Features

Toward a Contextually Valid Measure of Social Support Among Middle-Aged and Older African Americans in a Southern Urban Community

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Abstract

A gap in the literature on social support among middle-aged and older African Americans and limitations in scales measuring social support among this group indicate a need for a new measure of social support that is sensitive to the cultural context in which this population lives. The literature indicates that social support is a multidimensional, fluid phenomenon, i.e., it has many dimensions and each dimension may have significance for individuals and communities at different periods in time and in different geographical locations. The specific goals of this research were to (1) identify the domains and dimensions of support among middle-aged and older African Americans, ages 38 to 65, that potentially moderate the effects of psychosocial factors on health outcomes; (2) use the research findings to construct a new, contextually valid scale that measures social support among this population in a southern urban community; and (3) document the methodological process by which the first two goals were achieved. The iterative research process consisted of thirty-one methodological steps in nine phases over a four-year period. Six sets of data obtained from a content analysis of popular magazines, five types of interviews, a semi-structured questionnaire, a visual assessment of the community, and participant observation were analyzed for recurrent themes associated with social support. The findings were used to construct scale items that reflect culturally-relevant domains and dimensions of social support that are not typically assessed in traditional scales.

Introduction

There are a number of excellent scales that measure social support in the general population; however, few, if any, have tapped into the unique experiences of older African Americans. Furthermore, these scales are not comprehensive enough to elicit contextually-based responses from middle-aged and older African Americans, ages 38-65, who live in a southern urban community. This may result in investigators missing (or worse yet, misunderstanding) important information regarding social support among men and women in this age category and geographical location.

A gap in the literature and limitations in current scales measuring social support indicate a need for a new measure of social support that is sensitive to the cultural context in which middle-aged and older African Americans live. This study had three goals: (1) to identify, using qualitative and quantitative research methods, the domains and dimensions of support among African Americans, ages 38-65, that potentially moderate the effects of psychosocial factors on health outcomes; (2) to use the findings of this research to construct a new contextually valid scale that measures social support among this population in a southern urban community; and (3) to document the methodological process by which the first two goals were achieved.

Methodology

With NIA (National Institute on Aging) grant funding (5P02AG12058-02), The Duke University Exploratory Center (EC) for Research on Health Promotion in Older Minority Populations was established to conduct multidisciplinary pilot research and interventions and to initiate programs of health education and community outreach aimed at improving the health status of older African Americans. The scientific emphasis was on the interaction of psychosocial, behavioral, and physiological factors as they affect health and illness in older African American males and females. Duke investigators selected hypertension as their research theme. Researchers also were interested in filling a major gap in the scientific literature on health and aging in middle-aged and older African Americans. Duke EC investigators argued that social factors have received little attention in studies of hypertension among this older population.

In the proposal stage of the Duke EC grant, the NIA Study Section questioned whether the scales previously used by Duke (including Dressler's Scale of Chronic Role Stressors and the Duke Social Support Index) were "comprehensive enough to indicate the real life levels of support and environmental stress in this population, and were thus leading to an underestimation of the association of the 'environment' with hypertension." In response, the Duke EC decided to conduct a sub-study to develop new scales to measure stress and social support among older African Americans. This research focused on the development of one of the new scales: the African American Social Support

Scale.

Research Questions

      Social support refers to having a variety of social contacts as resources for personal benefit. It includes the structure of an individual's social life (e.g., group memberships, existence of familial ties) and the explicit functions they may serve (e.g., emotional, instrumental support) (Cohen et al. 2000; Uchino 2006). The conceptual framework underlying this sub-study is based on the assumption that social support potentially moderates the effects of psychosocial factors on health outcomes. To design a culturally sensitive measure of social support, a number of research questions needed to be answered: What are the domains (sources) and dimensions (types) of the support convoy in the study community? How are these domains and dimensions characterized? Who/what plays a major role in supporting middle-aged and older African Americans?

      Research also focused on questions related to the literature and methodology: Will interview, questionnaire, and participant observation findings reinforce the social support literature on older African Americans? If so, in what ways and to what degree? Will the methods employed provide further insight into widely recognized domains of support among older African Americans? Will the methods elucidate new domains and dimensions not addressed in the current literature? How will anthropological methods (research and analysis) provide insights into attitudes, beliefs, and behaviors associated with social support among older African American men and women? How will anthropological methods contribute to the construction of a new, contextually valid scale?

