



Article Who Can I Turn To? Emotional Support Availability in African American Social Networks

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Abstract: African Americans disproportionately experience psychological distress, such as feelings of sadness, hopelessness, and worthlessness and are disproportionately exposed to risk factors associated with mental illness, such as racial discrimination, violence and poverty. To effectively address African Americans' mental health needs, it is imperative to identify *who* African Americans turn to when they experience stressors. The purpose of this study was to assess the extent to which emotional support is provided within African Americans' social networks and determine the characteristics of social network members who African Americans rely upon for emotional support. Results indicate that African Americans rely on social network members for spiritual and physical health support more so than emotional support. Among both male and female participants, social network members were significantly more likely to be relied upon for emotional support if they were a non-familial network contact, had a close relationship to the participant, and if they also were someone the participant spoke to about his or her physical health. Findings have implications for the development of culturally-sensitive strategies for increasing emotional support provision within African Americans' social networks.

Keywords: African-American; social networks; emotional support; mental health; social capital

1. Introduction

1.1. Racial/Ethnic Disparities in Mental Health

According to the Office of Minority Health (U.S. Department of Health and Human Services Office of Minority Health 2017), African Americans are 20% more likely to experience serious mental health problems than the general population. The mental health outcomes for African Americans are most well documented for psychological distress, where African Americans are 10% more likely than Non-Hispanic Whites to report having serious psychological distress (U.S. Department of Health and Human Services Office of Minority Health 2017). Similarly, data from the 2014 National Health Interview survey indicate that higher percentages of African Americans report feelings of sadness, hopelessness, worthlessness, or that everything is an effort, all of the time.

1.2. Risk Factors and African American Mental Health

Several risk factors likely play a role in African American reports of psychological distress. According to the Office of Minority Health (U.S. Department of Health and Human Services Office of Minority Health 2017), African American adults who live below the federal poverty line (FPL) are three times more likely to report serious psychological distress than African Americans who live at or above the FPL. Additionally, research suggests that perceived exposure to racial discrimination may be a unique stressor among African Americans (Williams and Williams-Morris 2000). In particular, several studies have demonstrated a positive relationship between exposure to racial discrimination and psychological distress (Thompson 1996, 2006, 2002). Despite significantly greater reports of psychological distress, data indicate that overall mental health service utilization among African Americans, like other racial/ethnic minorities, is lower than that of Whites (Substance Abuse and Mental Health Services Administration 2015; Zuvekas and Fleishman 2008). Given African Americans' relatively low utilization of formal mental health services, it is important to explore and understand the role that their informal social network plays regarding mental health.

To effectively address African Americans' mental health needs, it is imperative to identify *who* African Americans turn to when they experience stressors. As noted by Thoits (2011), "emotional support refers to demonstrations of love and caring, esteem and value, encouragement, and sympathy" (p. 146). Thoits (2011) argues that emotional support from network members, operationalized as emotional sustenance (i.e., exhibiting concern, listening), empathy, and active coping assistance (i.e., advice and encouragement) is beneficial for alleviating the emotional impact of stressors. The current article will describe findings from the *African American Social Networks & Health* study, which sought to assess the extent to which emotional support is provided within African Americans' social networks and determine the characteristics of social network members who African Americans rely upon for emotional support.

1.3. Social Networks and Health

An individual's social ties can impact his or her health through a variety of mechanisms, including the provision of social support and social influence (Smith and Christakis 2008). Social ties tend to exhibit *homophily*, a network term used to describe individuals' tendency to interact with others who are similar to themselves, on characteristics such as race, age, gender, religious affiliation, and education level (McPherson et al. 2001). This "birds of a feather flock together" phenomenon is also applicable to health, where individuals and their close ties tend to have similar health-related behaviors, attitudes, and beliefs (Perry and Pescosolido 2010).

Network theorists posit that one's tendency to have health beliefs and attitudes similar to his or her network members is a result of *social contagion*, as individuals are likely to adopt health behaviors, attitudes, and beliefs that are modeled by their social network members (Christakis and Fowler 2013). From this perspective, one's social network provides guidance about behavioral norms. Previous research has shown that social network members can positively influence individuals' mental health behaviors, such as mental health help-seeking and coping (Lindsey et al. 2010).

1.3.1. African American Social Networks

Previous studies have found that African Americans' social networks are largely comprised of kin (Ajrouch et al. 2001; Kim and McKenry 1998; Martineau 1977), and thus tend to be more dense or "close-knit" (Stack 1975). A unique attribute of African Americans' social network composition is the presence of extended or "fictive" kin, who are non-biological network members, such as friends, co-workers, neighbors and church members who individuals consider to be close like family (Chatters et al. 1994). Additionally, as observed with other racial/ethnic groups, African Americans' social networks have been observed to primarily include individuals of the same race. In a recent national survey study conducted by Cox et al. (2016), approximately two-thirds of African Americans

surveyed reported that their social network was entirely composed of African Americans. Gender differences exist in the social network composition of African American men and women, where African American women's networks have been observed to be larger and primarily consist of friends and children, whereas African American men's networks primarily consist of spouses, kin, and friends (Barker et al. 1998).

