Title

Family and Friendship Networks and Obsessive-Compulsive Disorder Among African Americans and Black Caribbeans.

Journal

The Behavior therapist / AABT, 40(3)

ISSN

0278-8403

Authors

Himle, Joseph

Taylor, Robert

Nguyen, Ann

et al.

Publication Date

2017-03-01

Peer reviewed

HHS Public Access

Author manuscript

Behav Ther (N Y N Y). Author manuscript; available in PMC 2017 September 01.

Published in final edited form as:

Behav Ther (N Y N Y). 2017 March ; 40(3): 99–105.

Family and Friendship Networks and Obsessive-Compulsive Disorder Among African Americans and Black Caribbeans

Joseph A. Himle,
School of Social Work, Department of Psychiatry, University of Michigan, Ann Arbor

Robert Joseph Taylor,
School of Social Work, Program for Research on Black Americans, Institute for Social Research, University of Michigan, Ann Arbor

Ann W. Nguyen,
Jack, Joseph and Morton Mandel School of Applied Social Sciences, Case Western Reserve University

Monnica T. Williams,
Department of Psychological Sciences, University of Connecticut

Karen D. Lincoln,
Suzanne Dworak-Peck School of Social Work, University of Southern California

Harry Owen Taylor, and
The Brown School of Social Work, Washington University in St. Louis, MO

Linda M. Chatters
School of Social Work, School of Public Health, Program for Research on Black Americans, Institute for Social Research, University of Michigan, Ann Arbor

Abstract

Although there is a large literature on the influence of social support on mental health there is limited research on social support and OCD. This is especially the case for African Americans and Black Caribbeans. This study examines the relationship between family and friendship networks and the prevalence of OCD. The analysis is based on the National Survey of American Life a nationally representative sample of African Americans and Black Caribbeans. Variables included frequency of contact with family and friends, subjective closeness with family and friends, and negative interactions (conflict, criticisms) with family members. The results indicated that only negative interaction with family members was significantly associated with OCD prevalence. African Americans and Black Caribbeans with more frequent negative interactions with family members had a higher likelihood of having OCD. Subjective closeness and frequency of contact with family and friends was not protective of OCD. Overall the findings are consistent with previous work which finds that social support is an inconsistent protective factor of psychiatric disorders, but negative interactions with support network members is more consistently associated with mental health problems.

Corresponding Author: Monnica Williams, Ph.D., University of Connecticut, Department of Psychological Sciences, 406 Babbidge Road, Unit 1020, Storrs, CT 06269-1020, monnica.williams@uconn.edu, Phone: 860-486-0919, Fax: 860-486-2760.

Keywords

Obsessive-compulsive disorder; social support; non-kin; Afro Caribbean

1. Introduction

OCD involves obsessions and/or compulsions. Obsessions involve repetitive thoughts, ideas or impulses that are excessive and experienced as outside of the individual's voluntary control (American Psychiatric Association, 2013). Compulsions are defined as repetitive behaviors or mental acts that are performed according to specific rules or standards and are designed to relieve distress and/or reduce the frequency or intensity of obsessional thoughts. Obsessions and compulsions center on a range of issues including but not limited to concerns related to dirt or contamination, symmetry or order, making catastrophic mistakes, harm coming to or harming others, and religious blasphemy (American Psychiatric Association, 2013).

OCD typically first occurs in childhood or early adulthood (Kessler, Chiu, Demler, Merikangas, & Walters, 2005) and approximately 2% of the general population in the US meet structured interview-based diagnostic criteria for the disorder in their lifetime (Kessler et al., 2005). International studies indicate that OCD is present at similar rates across culture and that symptom profiles are remarkably similar from country to country (Weissman et al., 1994). Within the US, there is some variation in the prevalence rates of OCD across race/ethnic groups. Our previous research indicates that approximately 1.6% of African Americans and Blacks of Caribbean descent meet criteria for OCD at some point in their lives (Himle et al., 2008). This prevalence rate is somewhat less than rates typically found among whites in the United States. However, when OCD is present in African American and Caribbean Blacks, it is typically more severe compared to whites (Himle et al., 2008). Contamination compulsions are particularly common among African Americans (Williams, Abramowitz, & Olatuni, 2012) whereas symptoms related doubt and uncertainty may be more prevalent among whites (Nota et al., 2014).