Research Design

      For the most part, this research followed a sequential study design, i.e., one type of research method followed another. The iterative research process consisted of a total of 31 methodological steps in nine phases over a four-year period (See Figure 1). Each methodological step provided insight into previous data, identified new questions, or informed the next step of the research process. The research methods used in this study provided six sets of data that were analyzed for recurrent themes associated with domains and dimensions of support. Throughout the study, a number of men and women provided feedback on the questionnaire, interview protocols, analyses, and construction of the new scale. For example, focus group participants offered suggestions related to word usage, phraseology, questionnaire and scale formatting, and scale item selection. Feedback resulted in appropriate modification of the questions in the preliminary semi-structured questionnaire, interviews, and preliminary social support scale. The iterative research process, which included feedback from study participants, was particularly important in this study because research that focused on unique domains and dimensions of social support needed to be sensitive to the cultural context in which African Americans live. By including study participants in the research process, there was less likelihood of researcher bias; participants' feedback continually challenged the researchers to step back and determine the objectivity and relevance of their questions.

      The triangulation of qualitative and quantitative methods and data sets provided greater assurance of validity. These data were used to construct the new African American Social Support Scale, a paper and pencil instrument consisting of six domains and 96 dimensions of social support.

Features

FIGURE 1. TOWARD A CONTEXTUALLY-VALID MEASURE OF SOCIAL SUPPORT AMONG MIDDLE-AGED AND OLDER AFRICAN AMERICANS

Methodological Steps
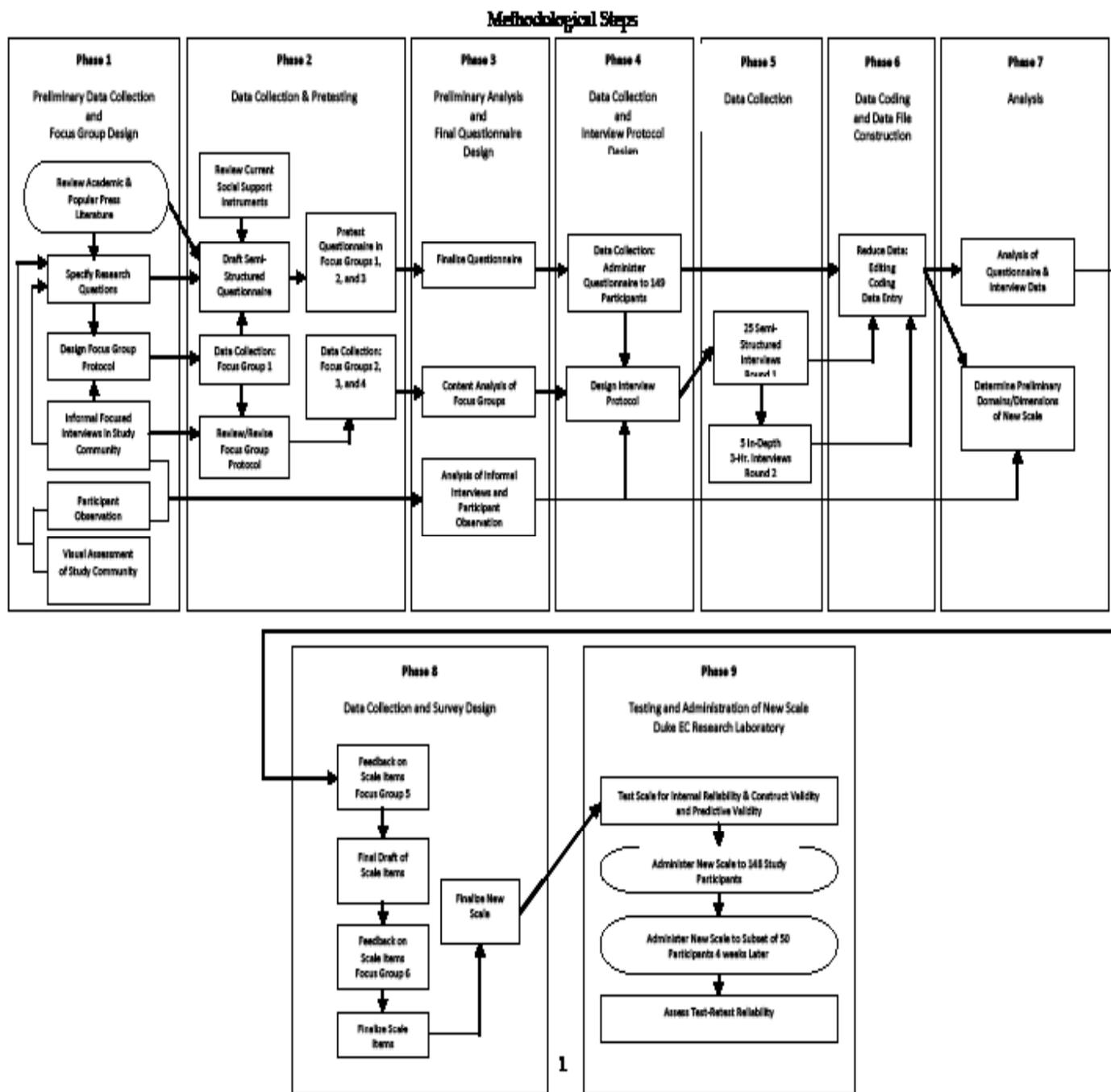
Review of Academic Literature

