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Article

Social Ties and Depression: An Intersectional Examination of Black and White Community-Dwelling Older Adults

Christine A. Mair¹

Abstract

Aging literature often links social ties to lower depression for older adults; however, research shows inconsistent findings by race and gender. Drawing from an "intersectionality" framework, this article explores whether the relationship between social ties and depression is moderated by race and gender for a nationally representative sample of diverse, community-dwelling older adults (aged 60 and older). Analysis of the most recent wave of the Health and Retirement Study (HRS) indicates that White men, Black men, White women, and Black women differ in terms of the relationship between social ties and depression. Main findings include (a) the overwhelming benefit of marriage and partnership, (b) pronounced differences between Black women's and White women's friend and kin ties, and (c) the potential vulnerability of older Black men. Findings highlight the importance of catering community-based elder support toward diverse aging populations. Potential community-based care solutions are discussed.

Keywords

social ties, depression, intersectionality, race, gender

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Theoretical and programmatic attention to diversity in aging populations has increased in recent years. In 1996, Toni Calasanti called for increased focus on diversity in aging studies, whereas Dressel, Minkler, and Yen (1997, p. 18) encouraged other scholars to incorporate inequality in their understanding of the processes of aging: "As we have argued, the role of interlocking systems of inequality in shaping how aging is experienced on both the macro and the micro levels must be a central focus of this research." Dilworth-Anderson, Williams, and Gibson (2002) reviewed 20 years of caregiving research and noted the necessity of considering racial and ethnic and cultural differences in the effect of family support on older adults' depression. They called for more theoretical advancement in the study of diverse aging.

Aging scholars have begun to answer the call for further theoretical development of the role of inequality in aging studies. Cumulative advantage/disadvantage theory (CAD; O'Rand, 1996) and cumulative inequality theory (CI; Ferraro, Shippee, & Schafer, 2009) offer clear examples of how inequality accumulates across the lifespan to produce divergent destinies in later life. Such perspectives, however, tend to group all women or all African Americans together. Drawing from feminist theory, the "intersectionality" perspective encourages exploring gender differences within racial groups, racial differences within gender groups, as well as class and age variation (Collins, 1990). Although examples of intersectionality in aging studies are still relatively scarce (see Hinze, Andersson, & Gran, 2009; McMullin & Cairney, 2004), this perspective offers a useful complement to CAD/CI theories by exploring the nuanced context inherent within classifications of race and gender.

How do social ties affect depression in diverse aging populations? Strong social ties are often linked to better general health (Ferlander, 2007). Social ties may act as an important resource individuals can draw upon to buffer stress and strain. These ties, however, may have negative effects on health if they encourage unhealthy behaviors (Berkman, Glass, Brissette, & Seeman, 2000). Furthermore, the effect of social ties on depression may vary for diverse populations. Thus, despite recent attention to diversity in aging studies, previous studies have not addressed the overlapping influence of race and gender; thus, the specific relationship between social ties and depression among Black and White older adults remains unclear. How is the effect of social ties on depression moderated by gender and race for older adults? What do these differences mean for the development of policies and community care programs aimed at diverse aging populations?

Drawing from the intersectionality perspective and extensive literature on the relationship between social ties and health, I examine the link between social ties and depressive symptoms for a diverse group of Black and White older adults. Utilizing the latest wave of data (2006) from the Health and Retirement Study (HRS), I elaborate on recent attention to diversity in aging by investigating how social ties affect depression differently for community-dwelling older adults in

race–gender subgroups, including Black men, White men, Black women, and White women (controlling for Hispanic ethnicity). The purpose of this study is twofold: (a) to provide a baseline, in-depth analysis identifying how the effect of social ties on depression differs for older White men, Black men, White women, and Black women, and (b) to explore the meaning of these findings for programs and policies aimed at older adults. With an enhanced understanding of how social ties affect depression for diverse community-dwelling older adults, practitioners and policy makers will be better able to enhance older adults' opportunity to remain independent in their communities, if they choose.