OCD is associated with detriments in several important areas of functioning including family relationships (Murphy & Flessner, 2015). Two dimensions of family functioning, family accommodation and high levels of expressed emotion within the family have received substantial attention in the OCD literature. Family accommodation refers to OCD-related behaviors/avoidance performed by family members (e.g., participating in compulsions, providing repetitive reassurance) in order to relieve distress among sufferers (Braga et al., 2014). These behaviors, although they can reduce anxiety in the short-run, have been found to be associated with a worsening of symptoms over time and a recent meta-analysis indicates that high levels of family accommodation have a substantial negative impact on treatment outcome (Bloch, Lebowitz, Panza, & Su, 2012). Expressed emotion refers to a range of interpersonal behaviors involving loud talking, belittling, criticism, arguments, and over-involvement in another person's affairs (Vaughn & Leff, 1976). Prior research indicates that high levels of expressed emotion in the family are associated with more severe OCD symptoms (De Berardis et al., 2008) and poorer response to treatment (Peris, Yadegar,

Asarnow, & Piacentini, 2012). The temporal relationships between OCD severity, treatment outcomes and expressed emotion in the family are largely unknown given the paucity of longitudinal studies related to this issue but it is likely that high symptom levels and poor treatment response both *contribute* to and *result* from increased expressed emotion among OCD families.

The relationship between OCD and family functioning beyond issues of accommodation and expressed emotion is not well known, particularly among adults with OCD. The pediatric OCD literature indicates that parents of children with OCD are less likely to encourage independence (Barrett, Shortt, & Healy, 2002), are over protective (Wilcox et al., 2008) and expect their children to be highly responsible (Farrell, Hourigan, & Waters, 2013) and are less positive and warm (Barrett et al., 2002) in their interactions compared to parents of children without OCD. Literature related to the impact of adult OCD on family interactions beyond the influence of high expressed emotion and family accommodation is also limited. It is clear that having an adult family member with OCD is often distressing for their relatives (Amir, Freshman, & Foa, 2000). Family members often report feelings of anxiety and depression (Amir et al., 2000; Cooper, 1996) and feel burdened by their relatives with OCD (Cooper, 1996). These burdens include disruption in relatives' social life and financial well-being as a result of living with a family member who has OCD (Cooper, 1996). Only one study has looked at the connection between family communication and OCD in African Americans. Using a retrospective self-report questionnaire, no connection was found between OCD severity and problematic family functioning in the areas of “communication and emotionality” (Sawyer, Williams, Chasson, Davis, & Chapman, 2015).

Beyond the association between OCD and family functioning, very little is known about the impact of OCD on other relationships. Much of the research that has been done related to friendships and OCD is limited to pediatric OCD. Kim and colleagues found that children with OCD had reduced social competence, fewer friendships and had greater difficulty making friends compared to matched controls without psychiatric problems (Kim, Reynolds, & Alfano, 2012). A second recent study confirmed increased difficulties with peer relations among youth with OCD compared to non-psychiatric controls. Borda and colleagues (Borda, Feinstein, Neziroglu, Veccia, & Perez-Rivera, 2013) found that youth with OCD report having fewer friends, more trouble making friends, experience increased levels of peer victimization and report greater fears of negative evaluation from peers compared to youth without OCD. In terms of ethnic minority youth, a large study in London found that minorities receiving treatment for OCD had more peer relationship difficulties as reported by parents compared to their White British counterparts with OCD (Fernández de la Cruz, et al., 2015). If this pattern of difficult interpersonal functioning also occurs in Black American youth with OCD, it could result in greater alienation when compounded with marginalization due to minority status (Williams & Jahn, in press). As for adults with OCD, information regarding the impact of OCD on relationships outside of the immediate family is limited to studies that report high levels of overall social impairment without reference to impairment in friendships specifically (Piacentini, Bergman, Keller, & McCracken, 2003). Thus, there is a clear paucity of information about the relationship between OCD and friendships.

The limited knowledge base related to the impact of OCD on relationships with family and friends notwithstanding, essentially nothing is known about family functioning and friendships among African American and Caribbean Blacks with OCD. Gathering information about family and other interpersonal relationships among African Americans and blacks of Caribbean descent with OCD in the United States is critical in order to understand the treatment needs of these groups.

The purpose of the present investigation is to gain further understanding on the impact of OCD on family relations and friendships. This is the first investigation on the impact of OCD on the family and social network of African American and Caribbean Blacks with OCD. This study utilizes data from the National Survey of American Life, the largest representative study of the mental health and well-being of African Americans and Caribbean Blacks available in the United States to date.

2. METHODS

2.1 Participants

The National Survey of American Life: Coping with Stress in the 21st Century (NSAL) was collected by the Program for Research on Black Americans at the University of Michigan's Institute for Social Research. The NSAL includes the first major probability sample of Black Caribbeans. For the purposes of this study, Black Caribbeans are defined as persons who trace their ethnic heritage to a Caribbean country, but who now reside in the United States, are racially classified as Black, and who are English-speaking (but may also speak another language).