Researchers have also found that African Americans have smaller social networks and more contact with their network members than their White counterparts (Ajrouch et al. 2001). In a recent study on African American extended family and church-based social network typologies by Nguyen et al. (2016), participants reported moderate to high frequency of contact, subjective closeness, and emotional support with their family and church members.

1.3.2. Social Networks, Social Support, and African American Mental Health

Social support and social connectedness are important dimensions of social networks that have critical implications for mental health. Both social support and social connectedness have been found to influence mental health by buffering the effect of stressors (Kawachi and Berkman 2001; Marshall and Rue 2012). Research has shown that African Americans' social network members play a vital role in their mental health and well-being. Strong social networks, in which African Americans have high social support and high social connectedness, are observed to be a protective factor against depressive symptoms in African Americans (Lincoln et al. 2005; Lindsey et al. 2010; Marshall and Rue 2012).

Emotional support from family and friends has been identified as a protective factor against psychological distress (Gray and Keith 2003; Lincoln et al. 2007), and also protective against suicidal behaviors (Lincoln et al. 2012; Nguyen et al. 2017a). Related to social connectedness of supportive networks, the quality of the familial relationship has also been found to play a role in mental health outcomes of African Americans. In a study on social support and depression by Shim et al. (2012), participants who reported feeling "not very close at all" with their family members were observed to have a three-fold increased risk for depression when compared to those who reported feeling "very close" to family.

Non-familial network members have also been found to play a role in African American mental health. In particular, recently published studies have demonstrated that church-based emotional support has protective mental health benefits, including functioning as a stress buffer for African American adults who experience serious psychological distress (Nguyen et al. 2017b) and lowering depressive symptoms (Hamilton et al. 2013; Holt et al. 2017). In a 2011 study by Chatters et al., African Americans' subjective closeness to their church members was negatively associated with suicidal ideation (Chatters et al. 2011).

Finally, social connectedness has been associated with regard to whom African Americans seek out as sources of support when confronting mental health concerns (Lindsey and Marcell 2012). Network size has also been found to influence mental health outcomes of African Americans, where the number of inner social network members has been observed to significantly positively predict coping efficacy among African Americans (Tkatch et al. 2011).

1.4. Purpose

Social networks are an important source of emotional support, and exist as a form of social capital that promotes positive mental health and psychological well-being (Kawachi and Berkman 2001). It is important to understand how emotional support availability and provision occurs *within* African American social networks, as cultural differences exist in how social network influence is conceptualized (Wright 2016). The purpose of this study was to conceptualize emotional support processes in African Americans' social support networks. Findings have implications for informing future efforts to develop culturally-sensitive strategies for improving African Americans' mental health and well-being through the provision of social support within their social networks.

2. Methods

The study received Institutional Review Board approval from the Indiana University Human Subjects Office (protocol # 1502818898).

2.1. Participants & Recruitment

Individuals were eligible to participate in the *African American Social Networks & Health* study if they were (1) African American; (2) at least 18 years old; and (3) currently living in the Indianapolis metropolitan area. Participants were recruited from local churches, health fairs, universities, African American community events, and African American family reunions. At these venues, the Principal Investigator (S.H.) made an announcement about the opportunity to participate in the study, and an information table was available where participants were also recruited via electronic flyers and word of mouth. All prospective participants were screened for eligibility by the study project manager prior to receiving an appointment confirmation. Data collection took place September 2016–December 2016.

2.2. Study Design

The *African American Social Networks & Health* study employed an egocentric network analysis study design. Egocentric networks specifically focus on individuals (egos) and seek to gather information from the ego's perspective about social contacts (alters) in his or her personal network (Smith and Christakis 2008). Thus, egocentric data provides insight regarding the types of people who respondents interact with (Valente 2010). Egocentric network data is collected using a name generator instrument, where the ego is asked to provide the names of alters who function in specific roles, such as the people who they rely upon for important and health matters. The ego is also asked to provide descriptive information about each alter named during the interview, such as the strength of the ego-alter relationship, frequency of interaction, type of relation, and alter demographic characteristics (age, race etc.) (Valente 2010).