The Intersectionality Perspective

Although extensive research links social ties to improved health (Ferlander, 2007), the relationship between social ties and depression is complexly intertwined with race and gender across the life course. Race and gender interact and intersect to form divergent destinies in later life (Dannefer, 2003; Ferraro et al., 2009; O'Rand, 1996). The intersectionality perspective offers a conceptual foundation for considering this complex relationship. Originally proposed within Black feminist theory, intersectionality stresses the compounding effects of race and gender, as well as other factors such as class and age (Collins, 1990). This theoretical framework emphasizes the overlapping nature of race and gender and argues against grouping together all women, all men, or all minority races and ethnicities. Intersectionality suggests that White women's experiences differ from Black women's, despite both groups being of the same gender. Similarly, Black men's minority status creates unique challenges that White men are unlikely to experience.

The intersectionality framework offers the ideal foundation for exploring the effect of social ties on depression for White men, Black men, White women, and Black women. Although CAD and CI theories address inequality across the life course (Ferarro et al., 2009; O'Rand, 1996), conceptualizing race and gender as intersecting categories is relatively rare in gerontological literature. Quantitative examples of intersectionality are also less common. Statistical modeling of intersectionality can be challenging, due to the complex theorization of the perspective (McCall, 2005). McMullin and Cairney (2004), in their study of self-esteem, performed one of the first quantitative studies of intersectionality among older adults. However, the authors did not focus on social ties and data limitations prevented them from examining race. A recent cross-sectional study of social ties and depression among non-Hispanic White men, Black men, White women, and Black women aged between 18 and 65 years also employs intersectionality and finds that the effects of marriage and nonmarriage differ by race and gender (Roxburgh, 2009). Though not without limitations, these examples demonstrate

the potential of the intersectionality perspective. A comprehensive intersectional examination of social ties and depression among older adults, however, has not been conducted. The present study specifically addresses this gap in the literature. An intersectionality focus on older adults' social ties and depression complements existing theories of inequality while seeking to gain a greater understanding of the programmatic/policy needs of increasingly diverse aging populations.

Social Ties and Depression in Diverse Aging Populations

Although many factors influence depression, a growing body of gerontological and sociological literature focuses on how social ties affect depression (for a review, see House, Umberson, & Landis, 1988). Social ties are linked to lower depression for older adults. Social involvement with friends and family may help alleviate depression via emotional, functional, and financial assistance (see Baker, Cahalin, Gerst, & Burr, 2005; Cobb, 1976; Fast, Keating, Otfinowski, & Derksen, 2004; Kahn & Antonucci, 1980; Lang & Baltes, 1997; Lin, Dean, & Ensel, 1986; Litwin & Shiovitz-Ezra, 2006; Moren-Cross & Lin, 2006; Nezlek, Richardson, Green, & Schatten-Jones, 2002).

The relationship between social ties and depression, however, is likely tempered by gender and race. Intense social ties can actually lead to increased levels of anxiety, particularly for women (Antonucci, Akiyama, & Landsford, 1998; Haines & Hurlbert, 1992; Israel & Antonucci, 1987). Although anxiety and depression are separate conditions, recent research indicates a connection between the two. Anxiety is considered an "active" emotion that may decline with age as "passive" emotions, such as depression, increase (Carstensen, Isaacowitz, & Charles, 1999; Ross & Mirowsky, 2008). Elevated anxiety for younger women may translate into higher depression at older ages. Women and African Americans often report higher depression (Geronimus, 2001; Jang, Borenstein, Chiriboga, & Mortimer, 2005; Mills & Henretta, 2001; Mirowsky, 1996; Mui, 1993; Pinquart & Sörensen, 2001; Skarupski et al., 2005) and the gender–race gap in depression may widen in older ages (Geronimus, 2001; Pinquart & Sörensen, 2001; Skarupski et al., 2005).

Social Ties From Partners, Kin, and Friends

To what extent do gender and race moderate the relationship between social ties and depression? To address this question, I explore social ties from marriage and partnership, children, and ties to friends, neighbors, and relatives. Marriage is commonly linked to many health benefits (Waite, 1995) and is one of the strongest predictors of lower depression among older adults (Dean, Kolody, & Wood, 1990; Mills & Henretta, 2001). Marriage and divorce rates, however, differ by gender and race. Therefore, not every individual has equal access to the benefits of marriage and partnership.