    A search primarily of the anthropological (urban, medical), African American studies, theological, psychosocial, historical, medical, and gerontological literature related to social support among African Americans was conducted to identify concepts, theories, and empirical findings associated with types, dimensions, and efficacy of social support.

Data set 1: Review of African American PopularPress

A review of the African American popular press (e.g., *Essence Magazine*, *Black Woman Magazine*, *Black Elegance Magazine*, *Ebony*, *Heart & Soul*) served as an unobtrusive observation method. An opportunistic sample of 839 feature articles from 118 issues of 10 prominent African American magazines was useful for detecting the presence or absence of key themes that may be associated with social support among African Americans and corroborating findings from other data sets. This method was particularly insightful because the literature was written for an African American audience. Authors openly addressed many issues in the African American community that would not be shared with non-African Americans in public forums. A content analysis was conducted by recording the most prominent theme/s emerging from each feature article, developing a list of the most discussed topics, and examining frequencies of mention. To confirm the relevance of the articles in the day-to-day lives of readers, letters to the editors in each issue were examined. Month after month, readers praised the editors for providing such needed support. For example, one reader wrote: "Just seeing my likeness as I turn the pages motivates me to act on the information I've just absorbed. As I read, I sensed that this information was put together just for me by people who genuinely care about me, my family, and the African American community at large. Your magazine is like a friend or a relative."

Data set 2: Focus Groups

Six focus groups, consisting of a total of 26 African American men and women from the study community, were conducted. Focus group participants were recruited through word-of-mouth to provide an overview of stress and social support in their community. The focus groups served several purposes. First, they provided access to data that would not be obtained easily with interviews and participant participation. For example, topics and themes emerging in the discussions sometimes were debated, revealing a diversity of attitudes, beliefs, and opinions. Second, the focus group discussions provided insight into the natural vocabulary and styles of communication among participants. A deeper understanding of phraseology and body language facilitated future discussions with African American men and women. The first focus group session served to identify general topics and issues of importance to the participants, their families, and the African American community. Participants told stories, gave examples, and described their day-to-day lives. The ensuing three focus group discussions explored, in more detail, the key issues (e.g., racism, discrimination, the church) raised in the first focus group. Participants discussed the efficacy of social supports in the study community and described the types of support they seek and provide. The last two focus groups were designed to obtain more detailed feedback on the construction of the new scale.

Data set 3: Semi-structured Sociocultural Questionnaire

In order to construct a contextually valid scale that measures social support among middle-aged and older African Americans, a 10-page questionnaire was designed to specifically identify the widest range of sources and types of social support among this population. The preliminary questionnaire was administered to all 26 focus group participants who provided feedback on the content and structure of the questionnaire. The final semi-structured questionnaire was administered to 149 participants in the larger, Duke EC hypertension study. The questionnaire identified cognitive categories utilized by, and meaningful to, respondents and determined patterns of responses related to social support. Questions were based on constructs identified in the academic and popular literature, informal interviews, and focus groups. Scales successfully used in other Duke EC studies (e.g., the Dressler Scale of Chronic Social Role Stressors and the Duke Social Support Index) also were useful in developing these questions.

A portion of the questions elicited demographic and social status information, e.g., marital status and living arrangement, educational and employment status, religious background, racial makeup of neighborhood, household income, and organizational memberships. Open- and close-ended questions associated with social support focused on the influence of spirituality and the church on respondents' lives, sources of support when respondents have problems, and quality and quantity of support respondents give and receive.

Several qualitative data gathering techniques were used. A number of questions requested listings (e.g., people from whom they receive/give support, types and amounts of support provided and received, most important person in life, causes of stress, and words associated with church) and written descriptions (e.g., difference between church in past and present, relationship between men and women today, and things they would change in their personal lives, community, and society.