2.3. Interview

Each participant in the *African American Social Networks & Health* study was asked to complete an in-person egocentric network interview to gather information about his or her social support network. Interviews were scheduled at a time that was convenient for the participant. All interviews were conducted in a private conference room at Indiana University-Purdue University Indianapolis (IUPUI), and were conducted by African American research team members (K.B., H.S.), who were trained on the data collection protocol. Upon each participant's arrival to his or her interview, the research team member reviewed the informed consent form with the participant and answered any questions he or she had. Next, the research assistant gathered the participant's demographic information, and also gathered their social support network data using a modified version of the Important and Health Matters Social Network Battery name generator (Perry and Pescosolido 2010; Pescosolido et al. 1998). All data were collected via laptop and entered into an electronic form using Research Electronic Data Capture (REDCap), a secure web-based electronic data management software. Network interviews lasted approximately 45 minutes on average. Each participant received a \$20 gift card at the completion of his or her interview as a token of appreciation for participation.

2.3.1. Demographic Survey

Demographic information was collected from each participant and electronically recorded using REDCap. General demographic variables collected include age, gender, household size, marital status, education level, and employment status. Health-related demographic variables were also collected for each participant, including insurance status, self-rated health status, and personal health history.

2.3.2. Name Generator

The Important and Health Matters Social Network Battery name generator (Perry and Pescosolido 2010; Pescosolido et al. 1998) was used to collect each participant's egocentric network data. Specifically, our participants were interviewed using an adapted version of the "health matters" portion of the instrument. Whereas previous studies using the health matters name generator have inquired about the people who respondents rely upon for health matters generally, we obtained permission from the instrument's developer to inquire about "mental health matters" and "physical health matters" separately, as the people with whom an individual discusses his or her mental health may differ from those with whom he or she chooses to discuss his or her physical health. We also added two additional name generators, and asked each respondent to name the people who provide them with tangible health support and spiritual support. We did not restrict the number of names a respondent could provide for each name generator, as there have been inconsistencies in the social network literature regarding the appropriate name generator limit, which may vary by context (Merluzzi and Burt 2013).

For the *African American Social Networks & Health* study, we asked participants to provide the names of the people who they rely upon for four distinct dimensions of social support, including (1) physical health support (people with whom they discuss their physical health issues); (2) emotional support (people with whom they discuss their emotional health issues); (3) tangible health support (people who attend medical appointments, provide assistance with organizing pills); and (4) spiritual support (people with whom the respondent has spiritual support exchanges, such as attending religious services together, praying, reading the Bible, or talking about God or spiritual matters). In an effort to assess reciprocity of social support within egocentric networks, we asked each respondent to also report the names of people to whom they provide physical health support, emotional support, tangible health support, and spiritual support. Following the completion of the name generator exercises, each respondent was asked to report the characteristics of each person (alter) who they listed during the interview, including alters' gender, approximate age, race, occupation, and relationship to the respondent (family member, friend, coworker etc.). They were also asked to report on their perceived closeness to each alter named and frequency of contact. Data collection instruments are available from the corresponding author upon request.

2.4. Measures

To capture the complexity of individuals (egos and alters), ties, and networks, we measured variables at two distinct levels—ego-network level and alter level.

2.4.1. Dependent Variable

The primary outcome of interest for this analysis was whether an alter was named as an emotional support provider to the ego. An alter was considered an "emotional support provider" if he or she was listed by the participant in response to the name generator prompt "I am interested in the people that you talk to about emotional problems when they come up, whether they live near you or far away. These can be family, friends, or other people who have been really helpful to you. Who are the people that you discuss your emotional health with or you can really count on when you have emotional issues or concerns?"

2.4.2. Covariates

Other variables of interest in the analysis included alter sociodemographic characteristics such as gender, age, race, education, and history of healthcare employment, as well as alter-ego tie characteristics including relationship to ego, closeness to and frequency of contact with ego, and number of other support functions provided by the alter. Alter race was measured by ego response to the question "Is this person the same race as you?" Participants were also asked if an alter had ever in their knowledge worked in a healthcare field. Each alter's relationship to ego was assessed during the interview by a 26-item list of relationship types in response to the prompt "How are you connected to this person?" For analytic purposes, the list of relationship types were collapsed into five broad categorical variables: family member (parent, sibling, child, grandparent, grandchild, aunt or uncle, in-law, former foster parent, or other relative), friend (fellow club or social group member, fellow church member, person with whom ego does leisure activities), spouse or partner (spouse/partner or girlfriend/boyfriend), health or social services provider (doctor, other medical person, counselor or mental health therapist, social worker or other professional), clergy (i.e., priest, minister, or rabbi) or other (boss, employer, teacher, employee, coworker or colleague, neighbor, or fellow student). Ego-alter closeness was assessed by asking the respondent "How close are you to this person?" for each alter in the network, with the response choices "not very close," "sort of close," or "very close." Egos were asked to assess their frequency of contact with each alter by responding to the question, "How often do you see this person or talk to them over the phone or video chat?" with the response options of "rarely," "occasionally," "frequently," or "very frequently." A variable for role multiplexity was computed to reflect the number of other different social support roles in which an individual alter was named, excluding the dependent variable "emotional support provider."