Studies of social ties in African American samples (Ball, 1983; Ball & Robbins, 1986; Brown & Gary, 1985; Ellison, 1990; Roxburgh, 2009) yield conflicting results. Many of these studies focus on measures of subjective well-being, such as life satisfaction. Life satisfaction has been identified as a subcomponent of depression (Mitchell, Mathews, & Yesavage, 1993) and is strongly negatively correlated with depression for older populations, including older African Americans (Jang, Borenstein, Chiriboga, Phillips, & Mortimer, 2006). Individuals reporting lower life satisfaction may be prone to depression and may have a weaker reaction to the positive effect of social ties. Never married African American women have lower life satisfaction than married, divorced, and widowed (Ball, 1983). Unmarried African American women rely more extensively on extended kin ties in lieu of spousal ties (Brown & Gary, 1985). Married Black men may have lower life satisfaction compared to other groups (Ball & Robbins, 1986). Roxburgh found no difference in depression between married and unmarried Black men (aged 18-65), suggesting that marriage may be less likely to lower depression for Black men. Research on marriage and partnership, reliance on nonspousal ties in lieu of marriage and partnership, and the potential vulnerability of Black men underscore the importance of examining older adults' social ties and depression by overlapping subgroups of race and gender.

Adult children may provide important social ties for older adults, but dependent children can be a drain on resources and may increase depression (Connidis, 2001; Connidis & McMullin, 1993). Furthermore, men and women may experience ties with adult children differently (Zhang & Hayward, 2001). Zhang and Hayward found that elderly, unmarried, childless men had higher depression than elderly, unmarried childless women. Similarly, Sudha, Mutran, Williams, and Suchindran (2006) noted that for women of any race, childlessness was not associated with higher depression.

For older adults who lack spousal or child ties, having friends and extended relatives living in close geographic proximity may lower depression. Even among older adults with adult children, friend ties may be more effective in lowering depression (Dean et al., 1990; Pinquart & Sörensen, 2001). The effect of having friends or relatives living nearby also appears to differ by gender and race. Older men are more likely than older women to have friends and family living nearby (Ajrouch, Blanton, & Antonucci, 2005). For older African Americans, family living in proximity may actually decrease life satisfaction, a strong correlate to increased depression, whereas having friends nearby may not affect life satisfaction (Ellison, 1990). Therefore, older African Americans may be at high risk for depression

despite having friends or relatives available nearby. For older adults in general, a few studies conclude that kin interaction has no concrete or clearly discernable effect on well-being (Ball, 1983; Haines & Hurlbert, 1992; Lee & Ellithorpe, 1982; Spakes, 1979) and may have a slight negative effect for White rural retirees (Brown & Glasgow, 2008). More research is necessary to disentangle the effects of friends and kin on depressive symptoms for Black and White older adults.

More frequent interaction with friends and kin likely lowers older adults' depression, but the effect varies by race and gender. Women and African Americans have more active and frequent social interactions in old age (Antonucci & Akiyama, 1987; Antonucci et al., 1998; Cornwell, Laumann, & Schumm, 2008). Social ties are more strongly associated with general life satisfaction for older women compared to older men (Bourque, Pushkar, Bonneville, & Beland, 2004), suggesting that social ties may also have a weaker effect on depression for men compared to women. Elderly, unmarried men have fewer social connections (Van Tilburg, 1995). Older men tend to arrange social interactions around their spouse. Thus, widowed men may be more vulnerable to social isolation than widowed women.

Social tie quality is likely a better predictor of general health than frequency of interaction (Litwin & Shiovitz-Ezra, 2006). Individuals can rely more strongly on close, high-quality ties for assistance and support (Ajrouch et al., 2005), which also lessens depression for older adults (Bothell, Fischer, & Hayashida, 1999; Wallsten, Tweed, Blazer, & George, 1999). Men and African Americans have smaller social networks overall (Cornwell et al., 2008) and thus may have fewer social resources to draw from in times of need. White women report more emotional support from friends and family than White men (Turner, 1994). Overall, the literature suggests that White men have fewer, less frequent social ties than women and African Americans, which may be a slight social disadvantage in old age.