An analysis of the study participants' social networks was conducted using a visual display method. Respondents were asked to list the people with whom they spend time and the amount of time spent with each person. After categories of people were identified, and hours of contact per month calculated, categories of people in each support network were listed horizontally in the order of time spent with each respondent. Figure II is an example of the listings in display form. The full display of 149 social networks identified *coworker* and *friend* as important sources of social support.

Figure II.
Visual Display of participants' social network

SPOUSE SON FRIEND MOTHER SISTER
SISTER FRIEND COUSIN
FRIEND COWORKER DAUGHTER SISTER
COWORKER FRIEND SPOUSE SON
MOTHER FATHER COWORKER BROTHER AUNT FRIEND
SPOUSE DAUGHTER DAUGHTER-IN-LAW FRIEND MOTHER SON

Data set 4: Interviews

Four types of one-one-one interviews were conducted over the course of the study: unstructured and non-directive, in-depth unstructured, semi-structured, and in-depth focused. Unstructured and non-directive interviewing was conducted in various locations where middle-aged and older African American men and women congregate (e.g., the workplace, church, community cultural center, community events, a wedding). The purpose of this type of interviewing was to get to know "the lay of the land" and build rapport in the study community. Interactions, behaviors, and beliefs among African Americans emerged from within their own personal and cultural context, i.e., topics of significance to each individual emerged naturally as (s)he talked. Typical questions were, "How would you describe your community?" and "What is daily life like here for African Americans?" When they described an interaction between men and women or African Americans and Caucasians, I asked for a description of what happened. Informants offered an "audio tour" of daily life.

Face-to-face, semi-structured, audio taped interviews with 25 study participants were conducted primarily in a community nutrition center where the informants were participating in the larger Duke EC hypertension study, and in their homes. These one-hour interviews served as a means by which to learn about issues of importance to middle-aged and older African American men and women and uncover topics of interest that may have been overlooked in the focus group discussions. An interview guide was used to identify individuals' perceptions and experiences of, and attitudes toward, social support. Participants also were invited to tell personal stories.

Of the 25 interviewees, five were interviewed a second time for a period of two to three hours. The purpose of conducting a second round of in-depth, focused interviews was to obtain more comprehensive explanations of attitudes, beliefs, and behaviors associated with social support and to identify ways in which social support intersected with the stressors in their lives. Participant availability and interest determined who would be interviewed a second time. A key informant emerged out of this group. She was always available to answer questions and provide feedback on findings throughout the entire research period.

Data set 5: Visual Assessment of Community

An overall assessment of the community from which the study sample was drawn was conducted in order to gain knowledge of the ecological and structural context in which the subjects lived. The assessment consisted of a "windshield survey" of neighborhoods and available formal (e.g., social service agencies) and informal (e.g., churches) support resources in the study community. This assessment continued throughout the entire research process.

Data set 6: Participant Observation

Participant observation included attending numerous churches; attending events such as weddings, parties, and community programs; and participating in group discussions with older African American women and men at schools, community meetings, and non-profit organizations. Throughout the entire research period, these observations informed the development of interview and focus group questions and the construction of the semi-structured questionnaire and final social support measure.

Discussion

The research findings support many of the hypotheses postulated by social support researchers. On a general level, there is a concatenation of sociocultural factors (identified as stressors) that negatively impacts the quality of middle-aged and older African Americans' lives. Social support is a mechanism through which African American men and women cope with stressors (e.g., psychological and sociocultural) (Kikusui et al. 2006; Cohen & Pressman 2004; Krause 2001; Harrison 1995; Lepore et al. 1993; Cohen and Wills 1985; Dressler 2000, 1991). The types of support study participants reported collapsed into four primary categories: emotional, instrumental, social (participation), and

spiritual.

Research shows that African American men and women experience and cope with these stressors in different ways at different times in their lives. Thus, their need for particular sources and types of support also fluctuates. This study suggests that social support among middle-aged and older African Americans is multidimensional and fluid, i.e., each domain and dimension of support may have significance for individuals at different periods of time and in different geographical locations. Additionally, ethnic and family bonds, American lifestyle, the Black church, and availability of institutional and social resources in the community influence the frequency and quality of support provided to men and women at any given time. The efficacy of support therefore moves back and forth on a *not enough/ enough* continuum.

The findings support the research of Taylor and Chatters (1989) and Antonucci (1985) which shows that the support convoy (i.e., the constellation of support providers) is a dynamic entity that develops and changes over time in response to individual, family, community, and societal changes. The interviews and participant observation findings reveal that men and women have their own decision criteria for seeking support. They have a cognitive map of available supports, and their decisions for selecting sources and types of supports are influenced by geographic relocation, major role changes (e.g., marriage, family, widowhood), accessibility to "trustworthy" coworkers and friends, and personal and family members' lifestyles.