2.2 Procedure

The data collection was conducted from February 2001 to June 2003. A total of 6,082 face-to-face interviews were conducted with persons aged 18 or older, including 3,570 African Americans, 891 non-Hispanic Whites, and 1,621 Blacks of Caribbean descent. Due to time and cost restraints, OCD was assessed in the African American and Black Caribbean sub-samples but not among non-Hispanic White participants. Consequently, this analysis is only among African Americans and Black Caribbeans.

The overall response rate was 72.3%. Response rates for individual subgroups for African Americans and Black Caribbeans were 70.7%, and 77.7% respectively. Final response rates for the NSAL two-phase sample designs were computed using the American Association of Public Opinion Research (AAPOR) guidelines (for Response Rate 3 samples) [see (Jackson, Neighbors, Nesse, Trierweiler, & Torres, 2004) for a more detailed discussion of the NSAL sample]. The NSAL data collection was approved by the University of Michigan Institutional Review Board.

2.3 Measures

2.3.1 Dependent Variable

Diagnostic assessment of OCD: Diagnostic assessment was conducted using the Diagnostic and Statistical Manual (DSM-IV) World Mental Health Composite International

Diagnostic Interview [WMH-CIDI] (Kessler & Ustan, 2004). The WMH-CIDI is a structured, lay interviewer-administered diagnostic interview. The CIDI short-form version (CIDI-SF) Obsessive-Compulsive Disorder diagnostic module (Kessler, Andrews, Mroczek, Ustun, & Witchen, 1989) was administered rather than the full WMH-CIDI OCD module. A CIDI-SF OCD diagnosis should be considered a probable DSM-IV OCD diagnosis, since the section does not fully assess DSM-IV criteria. Specifically, persons with a positive CIDI-SF OCD are estimated to have an 84.21% chance of also meeting full CIDI criteria for OCD according to the CIDI-SF OCD scoring guidelines. The CIDI-SF OCD questions assess the presence of obsessions and compulsions; the inability to put such thoughts "out of your mind," a sense that these obsessions/compulsions were unreasonable and/or unnecessary, and levels of distress and impairment.

2.3.2 Independent Variables

Family and Friendship Variables: There are five independent variables representing selected measures of involvement in extended family and friendship informal social support networks. Three measures assess involvement in family support networks and two measures assess involvement in friendship support networks. Degree of subjective family closeness is measured by the question: "How close do you feel towards your family members? Would you say very close, fairly close, not too close or not close at all?" This item was also asked of friends (i.e., Subjective Friendship Closeness). Frequency of contact with family members is measured by the question: "How often do you see, write or talk on the telephone with family or relatives who do not live with you? Would you say nearly every day, at least once a week, a few times a month, at least once a month, a few times a year, hardly ever or never?" This question was also asked of friends (i.e., Friend Contact). Lastly, negative interaction with family members is measured by an index of three items. Respondents were asked "Other than your (spouse/partner) how often do your family members: 1) make too many demands on you? 2) criticize you and the things you do? and 3) try to take advantage of you?" The response categories for these questions were "very often," "fairly often," "not too often" and "never." Higher values on this index indicate higher levels of negative interaction with family members (M = 1.85, SD = 0.59) (Cronbach's alpha =0.74).

Control Variables: Demographic variables used in this analysis included age, gender, marital status (married, unmarried), education, family income and ethnicity (African American, Black Caribbean). Missing data for family income and education were imputed using an iterative regression-based multiple imputation approach incorporating information about age, gender, region, race, employment status, marital status, home ownership, and nativity of household residents. The distribution of the study variables is presented in Table 1.

2.4 Data Analytic Strategy

The distribution of basic demographic characteristics, Cronbach's alpha and weighted logistic regression analyses were conducted using SAS (Version 9.1.3). Odds ratio estimates and 95% confidence intervals are presented. Standard error estimates are corrected for unequal probabilities of selection, nonresponse, poststratification, and the sample's complex

design (i.e., clustering and stratification), and results from these analyses are generalizable to the African American adult and Black Caribbean adult populations.

3. Results

3.1 Multivariate analysis

Table 2 presents the logistic regression of the family and friendship social support variables and lifetime obsessive compulsive disorder among African Americans and Black Caribbeans. The frequency of negative interaction with family members was the only family or friendship variable that was significantly associated with OCD. Respondents with OCD had more frequent negative interactions with their family members than respondents without OCD. Based upon the findings of previous research (Taylor et al., 2015), we tested whether there were significant interactions between the family and friendships social support variables and lifetime OCD. In particular we tested interactions between negative interaction and family contact, negative interaction and family closeness, negative interaction and friendship contact, negative interaction and friendship closeness, family contact and family closeness, friendship contact and friendship closeness, as well as family contact and friendship contact. None of these interactions were significant.