Normative expectations of social interaction also vary by gender and race and may condition the relationship between social ties and depression. Women are more likely to be "kin-keepers" in the family and are expected to maintain communication between family members (Connidis, 2001). Expectations of assistance and receipt of assistance from friends and family also varies by race and ethnicity and cultural norms (Dilworth-Anderson & Marshall, 1996; Dilworth-Anderson et al., 2002; Moriarty & Butt, 2004). Whites are more likely to ask adult children for help and are more likely to receive emotional support from kin (Sarkisian & Gerstel, 2004). African Americans tend to seek assistance from family for practical tasks like housework and child care (Lincoln, Chatters, & Taylor, 2003; Sarkisian & Gerstel, 2004). Older African Americans also tend to receive more assistance from multigenerational ties, such as grandchildren (Peek, Coward, & Peek, 2000). African Americans and Caribbean Americans report stronger connections to church ties compared to other groups (Dilworth-Anderson et al., 2002). Multigenerational kin and church ties (Roff et al., 2004) may buffer depression, particularly in low-income communities that lack formal sources of support (Ferlander, 2007). Similar to marriage and partnership ties and nonspousal ties, the overall effect of social support expectations on depression is likely conditioned by gender and race (Scott & Wenger, 1995; Turnbull & Mui, 1995).

The literature on social ties and depression for diverse samples yields mixed conclusions. Few studies examine the intersecting effect of gender and race. Those that do (Armstrong, 2000; Jang et al., 2005; Laditka, Laditka, & Fisher Drake, 2006; Roxburgh, 2009) either neglect the role of social ties or analyze samples that are not nationally representative of older Americans. Furthermore, large studies that subdivide samples by gender and race rarely develop suggestions for policy and program development. The aim of this article is to provide a more comprehensive analysis of the relationship between social ties and depression that lends itself to broad application in communities. To do so, I analyze nationally representative data of older adults by race and gender, testing the effects of a wide variety of social ties on depression. This article seeks to provide a clearer direction for the future of gerontology and policy/program development by clarifying the relationship between social ties and White older adults and by identifying specific social ties that reduce depressive symptoms.

Hypotheses

Based on the intersectionality framework and previous research on the relationship between social ties and depression in diverse samples, I hypothesize that gender and race moderate the relationship between social ties and depression. Due to the strong reliance of men on their wives or partners for social ties and lower rates of marriage in Black populations, I hypothesize that widowed men and nonpartnered Black men are more vulnerable to depression. Different social tie patterns of Blacks and Whites leads me to hypothesize that Black respondents utilize nonspousal ties such as friends, children, and other kin more extensively than Whites. Finally, despite evidence of support from church groups in African American populations, I hypothesize that the advantaged position of Whites and women's higher propensity to form social ties will mean that Whites and women benefit most from social ties.

Method

Sample: The HRS

I utilize data from the most recent wave (2006) of the HRS. The HRS is sponsored by the National Institute of Aging (Grant Number NIA U01AG009740) and is conducted by the University of Michigan. It is a nationally representative, longitudinal panel study of adults over the age of 50 in the United States (for a thorough description, see Hauser & Willis, 2005). The measures are drawn from the raw HRS data as well as RAND HRS data (Version H, February 2008), a cleaned data set based on the HRS. This dataset is uniquely suited to the study of social ties, depression, and diversity because it oversamples for racial minorities and includes extensive measures of social ties, depression, and physical health. The analytic sample includes 10,441 noninstitutionalized Black and White adults aged 60 and older in 2006.