Anthropological Research Methods Identify New Domains and Dimensions of Social Support

At the beginning of the study, two specific methodological questions were posed: Will the methods employed provide further insight into widely recognized domains of support among older African Americans? Will the methods elucidate new domains and dimensions not addressed in the current literature?

Five of the six methodological data sets provided new perspectives on domains (sources) and dimensions (types) of social support among middle-aged and older African Americans in the southern urban community. The range of dimensions identified in each data set varied, yet they complemented each other. The sum of dimensions identified in all of the data sets provided an in-depth picture of the range of sources and types of social support.

The cumulative findings from all five data sets reveal that the constellation of support providers consists of spouse, family, friends, coworkers, organizations and clubs, and the church. Each source provides one or more types of support to middle-aged and older African American men and women in the study community.

The previous Duke Social Support Index explored types, frequencies, and efficacy of support provided by *family* (including spouse/significant other) and *friends*; however, these sources of support were lumped into one domain. The findings of this study suggest a variation in types of support provided by *spouse, family*, and *friends*; thus, each should be explored independently in more detail. Furthermore, three additional sources of support emerged from the data: *coworker, organizations and clubs*, and the *church*. Since these categories were not included in previous social support scales, and the findings show that they are important sources of support, they also should be categorized as independent domains in the new social support scale.

Study participants provided more contextually rich information about the church than any other source of support. Most middle-aged and older men and women believed that the church continues to be the most supportive institution in the community, and it should continue to focus largely on providing emotional, instrumental, and spiritual support to members and nonmembers.

In discussing the role of the church with study participants, one key point became clear: The Black Church must not be essentialized. As argued by Baer and Singer (1992) and Lincoln and Mamiya (1990), the Black church is not one monolithic entity with one universal set of characteristics. Personal values and attitudes of pastors, denominational doctrines, and program emphases may influence men's and women's attitudes, beliefs, and behaviors in their day-to-day lives. Differences across denominations in terms of preaching style, sermon message, music selection, outreach activities, and worship practices often are mirrored in the various ways in which men and women attach meanings to their religious experience inside and outside the church.

In the same way that the Black churches move back and forth on a continuum of dialectical tensions (i.e., shifts in functions and missions), so too do men and women move on a continuum of religious experience. Men and women make unconscious and conscious choices regarding the degree to which they are committed to, and participate in, the church.

The study findings also support scholars (Baer and Singer 1992; Lincoln and Mamiya 1990) who contend that the church is a "pseudo-extended family" mimicking numerous functions of the Black family. Like the family, the church provides different types of support for each member.

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Tables 1-4 highlight the sources of emotional, instrumental, social, and spiritual support. Each source provides one or more types of support to middle-aged and older African American men and women.

Table I displays the sources of emotional support identified in each data set. All of the data sets highlighted spouse, family, friends, coworker, and church as important sources of emotional support. Organizations and clubs were mentioned in the popular literature and questionnaire.

Table I. Sources of emotional support

Source	Popular Literature	Focus Groups	Questionnaire	One-on-0ne Interviews	Participant Observation
Spouse			x		
Family	x	x	x	x	x
Friends	x	x	x	x	x
Coworker	x	x	x	x	x
Org/Clubs	x		x		
Church	x	x	x	x	x

Table II shows the sources of instrumental support identified by study participants. All of the data sets highlighted spouse and family as primary sources of support. The popular literature, focus groups, and questionnaire findings show that friends and the church also are sources of instrumental support, and the questionnaire findings indicate that co-workers and organizations and clubs are considered support providers.

Table II. Sources of Instrumental Support

Source	Popular Literature	Focus Groups	Questionnaire	One-on-One Interviews	Participant Observation
Spouse			x		
Family	x	x	x	x	x
Friends	x	x	x		
Coworker			x		
Org/Clubs	x		x		
Church	x	x	x		

As Table III shows, all five data sets identified family, friends, and the church as primary sources of social (i.e., social participation) support. All data sets except the focus groups also identified coworkers, organizations, and clubs as important sources of social support. Questionnaire findings showed that 71 percent of women and 58 percent of men said membership in a group had helped them socially. Women most frequently stated that membership in an organization or club helped them "become a better person." Spouse did not emerge as a strong source of social support. Many study participants attributed the lack of social togetherness to lifestyle choices, overwhelming responsibilities at home and work, and strong "sister" friendships among women.