4. Discussion

4.1 Negative Interaction

The present paper adds to a growing literature confirming the relationship between negative family interactions and OCD. Similar to previous research (Chambless, Floyd, Rodenbaugh, & Steketee, 2007) the present study found that persons with OCD reported significantly more negative family interactions compared to persons who did not have OCD. This is the first paper to report this relationship among a nationally representative sample of African Americans and Blacks of Caribbean descent living in the US. This finding is concordant with prior research; studies on risk factors for psychiatric problems among African Americans have documented a positive relationship between negative interactions and a range of psychiatric problems. Individuals who report more negative interactions with family members are more likely to meet criteria for mood and anxiety disorders as well as a greater number of these disorders (Lincoln et al., 2010). For instance, several national studies of depression in African Americans found that respondents who reported more negative interactions with family members were one and half times more likely to meet criteria for major depression (Taylor, Chae, Lincoln, & Chatters, 2015) and experienced more depressive symptoms (Chatters, Taylor, Woodward, & Nicklett, 2015). Negative interactions are also predictive of suicide ideation and attempts (Lincoln, Taylor, Chatters, & Joe, 2012; Nguyen, Taylor, et al., 2016), PTSD (Nguyen, Chatters, Taylor, Levine, & Himle, 2016), and social anxiety disorder (Levine, Taylor, Nguyen, Chatters, & Himle, 2015) among African Americans.

Elevated levels of negative family interaction among African American and Caribbean Blacks with OCD is likely a bi-directional phenomenon. It is likely that African American's and Caribbean Blacks with OCD exhibit behaviors that are frustrating and worrisome to

their family members. It is not difficult to imagine that family members express these concerns with a range of interpersonal behaviors ranging from words of sympathy and support to excessive criticism and angry outbursts (Alonso et al., 2015). This broad range of responses is understandable given that clinical impression suggest that many individuals without OCD view OCD symptoms as senseless, excessive and at times manipulative. Conversely, it is also likely that increased stress associated with negative family interactions can increase risk for the development of OCD. The onset of OCD is often associated with stressful life events among individuals at risk for OCD (Albert, Asinari, Bogetto, Maina, & Rosso, 2011). It is possible that persons with sub-clinical OCD experience increased vulnerability to development of clinical OCD when family interactions are overly negative. Overall, the increased rate of OCD among respondents reporting higher than average negative family interactions is consistent with the literature documenting the relationship between high EE and OCD (Chambless et al., 2007).

In terms of clinical implications, when working with African Americans with OCD, it would be important for clinicians to ascertain the nature of the family communication styles to determine if high EE is present. If so, clinicians should consider including these family members in the certain aspects of the treatment process to provide education as how they can best support their loved one while in treatment, for example by emphasizing the importance of reducing conflict and increasing compassionate communications surrounding mental illness. Family members who have been involved in the client's rituals may be suffering and stressed as a result, therefore therapists should provide coping resources for these individuals and also work with the client to underscore the importance of not involving family members in OCD rituals.

4.2 Family and Friendships Social Support and OCD

Somewhat surprisingly, no other relationship variables were predictive of OCD risk. This finding stands in contrast to other research documenting the protective qualities of family support against meeting criteria for a range of disorders among Black Americans including posttraumatic stress disorder (Nguyen et al, 2016), social anxiety disorder (Levine et al., 2015), and major depression (Lincoln & Chae, 2012; Taylor et al., 2015). However, our finding that neither positive family relations nor supportive friendships reduced the likelihood of developing OCD is consistent with research indicating that biological factors such as genetic abnormalities (Taylor, 2015) and altered functional activation in brain regions involving affective and cognitive cortico-striatal-thalamic circuits (Brem et al., 2012) are central to the etiology of OCD. Perhaps family support and close friendships are not powerful enough to protect vulnerable individuals from developing OCD whereas negative family interactions may be toxic enough to increase the risk of OCD among those with a predisposition to OCD. In fact, research on negative interactions has indicated that the harmful effects of negative interactions can offset the protective effects of social support (Gray & Keith, 2003; Lincoln, Chatters, & Taylor, 2003, 2005). Negative interactions are particularly pernicious to mental health because they can erode one's positive self-appraisals and perceptions of competence and efficacy (Lincoln, 2000, 2007) and interfere with effective coping (Glanz & Schwartz, 2008). The use of adaptive stress coping strategies is often dependent on perceptions of self-efficacy and competence (Glanz & Schwartz, 2008).