Dependent Variable: Depression

The RAND HRS provides an index of depressive symptoms using the Center for Epidemiologic Studies Depression (CES-D) scale. The CESD is a summation scale with high internal consistency and reliability across a range of populations (Radloff, 1977). It is common in studies using HRS data (Benjamins, 2005; Brown, Bulanda, & Lee, 2005; Fultz, et al., 2005; Gallo et al., 2006; Luo & Waite, 2005; Siegel, Bradley, Gallo, & Kasl, 2004; Sobal & Rauschenbach, 2003). Short forms of the scale are recommended for older adults and are comparable to the 20-item scale (Kohout, Berkman, Evans, & Cornoni-Huntley, 1993). Despite well-grounded critiques in mental health literature that suggest that depression measures are biased against minorities (Callaghan & Wolinsky, 1994), the CESD has been shown to be a robust measure of depressive symptoms in diverse samples (Foley, Reed, Mutran, & DeVellis, 2002; Nguyen, Kitner-Triolo, Evans, & Zonderman, 2004). The short form of the CESD provided by the HRS excludes five items that are particularly biased against minorities (Callaghan & Wolinsky, 1994). Thus, it is a useful measurement of depression for Black and White older adults.

The short version of the CESD summation scale provided by the HRS includes 8 items: (a) felt depressed, (b) felt everything is an effort, (c) sleep is restless, (d) felt alone, (e) felt sad, (f) could not get going, (g) felt happy, and (h) enjoys life. Affirmative responses, "all," or "most of the time," to items (a) to (f) add points, whereas affirmative responses, "all," or "most of the time," to items (g) and (h) subtract points. Higher scores on the CESD indicate more depressive symptoms and thus higher depression (see Figure 1 for descriptive information on depression in the analytic sample).

Independent Variables: Social Ties, Gender, and Race

To pinpoint which social ties are the best resources for a diverse sample, the analysis includes a broad range of social tie measurements (Haines & Hurlbert, 1992). Although studies of older adults sometimes employ summation and index scales to measure social ties (see Jang et al., 2005; Park, 2009), the literature on social ties and depression indicates that men, women, Blacks, and Whites likely have different social tie patterns and preferences. White men, for example, may respond to a type of tie that Black men do not utilize. Summation or index measures fail to account for this type of variation. Thus, it is necessary to examine a broad range of social ties separately to identify race and gender patterns.

Social ties include marital status (married/partnered, divorced, widowed, and never married; 0 = married/partnered), number of all living children (sum), frequency of interaction (derived from a two-item question on raw frequency of interaction yielding the number of interactions each respondent has per week; for a similar method, see Choi, Burr, Mutchler, & Caro, 2007), proximate relatives ($1 = relatives \ living \ nearby$, $0 = relatives \ not \ living \ nearby$), proximate friends ($1 = friends \ living \ nearby$, $0 = friends \ not \ living \ nearby$), and help from relatives and friends ($1 = has \ relatives \ and \ friends \ to \ help \ with \ future \ needs$, $0 = does \ not \ have \ relatives \ and \ friends \ to \ help \ with \ future \ needs$).

Gender is measured as a dummy variable (1 = female, 0 = male). In the HRS, race is classified as three possible categories: White, Black, and Other. Due to an overall a lack of information about the "Other" racial group, the numerous ethnicities that likely comprise the group, and the small sample, it would be misleading to draw any major conclusions about this subsample. Thus, the analysis excludes all respondents in the Other racial category and dichotomizes *race* as Black or White (1 = Black, 0 = White). I employ the more generalized term *Black* rather than *African American* because (a) this is the terminology used by the HRS, and (b) respondents classified as Black are likely diverse, including African Americans, Caribbean Americans, recent African immigrants, and so on.