Table III. Sources of Social Support

Source	Popular Literature	Focus Groups	Questionnaire	One-on-One Interviews	Participant Observation
Spouse			x		
Family	x	x	x	x	x
Friends	x	x	x	x	x
Coworker	x		x	x	x
Org/Clubs	x		x	x	x
Church	x	x	x	x	x

Table IV clearly shows that study participants considered family, friends, and the church as primary sources of spiritual support.

Table IV. Sources of Spiritual Support

Source	Popular Literature	Focus Groups	Questionnaire	One-on-One Interviews	Participant Observation
Spouse			x		
Family		x	x	x	
Friends	x	x	x	x	x
Coworker					
Org/Clubs					
Church	x	x	x	x	x

Constructing the new African American Social Support Scale

The first step toward constructing the new African American Social Support Scale was to analyze and interpret the questionnaire, interview (focus group and one-on-one), popular press, and participant observation data. This involved identifying emergent themes related to the research questions that crosscut all of the data sets. These themes were further categorized into sources or "domains of support" (e.g., *spouse*, *friends*, *church*) and types or "dimensions of support" (e.g., *goes to church with me*, *takes care of me when sick*, *prays for me*).

The second step involved creating lists of all possible dimensions that could be included in each domain. The lists consisted of actual phrases and sentences identified in the data. The dimensions showing the highest frequencies were selected for inclusion in the preliminary scale. Each domain consisted of between 7-29 dimensions. A Likert response format was developed to measure the amount (*none* to *as much as I want*) of support received by respondents.

In the third step, the larger lists (dimensions) were collapsed by eliminating redundant phrases, i.e., phrases that were similarly worded. This became the first draft of the scale. The fourth step consisted of gaining feedback on the preliminary scale from focus group participants. They critiqued the scale in the following ways: 1) theme selection; 2) item selection; 3) word usage; 4) sentence construction; 5) appropriateness of the Likert rating system and its anchors; 6) sensitivity to the study population; and 7) ease of use. Focus group participants prioritized scale items in terms of importance, noted oversights regarding relevant themes, and made further suggestions related to the development of the scale items. In particular, they did not like the long phrases and sentences. Focus group participants said the items would be easier to read, more understandable, and less likely to be misinterpreted if words and very short phrases were used. The response format was designed in such a way that individuals could respond along a continuum from *no support* to *as much support as needed*. The fifth and sixth steps involved making suggested changes and presenting the revised scale to the same focus group participants.

As Table V shows, the new scale has several distinct advantages over the previous Duke Social Support Index when used with a middle-aged and older African American population. The new scale includes four more domains and 61 additional items.

Table V. Comparison between Duke Social Support Index and African American Social Support Scale

Domains	Duke Social Support Index	African American Social Support Scale
# of items (questions)	2	6
Types of dimensions	34	95
Type: Emotional	3	4
Type: Instrumental	3	41
Type: Social	9	37
Type: Spiritual	1	6
	--	11

The Duke Social Support Index primarily focuses on quantity rather than types of support. For example, questions ask "how many," "number of times," "how often," "how much," and "how satisfied." Fourteen of thirty-four questions ask about types of support.

African Americans constitute a culturally distinct and ethnically diverse population. The domain that speaks most to the cultural sensitivity of the new social support scale is that of the *church*. Study participants reported a wide spectrum of types of support provided by the church, and key themes were included as items in this scale. The Duke Social Support Index did not include any items associated with the church or spirituality, and the Duke Religious Participation Scale only included two types of support from church: *helps me in marriage* and *helps me in getting ahead in life*. Study participants identified more specific types of church support: *spiritual atmosphere, guidance, relief, strength, peace/calm, comfort, understanding, sense of connection, stability, sense of freedom*, and *empowerment*.

Men and women reported that in addition to providing spiritual support and guidance, the church connects men and women with their African American heritage, functions as an extended family, enhances self-esteem through historically based messages of empowerment and freedom, fosters and nurtures talents and skills through such ministries as music and teaching, and connects them to other members of the African American community.

Themes such as "my spouse prays with me," "my friends go to church with me," "my family reads the Bible with me," and "my friends offer spiritual support," translated into culturally relevant scale items. Items associated with instrumental support (e.g., scholarships and helping to support the children's education), emotional support (e.g., physical affection, emotional healing), and social participation support (e.g., connection to the African American community, acts as extended personal family) also are culturally relevant. These items are not included in the Duke Social Support Index and other traditional support scales.