Thus, along with a decreased sense of self-efficacy and competence, negative interactions can also lead to compromised stress coping responses. The results of this study may be particularly relevant here given that the particularly close kinship ties in black communities were still not associated with reduced risk of OCD. The relationship between high levels of expressed emotion within the family and increased risk for the development for a range of psychiatric disorders (Barrowclough & Hooley, 2003) clearly suggests that negative interactions are either a marker of elevated psychiatric symptomatology, a particularly strong contributor to psychiatric distress or a combination of both. These results suggest that that assessing and remediating negative family interactions could be of substantial benefit to both identifying and reducing OCD risk in the African American and Caribbean Black population in the US.

A second somewhat surprising finding in this study was that OCD did not significantly impact friendships in a negative way. Clinical experience indicates that persons with OCD can display observable symptoms (e.g., washing hands, repeating) in the presence of friends, arrive late or not at all to scheduled activities because of time consuming rituals, and appear distracted or distressed because of obsessional thoughts and accompanying anxiety. The maintenance of friendships despite these behaviors likely relates to the how much these behaviors interfere with interactions and activities and degree to which these behaviors are seen by the non-affected friend as disruptive or disturbing.

It is important to remember that unlike family members, friendships are relationships of choice. Whereas family ties are permanent friendship ties are voluntary, based on a history of reciprocity and trust. Thus individuals with OCD are more likely to lose friends who have difficulty with their symptoms and are able to maintain friendships with people who are more accepting of the disorder. In this analysis we found that the degree of subjective closeness to friends and the frequency of contact with friends was not associated with OCD. However, those with OCD may have a smaller network of friends. Some of these individuals may also be socially isolated from friends as research has found that adults with depression and anxiety are more likely be socially isolated from their friends (Taylor, Taylor, Nguyen, & Chatters, in press).

The lack of an association between friendship quality and OCD diagnosis relates to the fact that many OCD symptoms are private (e.g., intrusive thoughts, mental rituals). Further research is needed to determine the impact of OCD on adult friendships across cultures to determine if our findings are specific to African Americans and Caribbean Blacks or whether the limited impact of OCD on friendships is found among most samples of adults with OCD.

4.3 Summary and limitations

The findings from the current investigation are consistent with previous findings related to negative family interaction and OCD risk. It is clear, like with other psychiatric disorders, that negative interaction is more prevalent among respondents with OCD compared to those without OCD. The non-significant relationship between friendship quality and the diagnosis of OCD is interesting in that individuals appear to neither be protected by their friendships from developing OCD nor does the presence of OCD substantially impact their friendships

in a negative direction. Overall the findings are consistent with previous work which finds that social support is an inconsistent protective factor of psychiatric disorders, but negative interactions with support network members is more consistently associated with mental health problems (Lincoln et al., 2010).

This study has limitations. First, although the NSAL is the largest study of psychiatric disorders among Caribbean Blacks and African Americans conducted to date, the relatively small number of African Americans and Caribbean Blacks with OCD limits statistical power when examining the relationship between family relationships, friendships and OCD. Thus, we caution against over-interpretation of the null findings (e.g., no association between friendships and OCD), which could have been due to insufficient power to detect a small effect, and suggest that future replication efforts are needed. Second, the cross-sectional nature of this study does not allow for assessment of temporal relationships between OCD and interpersonal relationship impacts. Third, the NSAL did not assess OCD among Whites, which obviously does not allow for comparison of the association between OCD and interpersonal relationships among Whites and Blacks in the United States. Finally, the CIDI-SF may not yield identical rates of OCD compared to rates obtained using the full CIDI OCD diagnostic criteria.

In conclusion, this study is particularly notable given that it is among the first to investigate the relationship between friendship quality and adult OCD. This study is unique in its examination of family relationships and friendships and OCD risk among African American's and Caribbean Blacks. Also, unlike the vast majority of research on relationship factors and OCD which is derived from clinical samples of OCD patients, the present study involves a representative, national sample. Finally, further cross-cultural research is needed to expand our knowledge of the bi-directional nature of the relationship between OCD risk and notable interpersonal relationships to better inform research and clinical practice.

References

Albert U, Asinari GF, Bogetto F, Maina G, Rosso G. Stressful life events and obsessive-compulsive disorder: clinical features and symptom dimensions. Mood and Anxiety Disorders Unit. 2011; 197:259–264.