Covariates: Hispanic Ethnicity, Health, Socioeconomic Status (SES), and Age

Although an in-depth consideration of racial groups beyond Black and White is not within the scope of this article, individuals classified as Black or White may also be of Hispanic ethnicity. Hispanic older adults likely possess different norms with regard to social ties than non-Hispanics. Thus, the analysis includes Hispanic ethnicity as a covariate dummy variable (1 = Hispanic, 0 = non-Hispanic). Physical health is measured as self-rated health (1 = excellent; 5 = poor) and functional limitations (instrumental activities of daily living [IADL]) measure any difficulty with the following tasks: (a) using a phone, (b) handling money, (c) taking medications, or (d) preparing a meal. Both items are commonly used in studies predicting mental well-being (Balaswamy & Richardson, 2001; Fiori, Antonucci, & Cortina, 2006; Lee & Ellithorpe, 1982; Okabayashi, Liang, Akiyama, & Sugisawa, 2004; Wenger, Davies, & Shahtahmasebi, 1995) and in studies using HRS data (Benjamins, 2005; Luo & Waite, 2005; Siegel et al., 2004). Higher scores on self-rated health and/or functional limitations indicate poorer physical health. Age is measured categorically (60-69 years; 70-79 years; 80 years or older; 0 = 80 years or older). SES includes three variables: income (natural log of household income/year), net wealth (total net wealth of a household minus any household debt/10,000), and education (total years of education). These three measurements of SES are commonly included together as covariates in studies using HRS data (see Benjamins, 2005; Gallo et al., 2006; Sobal & Rauschenbach, 2003; Sudano & Baker, 2006; Zhang, 2006; Zhang & Hayward, 2006). Despite being conceptually linked, these measures of SES are not highly correlated in the HRS data (education and income have the highest correlation of the three, at only .151, p = .001) and pose no threat of multicollinearity (confirmed by additional tests of tolerance and variation inflation factor [VIF] results available upon request; see Cohen, Cohen, West, & Aiken, 2003).

Depressive Symptoms by Race and Gender

In the HRS, depression varies by race and gender (Table 1, Figure 1). Blacks report more depressive symptoms than Whites, yet women of both races report more depressive symptoms than men. Despite research suggesting that the CESD underestimates depression for Black men (Callaghan & Wolinsky, 1994), Black men in this sample have higher average depressive symptoms than Whites. Descriptively, social ties are also conditioned by race and gender. White men are the most likely to be married or partnered. Black women are the most likely to have relatives living nearby and the least likely to have friends living nearby.

Analytic Strategy

The analysis includes ordinary least squares (OLS) regression predicting depressive symptoms for the full sample (N = 10,441). OLS regression analysis on the full sample includes models adding physical health; race, gender, and ethnicity; social ties; covariates; and interactions between race, gender, and social ties (Table 2). The final model of the full sample (Table 2, Model 5) includes a two-way interaction effect between gender and race, as well as multiple three-way interaction effects are presented in Table 2). To best display the concept of intersectionality and for ease of interpretation of the three-way interaction effects, the second part of the analysis includes OLS regression of split samples by

lable 1. Descriptive statistics of individuals in Analysis by race and Gender	ט אאושווא ווו אושטווו	א המכפ and Gender			
	Total Sample (N = 10,441) 100%	VVhite Men (N = 3,823) 36.615%	Black Men (N = 478) 4.578%	White Women (N = 5,207) 49.871%	Black Women (N = 933) 8.936%
Physical health Average self-rated health	2.864 (1.090)	2.798 (1.076)	3.080 (1.132)	2.817 (1.091)	3.288 (1.003)
(1 = exceilent, 5 = poor) Average functional limitations (instrumental activities	2.350 (1.414)	2.294 (1.425)	2.364 (1.479)	2.332 (1.402)	2.670 (1.354)
of daily living) Ethnicity					
Hispanic (1 = Hispanic, 0 = non-Hispanic)	6.513%	6.723%	I.255%	7.701%	1.715%
Social ties					
Married and partnered (reference category)	63.748%	81.848%	68.410%	55.598%	32.690%
Divorced and separated	9.511%	6.069%	14.017%	9.622%	20.686%
Widowed	24.136%	9.861%	13.598%	32.591%	40.836%
Never married	2.605%	2.222%	3.975%	2.189%	5.788%
Average number of	3.332 (2.175)	3.255 (2.057)	4.008 (2.831)	3.245 (2.088)	3.790 (2.580)
living children					
Average frequency of interaction (ner week)	2.083 (7.047)	2.052 (5.424)	1.918 (3.656)	2.00 (6.633)	2.728 (13.514)
Relatives living nearby	28.867%	30.709%	30.126%	26.733%	32.583%
 (1 = relatives living nearby, 0 = relatives not living nearby) 					