What sets the new African American Social Support Scale apart from the Duke Social Support Index is that it enables the researcher to conduct a more sensitive examination of social support among middle-aged and older African Americans, thus potentially picking up new relationships between types of support and mental and physical outcomes. Additionally, researchers investigating race, SES, and health can use the scale to determine two- and three-way interactions. Such studies will be valuable additions to the burgeoning literature on environmental influences on morbidity and mortality.

Reliability and Validity of New African American Social Support Scale

According to House and Kahn, when well-designed empirical research confirms theoretical ideas about the relationship between social support and health, confidence in both the theory and measures used to test it is enhanced… The litmus test of the validity of any measure of social support is its relationship to the major causes and consequences of social support (1985:87).

Toward that end, the African American Social Support Scale was constructed with the intent to conceptualize and measure the experience of social support in a multidimensional, reliable, and valid manner. The new scale was administered to 148 participants and was re-administered four weeks later to a subset of 50 of these participants. The scale was tested for internal reliability, test-retest reliability, construct validity (convergent and discriminant) and predictive validity.

Internal reliability was tested using Chronback's alpha. Chronback's alpha statistically tests to what degree items within a scale or sub-scale are correlated with each other. The higher the degree of correlations, the higher the internal consistency of the scale, and the more desirable the scale. As Table VI shows, results from this testing indicated that internal reliability on the African American Social Support Scale was excellent, ranking in the .90s.

Table VI. Internal and test-retest reliability

Domain of Support	Internal Reliability Cronback's Alpha	Test-Retest Reliability Interclass Correlations
Spouse/Partner	.95	.89
Family/Kin	.95	.73
Friends	.94	.64
Coworkers	.95	.70
Organizations/Clubs	.93	.84
Church	.95	.75

Test-retest reliability was tested using interclass correlations (ICCs). Interclass correlations provide a conservative estimate of test-retest reliability in that they take into account the mean and distribution of each sample, which Pearson correlations do not. Table VI shows the test-retest reliability to be good, ranging from .64-.89. Slightly lower reliability on the *friends* sub-scale was observed, which might have been due to some turnover in friends. Nonetheless, these correlations were equal to, or better than, those reported for other scales measuring factors that fluctuate over time.

Construct validity assessed whether the instrument actually measures the construct it is purported to measure. Construct validity was assessed by testing for convergent and discriminant validity. Convergent validity tests to what degree scales or sub-scales measure the same construct, whereas discriminant validity determines to what degree instruments measure different constructs. Convergent and discriminant validity in this study were tested by conducting correlations between the new African American Social Support Scale and the Duke Social Support Index (DSSI) – a standard, widely used scale that has been used frequently with older populations, including African Americans. Table VII indicates that the new support scale showed excellent convergent validity with the Duke Social Support Index. The expected discriminant validity was also observed regarding the sub-scale of *spouse/partner* support, since the Duke Social Support Index did not include that domain.

Table VII. Construct and predictive validity

Domain of Support	Construct Validity New vs. DSSI	Predictive Validity New Scale vs. BDI
Spouse/Partner	.23	-.13
Family/Kin	.51***	-.04
Friends	.40***	-.10
Coworkers	.24*	-.16
Organizations/Clubs	.37*	-.21
Church	.41***	-.17

Key: *p<.05; ** p<.01; ***p<.001

Predictive validity assesses whether scores on one measure predict scores on another scale. The predictive validity of the new African American Social Support Scale was tested by correlating scores on the support scale with scores on the Beck Depression Inventory (BDI) Scale. Previous research has shown that individuals with lower social support often experience higher levels of depression. Stated more broadly, there is an inverse association between social support and depression. As shown in Table VII, results from this testing indicate that, as expected, support was inversely correlated with depression scores, although the correlations were not statistically significant. This finding was anticipated with our sample since none of our participants was clinically depressed. Hence, the restricted range of scores on the depression inventory would be expected to reduce the likelihood of detecting significant relationships.

In summary, tests conducted by Duke EC researchers showed that the internal reliability, test-retest reliability, construct (convergent and discriminant) and predictive validity were excellent.

Cultural Relevance of Scale

The new African American Social Support Scale was constructed with the intent to conceptualize and measure the experience of social support in a multidimensional, reliable, and valid manner. To my knowledge, the new scale is the first to investigate 53 types (out of a total of 95 questions) of support provided by six primary sources of support in the African American community: *spouse*, *family/kin*, *friends*, *coworkers*, *organizations and clubs*, and the *Black church*.