2.5. Statistical Analysis

The focus of the analysis was two-fold: (1) to produce descriptive characteristics of African-American social support networks (i.e., size, composition, density, and homophily, multiplexity); and (2) to identify characteristics of alters (i.e., network members named by ego) who African Americans rely on for emotional support. Ego and alter characteristics were analyzed using SPSS 24.0 (IBM 2016). Network characteristics were generated using E-Net (Borgatti 2006) egocentric network data analysis software.

Standard descriptive statistics (frequency, mean, proportion, standard deviation) were generated for the participant sample (egos) and their network members (alters). Network characteristics generated included the average network size, density (extent to which alters named knew one another), composition (proportions by gender, ego-alter relationships, and social support types), and homophily (extent to which alters named are similar to the ego's gender, race, and age). In our primary analyses, we conducted bivariate analyses (chi-square and *t*-tests) to assess the association between alter characteristics (gender, age, relation etc.) and the likelihood of an alter being named as a person who the ego relies upon for emotional support. Bivariate analyses were conducted for the aggregate ego sample, and were also gender-stratified to determine significant differences in bivariate associations that may exist by gender. Finally, we conducted logistic regression analysis to identify significant predictors associated with the likelihood of an alter being a person who the ego relies upon for emotional support, where predictor variables were entered in four blocks (Block 1: alter gender & age; Block 2: ego-alter relationship; Block 3: ego-alter closeness and frequency of contact; and Block 4: alter social support role). The regression analysis was stratified by gender, to demonstrate any similarities and differences that exist with regards to the types of people who African American men and women rely upon for emotional support. Prior to conducting logistic regression, we performed a correlation analysis to assess for multi-collinearity between variables. The research team discussed any variables that were highly correlated and whether to include them in the analysis. Two-tailed significance was flagged at the p < 0.001, p < 0.01, and p < 0.05 levels.

3. Results

3.1. Ego Characteristics

Descriptive statistics for egos are presented in Table 1. Egos (n = 42) on average were 43.8 years old and were comprised of slightly more women (52.4%) than men (47.6%). Nearly half of egos reported that they were married or in a marriage-like relationship (45.3%). Over one-quarter (26.2%) had completed some college or technical school, and 45.2% had completed a college degree. Almost

three-quarters of participants (73.8%) reported that they were currently working either part- or full-time, and nearly half (45.2%) of participants reported previous experience working in the healthcare field. Nearly all participants (92.9%) reported having health insurance coverage, and most participants rated their own health as "good" (61.0%) or "fair" (24.4%).

	Percent	Mean	SD	Range
Gender				
Female	52.4			
Male	47.6			
Age (years)		43.8	16.8	19.7–69.0
Marital status				
Married or in marriage-like relationship	45.3			
Single	42.9			
Divorced or widowed	11.9			
Household size		1.8	1.4	0–5
Educational level				
High school or less	7.1			
Some college	26.2			
College graduate	45.2			
Master's degree or higher	21.4			
Employment status ^a				
Working	73.8			
Student	26.2			
Retired	19.0			
Other	38.1			
Covered by health insurance				
Yes	92.9			
No	7.1			
Self-rated health				
Excellent	12.2			
Good	61.0			
Fair	24.4			
Poor	2.4			
Ever worked in healthcare field				
Yes	45.2			
No	54.8			

3.2. Alter and Tie Characteristics

Descriptive statistics for alters and ego-alter ties are presented in Table 2. A collective total of 463 alters were named during name generator interviews. Most alters were female (62.3%). Average alter age was 45.4 (range = 3–91 years). Nearly all alters (96.3%) were reported to be the same race as the ego. Most alters (72.6%) had no reported history of employment in the healthcare field. Around 63% of alters were named were identified as egos' family members. Similarly, around 62% of alters named were identified as egos' friends. Only 7.5% of alters were identified as clergy or fellow church members, followed by spouses (4.5%) and health or social service providers (2.4%). Egos reported a high degree of closeness to their network members, with 66.1% of alters described as "very close." Egos reported a moderate frequency of contact with alters, with approximately one-quarter of alters described as having "very frequent" contact with egos. Study participants primarily reported having spiritual exchanges with their social network members. Slightly under half of alters in the sample (42.4%) were named as an individual from whom the ego receives spiritual support, while almost

39% of alters were named as providing physical health support (e.g., individuals with whom they discuss their physical health problems). Less than one-third of alters in the sample (30.4%) were named as emotional support providers and just 15.4% of alters were named as individuals from whom the ego receives tangible health support (e.g., attending medical appointments with them or helping with prescription medications). Concerning multiplexity of roles, on average alters were identified as functioning in 2.9 health and/or social support roles within egos' networks. Specifically regarding the co-occurrence of other roles with emotional support, most alters who were named as providers of emotional support also provided spiritual support to the ego (62.0%), followed by physical health support (60.6%) and tangible health support (58.5%).