Table 1. Descriptive Statistics of Individuals in Analysis by Race and Gender

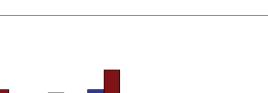
(continued)

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	Total Sample (N = 10,441) 100%	White Men $(N = 3,823)$ 36.615%	Black Men (N = 478) 4.578%	White Women $(N = 5,207)$ 49.871%	Black Women (N = 933) 8.936%
Friends living nearby (1 = friends living nearby,	68.566%	70.965%	68.829%	67.409%	65.059%
 0 = friends not living nearby) Has relatives and friends to help (1 = relatives and friends to help, 0 = no relatives and friends to help) 	69.380%	65.158%	75.941%	69.541%	82.422%
Covariates					
Average income (In) Average net wealth	2.207 (4.099) 62.010 (248.963)	2.534 (4.378) 77.216 (257.774)	2.498 (4.304) 22.055 (62.037)	1.944 (3.860) 63.294 (272.491)	2.186 (4.012) 13.010 (30.260)
(in 10,000 dollars) Average vears of education	12.368 (3.111)	12.836 (3.203)	10.628 (3.824)	12.338 (2.871)	11.513 (3.110)
Average age	72.046 (7.973)	72.169 (7.674)	71.042 (7.434)	72.268 (8.236)	70.822 (7.815)
60-69	44.517%	42.977%	48.117%	44.095%	51.340%
70-70	36.203%	38.268%	37.866%	34.915%	34.084%
80+ (reference category)	19.280%	18.755%	14.017%	20.991%	14.577%

Note: N = 10,441; standard deviations are shown in parentheses; ln = natural log. Source: Health and Retirement Study, 2006.

2.5

2



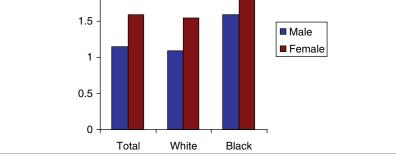


Figure 1. Mean depressive symptoms by race and gender Source: Health and Retirement Study, 2006.

subgroups of race and gender (White men, N = 3,823; Black men, N = 478; White women, N = 5,207; Black women, N = 933; see Table 3). This split sample technique is recommended for quantitative intersectional analyses (McCall, 2005). Table 3 presents three-way interaction terms by essentially interacting every variable from the full model (Table 2, Model 4), including social ties, with race and gender. The split sample analysis (Table 3) allows for a more thorough consideration of the confounding effects of race and gender and highlights the differential effects of social ties for each subgroup. In addition, it presents a thorough yet clear presentation and interpretation of the complex three-way interaction effects inherent in this intersectional analysis.

Results

Overall, the results indicate that social ties are an important predictor of depressive symptoms. Initial models (Table 2, Models 1 and 2) include physical health, gender, and race and ethnicity. In fact, when social ties are added to the model (Table 2, Model 3) race is no longer statistically significant, suggesting that social ties may mediate the relationship between race and depression. The addition of social ties to the analysis (Table 2, Model 3) statistically significantly improves the fit of the model to the data. Specifically, including social ties in Model 3 yields a model that explains 21.2% of the variation in the data compared to Model 2 that only explained 19.4% of the variation in the data (as indicated by improved R^2 statistics and confirmed with incremental *F* calculations: F = 30.125, which is statistically significant at $\alpha = .01$, df = 8).