Alonso P, Cardoner N, Goldenberg X, Jimenez-Murcia S, Lopez-Sola C, Menchon JM, et al. Via E. Predictive familiality, stressful life events and gender on the course of obsessive-compulsive disorder. Journal of Affective Disorders. 2015; 185:129–134. [PubMed: 26172984]

American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th. Arlington, VA: American Psychiatric Publishing; 2013.

Amir N, Freshman BA, Foa EB. Family distress and involvement in relatives of obsessive compulsive disorder patients. Journal of Anxiety Disorders. 2000; 14:209–217. [PubMed: 10868980]

Barrett P, Shortt A, Healy L. Do parent and child behaviours differentiate families whose children have obsessive-compulsive disorder from other clinic and non-clinic families? Journal of Child Psychology and Psychiatry. 2002; 43(5):597–607. [PubMed: 12120856]

Barrowclough C, Hooley JM. Attributions and expressed emotion: a review. Clinical Psychology Review. 2003; 6:849–880.

Bloch MH, Lebowitz ER, Panza KE, Su J. Family accommodation in obsessive compulsive disorder. Expert Review of Neurotherapeutics. 2012; 12:229–238. [PubMed: 22288678]

Borda T, Feinstein BA, Neziroglu F, Veccia T, Perez-Rivera R. Are children withobsessive–compulsive disorder at risk for problematic peer relationships? Journal of Obsessive-Compulsive and Related Disorders. 2013; 2:359–365.

Braga GJ, Bortoncello FC, Meyer E, Pato M, Tusi Braga D, Van Noppen B, Cordioli VA. Patient and family factors associated with family accommodation in obsessive-compulsive disorder. Psychiatry and Clinical Neurosciences. 2014; 68:621–630. [PubMed: 24521250]

Brem S, Hauser TU, Iannaccone R, Brandeis D, Drechsler R, Walitza S. Neuroimaging of cognitive brain function in paediatric obsessive compulsive disorder: a review of literature and preliminary meta-analysis. Journal of Neural Transmission. 2012; 119:1425–1448. [PubMed: 22678698]

Chambless D, Floyd F, Rodenbaugh T, Steketee G. Expressed emotion of familial interaction: a study of acrophobic and obsessive-compulsive patients and their relatives. Journal of Abnormal Psychology. 2007; 116:754–761. [PubMed: 18020721]

Chatters LM, Taylor RJ, Woodward AT, Nicklett EJ. Social support from church and family members and depressive symptoms among older African Americans. American Journal of Geriatric Psychiatry. 2015; 23(6):559–567. DOI: 10.1016/j.jagp.2014.04.008 [PubMed: 24862679]

Cooper M. Obsessive-Compulsive Disorder: Effects on Family Members. American Journal of Orthopsychiatry. 1996; 66:296–304. [PubMed: 8860758]

De Berardis D, Campanella D, Serroni N, Gambi F, Carano A, La Rovere R, et al. Ferro FM. Insight and perceived expresed emotion among adult outpatients with obsessive-compulsive disorder. Journal of Psychiatric Practice. 2008; 14

Farrell LJ, Hourigan D, Waters AM. Do mothers enhance responsibility in children with obsessive compulsive disorder? A preliminary study of mother–child interactions during a problem solving discussion. Journal of Obsessive-Compulsive and Related Disorders. 2013; 2:78–84.

Fernández de la Cruz L, Jassi A, Krebs G, Clark B, Mataix-Cols D. Phenomenology and treatment outcomes in children and adolescents from ethnic minorities with obsessive-compulsive disorder. Journal of Obsessive-Compulsive and Related Disorders. 2015; 4:30–36.

Glanz, K., Schwartz, MD. Health behavior and health education: theory, research, and practice. 4th. San Francisco (CA): John Wiley and Sons, Inc; 2008. Stress, coping, and health behavior; p. 211-236.

Gray, BA., Keith, VM. The benefits and costs of social support for African American women. In: Brown, DR., Keith, VM., editors. In and out of our rights minds: The mental health of African American women. New York: Columbia University Press; 2003. p. 242-257.

Himle JA, Muroff JR, Taylor RJ, Baser R, Abelson JM, Hanna GL, et al. Jackson JS. Obsessive-compulsive disorder among African Americans and Caribbean Blacks: Results from the National Survey of American Life. Depression and Anxiety. 2008; 25:993–1005. [PubMed: 18833577]

Jackson JS, Neighbors HW, Nesse RM, Trierweiler SJ, Torres M. Methodological innovations in the National Survey of American Life. International Journal of Methods of Psychiatric Research. 2004; 13(4):289–298.