	Percent	Mean	SD	Range
Gender				
Female	62.3			
Male	37.7			
Age (years)		45.5	18.7	3.0-91.0
Same as Race Ego (African-American)	96.3			
Ever worked in healthcare field	27.4			
Relation to ego ^a				
Family member	62.9			
Sibling	16.6			
Child	11.2			
Parent	10.8			
Other relative ^b	24.1			
Friend	62.4			
Other	9.4			
Clergy or fellow church member	7.5			
Spouse or partner	4.5			
Health or social service provider	2.4			
Very close ^c	66.1			
Very frequent contact ^d	25.1			
Social support roles ^a				
Spiritual support	42.4			
Physical health support	38.5			
Emotional health support	30.4			
Tangible health support	15.4			
Multiplexity of social support roles ^e		2.9	2.3	

Table 2. Alter and Tie Descriptive Statistics (n = 463).

SD = Standard deviation. ^a Since respondents could select all that apply, values do not add up to 100%; ^b "other relatives" included grandparents, aunts/uncles, and cousins; ^c percent of alters described as "very close" to ego; ^d in response to the question, "How often do you see this person or talk to them over the phone or video chat?" percent of alters who talk to ego "very frequently (1 or more times a day)"; ^e Multiplexity refers to the number of different health or support roles in which an individual alter was named out of 7 possible roles.

3.3. Network Characteristics

Network-level statistics are presented in Table 3. Analyses of ego networks (n = 42) revealed that the average network size was 12.9 alters (range = 4–19 alters). The average network density was 0.69, indicating that approximately 69% of the alters in an average network had ties to one another. Expressed as a proportion, networks on average contained a slightly greater share of women (0.61) than men (0.39); female egos, on average, had a significantly larger proportion of female alters in their network than male egos (0.52 vs. 0.70; p < 0.01). Concerning alter relationship type, female egos also had significantly higher proportions of family members (0.56 vs. 0.61; p < 0.01), friends (0.23 vs. 0.27; p < 0.05), other alters (0.07 vs. 0.12; p < 0.01), and health or social services providers (0.01 vs. 0.04; p < 0.001) in their networks than male egos. However, male egos had significantly higher proportions

of spouses/partners (0.06 vs. 0.03; p < 0.001) and clergy or fellow church members (0.09 vs. 0.05; p < 0.001) than female egos.

	Total		Male Egos		Female Egos	
-	Mean	SD	Mean	SD	Mean	SD
Network size	12.89	4.22	13.31	4.75	12.52	3.65
Network density	0.69	0.19	0.68	0.20	0.72	0.17
Proportion female **	0.61	0.22	0.52	0.19	0.70	0.14
Proportion by relationship type						
Family **	0.59	0.20	0.56	0.21	0.61	0.19
Friends *	0.25	0.25	0.23	0.15	0.27	0.18
Other **	0.09	0.17	0.07	0.10	0.12	0.21
Clergy or church member ***	0.07	0.09	0.09	0.10	0.05	0.78
Spouse or partner ***	0.05	0.05	0.06	0.05	0.03	0.04
Health or social service provider ***	0.02	0.06	0.01	0.03	0.04	0.08
Proportion by alter support type						
Spiritual support ***	0.46	0.22	0.33	0.12	0.58	0.01
Tangible health support ***	0.16	0.16	0.12	0.11	0.20	0.19
Physical health support ***	0.39	0.20	0.35	0.17	0.44	0.14
Emotional health support	0.31	0.22	0.31	0.22	0.32	0.23
Homophily						
Gender ***	0.58	0.21	0.47	0.19	0.69	0.14
Race ***	0.96	0.74	0.98	0.04	0.93	0.09
Age +,*	15.89	4.05	16.29	3.70	15.27	3.65

Table 3. Network level Descript	ive Statistics by	⁻ Ego Gendei	(n = 42).
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Significance levels denoted as * p < 0.05, ** p < 0.01, *** p < 0.001. * Network homophily around age is calculated using the average standard deviation for male and female ego networks.

With regard to alter support roles, female egos' networks had a significantly greater proportion of alters who provide spiritual support (0.58 vs. 0.33; p < 0.001), tangible health support (0.20 vs. 0.12; p < 0.001), and support related to physical health (0.44 vs. 0.35; p < 0.001) than male ego networks. Overall, networks overall displayed high degrees of homophily around race (0.96) and gender (0.58). Female egos had more homophilous networks with regard to gender (0.69 vs. 0.47, p < 0.001) and age (SD 15.27 vs. 16.29, p = 0.009), while male ego networks had greater homophily around race (0.98 vs. 0.93, p < 0.001).