Two primary comparisons can be made between the Duke Social Support Index and the new African American Social Support Scale. First, the new scale is empirically derived, i.e., an emic perspective, provided by a total of 245 people, significantly contributed to the development of scale items. Second, these data provide insight into a wider and more sensitive range of domains (e.g., church, coworkers) and dimensions (e.g., prays with me, pays for children's college education) of support among middle-aged and older Blacks than previously captured by other researchers. Because of its augmented sensitivity, the scale is more likely to identify new relationships among variables; the new scale will enable researchers to explore, in more depth, the relationship between social support and physiological outcome measures.

Limitations of Scale

Limitations of scale lie primarily in the sample: mostly female (77%), restricted SES, and healthy (with the exception of having hypertension). A higher percentage of participants were married and well educated compared to other residents in the study community. Similar to other community-based studies of African Americans, males were underrepresented in this study. A disproportionate sample size may occur, in part, because African American men are disproportionately represented among institutionalized populations and because the mortality rate among African American men is high. Additionally, many men did not meet the overall criteria for participation in the Duke EC hypertension study, did not have the time, or simply were not interested in participating in the study.

Since this research focused on social support among middle-aged and older African Americans, segments of the population that are important in the assessment of prevalence and efficacy of social support in the community (e.g., lower- and upper-class African Americans ages 38-65) were not included in the study. Men and women from these segments also did not meet Duke EC study criteria or were not interested. While the sample was primarily middle class, it must be noted that study participants had diverse economic, social, and educational backgrounds; were affiliated with various predominantly African-American denominations (e.g., African Methodist Episcopal, National Baptist Convention USA, Church of God in Christ); and had varied family structures (e.g., nuclear family, extended family, stepfamily, single-headed family) and functions. Thus, there was a universe of information to gather on this subgroup alone. Research focused on a subgroup located in a Southern community characterized by a unique culture and socio-historical pathway; therefore, further testing of reliability and validity may be required for studies of similar subgroups in other geographical locations (e.g., Midwest, Southwest).

Although the sample was adequate for the purposes of this study, further testing also should be conducted to determine reliability and validity of the scale for use with study populations comprised of African American males, younger adults, the elderly (over 65 years of age), and African Americans who are members of other faith communities.

Future directions include investigations of the relationships between the new social support scale responses and outcome variables of blood pressure, sympathetic nervous system activity (catecholamines/stress hormones), and sodium excretion. Considering that African Americans are at a higher risk for hypertension than any other ethnic group, further investigation of the effects of social support on health in African Americans is warranted.

Significance of Research and Scale

As many scholars have noted, the experience of support is a complex, multidimensional phenomenon. There are few instruments that attempt to capture the experience of social support in all of its complexity. The new African American Social Support Scale is reliable and valid; it captures the multidimensional experiences of social support among the study population. This scale provides not only an assessment of frequency of social support, but also advances the measurement of social support by providing an in-depth assessment of types of social support across sources of support. Statistical multiple techniques can be used by researchers to evaluate potential main effects and two-way interactions of social support among middle-aged and older African Americans. Potential covariates include age and gender, income, employment status, occupational status, marital status, depression (using the Beck Depression Inventory), and John Henryism (a psychological coping behavior). It is expected that the scale will elucidate within-group variations and provide a clearer picture of the ways in which social support, as a buffering factor, can moderate the effects of stress.

Features

A key factor contributing to the success of this research and resultant scale was the research team's respect for multidisciplinary research methods. Being a member of Duke EC's team of scholars in the fields of psychology, sociology, community health, and medicine was an ethnographic experience in and of itself. The only anthropologist on the team, I brought to the table a new perspective and new qualitative research strategies. In order to help colleagues understand these perspectives and strategies, it was important to understand their methods and communicate in their language. As the study progressed, the Duke EC team learned that anthropological research took considerable time, and that "thick description" of the environment in which middle-aged and older African Americans lived required several types of data collection methods and different types of rigorous analyses. This study was most likely the first to use anthropological perspectives and methods (e.g., participant observation, unobtrusive observation, content analysis of popular literature, and interviews) to inform the construction of a culturally sensitive measure of social support among middle-aged and older African Americans.

The use of anthropological research methods serves as an example of the ways in which contextual information and culturally relevant language can be used to design culturally sensitive measures of social support among ethnic groups. The methodological process may be of value to urban and medical anthropologists interested in obtaining information from larger, more representative groups of people while at the same time collecting the rich material that comes from ethnographic fieldwork.

The methods employed in this study have not typically been used by health and social scientists to construct scales; thus, this research strategy serves as a model for future scale development. It informs health and social scientists how anthropological methods provide a holistic and culturally relevant approach to scientific inquiry.

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