Kessler RC, Andrews G, Mroczek D, Ustun B, Witchen H. The World Health Organization Composite International Diagnostic Interview Short-Form (CIDI-SF). International Journal of Methods of Psychiatric Research. 1989; 7(4):171–185.

Kessler RC, Chiu WT, Demler O, Merikangas KR, Walters EE. Prevalence, severity, and comorbidity of 12-month DSM-IV disorders in the National Comorbidity Survey Replication. Archives of General Psychiatry. 2005; 62:617–627. [PubMed: 15939839]

Kessler RC, Ustan TB. The World Mental Health (WMH) Survey Initiative Version of the World Health Organization (WHO) Composite Diagnostic Interview (CIDI). The International Journal of Methods in Psychiatric Research. 2004; 13:93–121. [PubMed: 15297906]

Kim KL, Reynolds C, Alfano CA. Social impairment in children with obsessive compulsive disorder: Do comorbid problems of inattention and hyperactivity matter? Journal of Obsessive-Compulsive and Related Disorders. 2012; 1:228–233.

Levine DS, Taylor RJ, Nguyen AW, Chatters LM, Himle JA. Family and friendship informal support networks and social anxiety disorder among African Americans and Black Caribbeans. Social Psychiatry and Psychiatric Epidemiology. 2015; 50(7):1121–1133. DOI: 10.1007/s00127-015-1023-4 [PubMed: 25694021]

Lincoln KD. Social support, negative social interactions, and psychological well-being. Social Service Review. 2000; 74(2):231–252. DOI: 10.1086/514478 [PubMed: 26594064]

Lincoln KD. Financial Strain, Negative Interactions, and Mastery: Pathways to Mental Health Among Older African Americans. J Black Psychol. 2007; 33(4):439–462. DOI: 10.1177/0095798407307045 [PubMed: 21152353]

Lincoln KD, Chae DH. Emotional support, negative interaction and major depressive disorder among African Americans and Caribbean Blacks: Findings from the National Survey of American Life. Soc Psychiatry Psychiatr Epidemiol. 2012; 47(3):361–372. DOI: 10.1007/s00127-011-0347-y [PubMed: 21293846]

Lincoln KD, Chatters LM, Taylor RJ. Psychological Distress among Black and White Americans: Differential effects of social support, negative interaction and personal control. Journal of Health and Social Behavior. 2003; 44(3):390–407. DOI: 10.2307/1519786 [PubMed: 14582315]

Lincoln KD, Chatters LM, Taylor RJ. Social support, traumatic events, and depressive symptoms among African Americans. Journal of Marriage and the Family. 2005; 67(3):754–766. [PubMed: 16429592]

Lincoln KD, Taylor RJ, Bullard KM, Chatters LM, Woodward AT, Himle JA, Jackson JS. Emotional support, negative interaction and DSM IV lifetime disorders among older African Americans: Findings from the National Survey of American Life (NSAL). International Journal of Geriatric Psychiatry. 2010; 25(6):612–621. DOI: 10.1002/gps.2383 [PubMed: 20157904]

Lincoln KD, Taylor RJ, Chatters LM, Joe S. Suicide, negative interaction and emotional support among black Americans. Soc Psychiatry Psychiatr Epidemiol. 2012; 47(12):1947–1958. DOI: 10.1007/s00127-012-0512-y [PubMed: 22534818]

Murphy YE, Flessner CA. Family functioning in paediatric obsessiv compulsive and related disorders. British Journal of Clinical Psychology. 2015; 54:141–434.

Nguyen AW, Chatters LM, Taylor RJ, Levine DS, Himle JA. Family, friends, and 12-month PTSD among African Americans. Social Psychiatry and Psychiatric Epidemiology. 2016; 51:1149–1157. DOI: 10.1007/s00127-016-1239-y [PubMed: 27189209]

Nguyen AW, Taylor RJ, Chatters LM, Taylor HO, Lincoln KD, Mitchell UA. Extended family and friendship support and suicidality among African Americans. Social Psychiatry and Psychiatric Epidemiology. 2016; :1–11. DOI: 10.1007/s00127-016-1309-1

Nota JA, Blakey SM, George-Denn DA, Jacoby RJ, Schubert JR, Abramowitz JS, Coles ME. The experience of OCD-related instrusive thoughts in African American and European Americans: testing generalizability of cognitive models of obsessive compulsive disorder. Journal of Obsessive Compulsive and Related Disorders. 2014; 3:115–203.

Peris TS, Yadegar M, Asarnow JR, Piacentini J. Pediatric obsessive compulsive disorder: Family climate as a predictor of treatment outcome. Journal of Obsessive-Compulsive and Related Disorders. 2012; 1:276–273.