3.4. Emotional Support: Logistic Regression Results

Alter and tie characteristics that were significantly associated with an alter being an emotional support provider in tests of bivariate associations were included in a logistic regression model to test the adjusted odds of each variable as a predictor of the alter being named as an emotional support provider (see Table 4). Specifically, we used hierarchical logistic regression, where predictor variables were entered into four blocks, to yield a final model (model 4). Adjusted odds were calculated independently for both male and female ego networks. The final model controlled for alter gender, alter age, whether the alter was a family member or a friend, ego-alter closeness and frequency of contact, and additional alter support roles (provides physical health support, provides tangible health support, and provides spiritual support).

In the final model (model 4), within male ego networks, alters were significantly more likely to be named as an emotional support provider if they were female (OR = 2.81, p < 0.01, 95% C.I. = 1.31–6.01), not a family member (OR = 3.31, p < 0.01, 95% C.I. = 1.45–7.67), was closer with ego (OR = 15.32, p < 0.001, 95% C.I. = 3.94–59.64), if the alter provided physical health support to the ego (OR = 4.40, p < 0.001, 95% C.I. = 1.86–10.37), and if they provided spiritual support (OR = 2.19, p < 0.05, C.I. = 0.97–4.81). For female ego networks, alters were significantly more likely to be named as an

emotional support provider if they were younger (OR = 0.98, p < 0.05, 95% C.I = 0.96-0.99), not a family member (OR = 2.06, p < 0.05, 95% C.I. = 1.01-4.21), was closer with ego (OR = 2.49, p < 0.05, 95% C.I. = 1.23-5.05), and provided physical health support to the ego (OR = 3.99, p < 0.001, 95% C.I. = 2.04-7.84).

Table 4. Adjusted Odds of an Alter Being Named as an Emotional Support Provider, Stratified by Ego Gender (n = 463).

	Model 1 Exp (B)		Model 2 Exp (B)		Model 3 Exp (B)		Model 4 Exp (B)	
	М	F	М	F	Μ	F	Μ	F
Alter gender								
Male	[REF]	[REF]	[REF]	[REF]	[REF]	[REF]	[REF]	[REF]
Female	2.23 *	1.95 *	2.42 **	1.95 *	2.93 **	1.75	2.81 **	1.99
Alter age (years)	0.98	0.98 *	0.99	0.98 *	0.99	0.99	0.99	0.98 *
Ego-alter relationship								
Family member			[REF]	[REF]	[REF]	[REF]	[REF]	[REF]
Friend			1.37	1.00	2.29 *	1.68	3.31 **	2.06 *
Ego-alter closeness ^a					13.16 ***	2.91 **	15.32 ***	2.49 *
Ego-alter contact ^b					1.16	1.09	0.98	0.98
Alter support role								
Physical health support							4.40 ***	3.99 ***
Tangible health support							1.19	1.88
Spiritual support							2.19 *	0.93

Significance levels denoted as * p < 0.05, ** p < 0.01, *** p < 0.001. ^a Ego-alter closeness was measured on a 1-3 scale; ^b Ego-alter contact was measured on a 1–4 scale.

4. Discussion

While it is well documented that African Americans have lower mental health help-seeking practices than other populations (Substance Abuse and Mental Health Services Administration 2015), few studies have sought to specifically explore and understand who African Americans rely upon for their emotional support needs. Relevant to emotional support availability, it is important to understand details about social network membership and composition, as these characteristics provide information about who is potentially available as a support provider (Antonucci 2001).

Our study findings complement and build upon previous work that has examined functional aspects of social support within social networks. Studies using the convoy model of social relations, a concept used to describe the formation of social relations and how they influence health and well-being (Antonucci 2009), have focused on participants' degree of *closeness* to their reported social network members at varying levels and the *frequency* of network members at each level, as an indicator of their availability of functional social support. For example, previous convoy model research has found that African Americans who have larger inner networks have more health support, better health behaviors, and better coping (Tkatch et al. 2011). Other researchers using the convoy model have demonstrated that older African Americans tend to have smaller, less frequently seen, and less close (proximal-level) network contacts that are primarily of kin relation (Ajrouch et al. 2001). Building upon the extant literature, the goal of our study was to specifically examine the availability of *emotional support*, compared to other distinct types of social support, including spiritual support, physical health support, and health-related tangible support.

Social support theory posits that social support is a *multi-dimensional* construct (House et al. 1988). Under this premise, it is not surprising that an individual may rely on different sources and social network contacts for his or her emotional support needs than his or her tangible support needs or spiritual support needs. For example, in a study of sources and types of social support in HIV-positive African Americans, George and colleagues (George et al. 2009) observed that formal network members were critical for providing instrumental support, such as engagement in HIV-specific care, whereas

informal network members were relied upon for emotional support. Our study results also indicate that African American adults utilize their social support network for specific types of social support. In particular, our participants were more likely to rely upon their network members for spiritual support and physical health support, than for emotional support.

Interestingly, while a very small proportion of network members were named as clergy or fellow church members, our participants primarily reported having spiritual exchanges with their network members, demonstrating the importance of spiritual support exchanges occurring outside of church-based networks. Moreover, as shown by our multiplexity data, the majority of network members named as emotional support providers were also named as providers of spiritual support. These findings support a strong body of extant literature focused on religious coping as a preferred strategy among African Americans. A previous study by Chatters et al. (Chatters et al. 2008) comparing religious coping preference by race found that African Americans have higher endorsements of religious coping than Non-Hispanic Whites. Similarly, in a qualitative study of culturally endorsed coping strategies among older African American adults with depression, the most culturally accepted strategy for dealing with mental health problems was to turn to God (Conner et al. 2010). As religious coping is a seemingly preferred coping strategy within this population, African Americans may be seeking to address their emotional support needs through spiritual support exchanges with their network members, such as attending religious services together, praying and fasting together, reading the Bible together, or talking about God together.

There are several other plausible explanations for our participants' relatively low reliance on their social network members for emotional support. First, a growing body of literature has focused on the Superwoman Schema and John Henryism philosophies, which relate to the tendency of African American women and men, respectively, to exhibit strength and perseverance, even throughout prolonged exposure to stressors (Angner et al. 2011; Woods-Giscombé 2010). Both the Superwoman Schema and John Henryism are characterized by high effort coping, such that emotional reliance upon others is minimized. Moreover, masculinity norms among African American males promote emotional suppression. In essence, expressed efforts toward emotional coping is perceived to be a sign of "weakness" (Hudson et al. 2016). Practice of prolonged internalized emotional coping strategies has been observed to adversely impact African Americans' mental health and well-being. For example, research has shown that John Henryism is negatively associated with happiness among African American men (Angner et al. 2011).

A related barrier to emotional reliance that may explain our participants' relatively low reliance upon of their social networks for emotional support is *stigma* regarding mental health. A key strategy for improving African Americans' emotional reliance on their support network is to address the stigma around mental health and well-being. In particular, a cultural shift in norms is needed to promote the *acceptance* of emotional coping. In a study of stigma among African American mental health consumers, participants suggested that seeking support from accepting members of their existing social networks was an effective strategy for dealing with stigma (Alvidrez et al. 2008). Closely related research has shown that African American men desire to discuss their stress experience in support groups, but emphasize that the support groups be *non-judgmental* (Hudson et al. 2016). Acceptance of one's emotional support needs amongst his or her social network members is imperative.

Overall, our results reveal that there is a great deal of overlap in the *types* of individuals that African American men and women rely upon for emotional support. In particular, we observed that both African American men and women tend to seek emotional support from non-familial contacts (i.e., friends). Additionally, we also observed that African American men and women tend to rely upon individuals with whom they have a close relationship, and individuals with whom they also discuss their physical health. Our finding that African American adults tend to rely upon non-familial contacts for emotional support may be explained by the fact that family members are often the source of the problems that an individual is experiencing (Davis et al. 1997). Thus, it would not be likely that that they seek out emotional support from family members. African Americans who have more frequent

contact with their family members have indicated that they experienced more negative interactions, such as conflicts, with their family members (Lincoln et al. 2013). Negative interactions with family has been associated with increased odds of suicidal ideation (Lincoln et al. 2012) and social anxiety disorders (Levine et al. 2015). Closely related, a recent study by Taylor et al. (2015) found that African Americans who lack close supportive ties with family have higher rates of major depressive disorder over the course of a year and a lifetime than those who have close supportive family ties.

Our observation that participants tended to rely upon non-familial contacts for emotional support may also be another sign of the effect of mental health stigma among African Americans. While African American egocentric networks are largely comprised of biological kin (Ajrouch et al. 2001) and the family is viewed as a "safe space," family members may also exhibit judgment, especially when it pertains to stigmatized issues (Alvidrez et al. 2008), thus serving as a possible explanation our participants' tendency to primarily discuss their emotional health with non-familial contacts. Stigma reduction campaigns targeted to the African American community might help to increase individuals' willingness to seek emotional support and widen the narrow range of network members available and relied upon for emotional support.

Health, in general, is a very private topic. Thus, it is not surprising that our participants are more likely to discuss their emotional health with individuals with whom they have a close relationship. Future efforts to promote emotional well-being among African Americans should emphasize the importance of talking to the individuals who they *trust*, and encourage them to do so. Consistent with findings of previous network studies, our participants had a high degree of racial homophily, where their networks primarily consisted of other African Americans. Concerning racial homophily, "similar others" may be more supportive and have similar experiences, regardless of differences in socioeconomic status. For example, previous studies have shown that discrimination negatively impacts the mental health of African American males, regardless of social class (Sellers et al. 2006). Our study findings build upon the extant literature on ethnic density, which has emphasized the protective effects of ethnic density on the mental health of African Americans (Becares et al. 2014).