Piacentini J, Bergman RL, Keller M, McCracken J. Functional impairment in children and adolescents with obsessive-compulsive disorder. Journal of Child and Adolescent Psychopharmacology. 2003; 13:S61–S69. [PubMed: 12880501]

Sawyer B, Williams MT, Chasson G, Davis D, Chapman LK. The impact of childhood family functioning on anxious, depressive, and obsessive-compulsive symptoms in adulthood among African Americans. Journal of Obsessive-Compulsive & Related Disorders. 2015; 4:8–13. DOI: 10.1016/j.jocrd.2014.10.004

Taylor HO, Taylor RJ, Nguyen AW, Chatters L. Social isolation, depression, and psychological distress among older adults. Journal of Aging and Health. in press.

Taylor RJ, Chae DH, Lincoln KD, Chatters LM. Extended family and friendship support networks are both protective and risk factors for major depressive disorder and depressive symptoms among African-Americans and Black Caribbeans. The Journal of Nervous and Mental Disease. 2015; 203(2):132–140. DOI: 10.1097/NMD.0000000000000249 [PubMed: 25594791]

Taylor S. Disorder-specific genetic factors in obsessive-compulsive disorder: A comprehensive meta-analysis. American Journal of Genetics Part B: Neuropsychiatric Genetics. 2015; 171:325–332.

Vaughn C, Leff J. The measurement of expressedemotion in the families of psychiatric patients. British Journal of Social and Clinical Psychology. 1976; 15:157–165. [PubMed: 938822]

Weissman M, Bland R, Canino G, Greenwald S, Hwu H, Lee CK, et al. Yeh EY. The Cross-National Epidemiology of Obsessive-Compulsive Disorder: The Cross National Collaborative Group. Journal of Clinical Psychiatry. 1994; 55(Supplement 3):5–10.

Wilcox HC, Grados M, Samuels J, Riddle MA, Bienvenu OJ, Pinto A, et al. Nestadt G. The association between parental bonding and obsessive compulsive disorder in offspring at high familial risk. Journal of Affective Disorders. 2008; 111:31–39. [PubMed: 18299151]

Williams MT, Abramowitz JS, Olatunji BO. The relationship between contamination cognitions, anxiety, and disgust in two ethnic groups. Journal of Behavioral Therapy and Experimental Psychiatry. 2012; 43:632–637.

Williams MT, Jahn ME. Obsessive-compulsive disorder in African American children and adolescents: Risks, resiliency, and barriers to treatment. American Journal of Orthopsychiatry. in press.

Table 1
Demographic Characteristics of the Sample and Distribution of Study Variables

	% (S.E.)	Mean (S.D.)	N
Lifetime OCD		0.02 (0.10)	4995
Negative Interaction		1.85 (0.59)	5145
Family Closeness		3.64 (0.49)	5145
Family Contact		6.06 (1.00)	5147
Friend Closeness		3.29 (0.59)	5070
Friend Contact		6.60 (1.00)	5175
Age		42.18 (12.45)	5191
Gender			
Male	44.50 (0.81)		1914
Female	55.50 (0.81)		3277
Education		12.46 (1.94)	5191
Income		$37,545 (28,775)	5191
Marital Status			
Unmarried	57.75 (1.00)		3268
Married	42.25 (1.00)		1915
Ethnicity			
African American	93.02 (0.52)		3570
Black Caribbean	6.98 (0.52)		1621

Frequencies are unweighted; Percents and means are weighted to be nationally representative of the given population and subpopulations in the U.S.

Table 2

Multivariable weighted logistic regressions of Family and Friendship Social Support Network Variables and Lifetime OCD among African American and Caribbean respondents in the National Survey of American Life (NSAL, 2001-2003) (n=4857).

	Odds Ratio (95% CI)
Negative Interaction with Family	2.12 (1.56, 2.88) ***
Family Closeness	1.01 (0.66, 1.54)
Family Contact	1.04 (0.86, 1.26)
Friend Closeness	0.84 (0.56, 1.24)
Friend Contact	0.89 (0.73, 1.07)
Age	0.99 (0.97, 1.01)
Gender: Women vs. Men	0.80 (0.44, 1.47)
Marital Status: Unmarried vs. Married	1.28 (0.63, 2.59)
Education in Years	0.84 (0.76, 0.92) ***
Income	0.99 (0.93, 1.06)
Ethnicity: African American vs. Black Caribbean	0.71 (0.30, 1.68)

* $p < 0.05$

** $p < 0.01$

*** $p < 0.001$

CI=Confidence Interval