Gender homophily was also observed among our participants, where female egos' networks had significantly more female network members than males. This observation speaks to the potential for development of gender-specific initiatives for providing emotional support to African American women. For example, African American women may benefit from receiving support for their emotional health in a setting/context with other African American women. Similarly, African American males may be receptive to receiving emotional support in male contexts. A variety of studies have demonstrated the feasibility of promoting African American men's health in barbershops, as it is a natural setting for African American men to congregate with similar others. Barbershop studies have focused on a variety of health topics for African American men, including physical activity (Hood et al. 2015) and cardiovascular disease (Yancy 2011), and have also addressed the importance of prostate screening (Hill et al. 2017), a highly stigmatized health topic among African American men through barbershop-based interventions.

Male participants in our study were also observed to have a high proportion of female spouse/partners in their networks and they were also significantly more likely than female participants to categorize female network members as emotional support providers. It is well documented that significant others, especially females, play a vital role in men's health habits, such as their nutrition, and utilization of routine preventive healthcare. Our results give insight into an additional, and very important, aspect of health-related support that significant others can provide: emotional support.

Finally, our observation that participants' networks were almost nearly racially homogenous is important to consider. The homogeneity of the social networks may also signal ongoing marginalization that limits access to health producing resources. If African American social networks do not contain enough diversity to link to material, educational and employment contacts and resources, the social determinants that are detrimental to health with continue to operate. In addition,

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homogeneity in the network highlights the importance of improving mental health awareness within the African American community. If individuals are to gain timely access to assistance, then community awareness of signs and symptoms of concern and culturally-appropriate resources must be present. Moreover, there is potential for lay African American community members to be trained and available to assist those in need of emotional support in community-based settings, such as churches.

Strengths & Limitations

Our study consisted of several notable strengths. This is one of few existing studies to utilize the Important and Health Matters Social Network Battery with an exclusively African American study sample, affording the opportunity to focus on within group differences in emotional support availability. Moreover, previous studies examining support in African American networks have primarily described respondents' network composition and relationships (ties), leaving the functional characteristics of their social network members largely unknown. Thus, we know that African American social networks tend to be close-knit and composed of kin, but little is known about what African American's social network members *do*, in terms of their functional roles. Our study findings may begin to fill this gap by providing insight about the roles that African Americans' network members play, particularly regarding the provision of emotional and other types of social support. Previous research on support provision in social networks has primarily explored social support as a general construct, despite its multidimensional nature. A strength our study is the exploration of *emotional support*, a distinct aspect of social support that has implications for African Americans' mental health.

While our study possesses a variety of strengths, several limitations are worth noting. First, our analytic sample size of 42 egos was extremely informative for an understudied topic, but may limit the generalizability of our findings. The lack of representativeness of the sample is another factor affecting generalizability. In addition, while this was a purposive sample, participants volunteered to participate; thus, the sample may be biased in ways that we cannot examine. An additional limitation of this study was the lack of assessment of our participants' mental health indicators, as well as their emotional, physical and material support needs. In addition to being unable to describe the mental health characteristics of our sample, such as their levels of depression or distress, the lack of data on mental health, well-being and need for support, limits our discussion of the functioning and adequacy of the social support networks reported. Future research should address these and other factors, including the role that factors such as age, geographic location (i.e., urban/rural status), and sexual orientation may play in the relationship between social networks size, quality and composition and the availability and operation of social support.

5. Conclusions

Our results suggest that African American adults may rely upon their informal network members for other types of support, such as physical health support and spiritual support, than for emotional support. This observed limited reliance upon network members specifically for emotional support may be related to the stigma of mental illness (Byrne 2000). Additionally, emotional support needs may be fulfilled through spiritual exchanges with network members, as a form of religious coping. Our findings offer insight into the *types* of individuals that African American men and women seek for their emotional support, which include non-familial network contacts, individuals with whom they have a close relationship, and individuals with whom they also discuss their physical health. Future mental health interventions seeking to increase African Americans' emotional support may benefit by involving these types of influential others. However, this work should be mindful of the literature that notes the importance of family in African American social networks. The preference for non-familial emotional support suggests that church and other community organizations must play a role in these efforts. Future studies should seek to identify barriers to emotional support exchanges within African American informal networks, and should also seek to address mental health stigma in this population, as stigma appears to be a barrier to emotional support seeking in formal and informal networks alike. In particular, these efforts may prove effective when provided in community settings, and in culturally and contextually appropriate manners.

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