Table 2. Ordinary Least Squares (OLS) Regression Models Predicting Depressive Symptoms	Squares (OLS) Regr	ession Models Pre	dicting Depressive	e Symptoms		
	Model I	Model 2	Model 3	Model 4	Model 5	Model 6
Constant Physical health	-0.741*** (0.048)	-0.952 ^{stotek} (0.051) -0.720 ^{stotek} (0.066)	-0.720**** (0.066)	0.193 (0.121)	0.144 (0.122)	0.175 (0.123)
Self-rated health	0.614*** (0.017)	0.590*** (0.018)	0.565*** (0.017)	0.525*** (0.018)	0.526*** (0.018)	0.525*** (0.018)
(instrumental activities	0.166 ^{%stsk} (0.013)	0.169 ^{ktett} (0.013)	0.165**** (0.013)	0.163**** (0.013)	0.164**** (0.013)	0.163 ^{*66*} (0.013)
Race, gender, and ethnicity						
Black ($0 = White$)	I	0.133** (0.049)	0.057 (0.050)	-0.033 (0.050)	0.143 [†] (0.083)	0.145† (0.083)
Female ($0 = male$)	I	0.386*** (0.034)	0.251*** (0.035)	0.219*** (0.035)	0.252*** (0.037)	0.247*** (0.037)
Hispanic	Ι	0.417**** (0.069)	0.400*** (0.068)	0.118 [†] (0.072)	0.123 [†] (0.072)	0.122 [†] (0.072)
(0 = non-Hispanic)						
Social ties						
Divorced and separated	I		0.488*** (0.059)	0.495*** (0.058)	0.497 ^{%%} (0.058)	0.497*** (0.064)
(0 = married and						
partnered)						
Widowed ($0 = married$	Ι	I	0.497*** (0.042)	0.511*** (0.044)	0.515*** (0.044)	0.543*** (0.047)
and partnered)						
Never married			0.329** (0.107)	0.325** (0.107)	0.330** (0.107)	0.341** (0.118)
(0 = married and						
partnered)						
Number of living	I		0.008 (0.008)	-0.005 (0.008)	-0.005 (0.008)	-0.005 (0.008)
children						
Frequency of interaction	I		-0.003 (0.002)	-0.003 (0.002)	-0.003 (0.002)	-0.003 (0.002)
Relatives living nearby	I	I	0.035 (0.037)	<0.001 (0.037)	0.003 (0.037)	0.004 (0.037)
(0 = relatives not)						
living nearby)						

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Table 2. (continued)						
	Model I	Model 2	Model 3	Model 4	Model 5	Model 6
Friends living nearby (0 = friends not			-0.250**** (0.036)	-0.246*** (0.036)	-0.250 ^{%%*} (0.036) -0.246 ^{%%*} (0.036) -0.246 ^{%%*} (0.036) -0.245 ^{%%*} (0.038)	-0.245*** (0.038)
living nearby) Has relatives and friends to help $(0 = no relativesand friends to help)$	l	I	-0.136*** (0.036)	-0.164*** (0.036)	−0.136**** (0.036) −0.164**** (0.036) −0.163**** (0.036) −0.197**** (0.037)	-0.197*** (0.037)
Income (In) Net wealth (in 10.000)				~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	÷	-0.018 (0.004) <-0.001 (<0.001)
Years of education				-0.063**** (0.006)		-0.063*** (0.006)
Aged 60 to 69 years		I	I	0.276*** (0.050)	0.276**** (0.050) 0.278**** (0.050)	0.279*** (0.050)
(0 = aged 80+)						
Aged 70 to 79 years (0 = aged 80+)	I			0.081 [†] (0.048)	0.083 [†] (0.048)	0.095† (0.048)
Interaction effects						
Black women [*]	I	Ι	I		-0.271** (0.101)	-0.573** (0.190)
Black women—	I		I	I		-0.254 [†] (0.136)
widowed*						
Black* women*	I	I	I	I	I	0.530*** (0.149)
(has relatives and						
friends help)						
Adjusted R ²	0.181	0.194	0.212	0.223	0.223	0.224
Model F	1150.49***	503.3 I ***	216.40***	167.41***	159.08***	126.74***
Df	2	5	13	81	19	24
Note: $N = 10,441$; unstandardized regression coefficients shown with standard errors (in parentheses); $\ln =$ natural log	ed regression coefficier	ıts shown with standa	rd errors (in parentheses);	In = natural log.		

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[†] $p \le .10$. * $p \le .05$. ** $p \le .01$. ** $p \le .001$. Source: Health and Retirement Study, 2006.

Table 3. Ordinary Least Squares (OLS) Regression Models Predicting Depressive Symptoms for Split Sample by Gender and Race	gression Models Predic	ting Depressive Sympto	ms for Split Sample by C	Gender and Race
	White Men $(N = 3,823)$	Black Men (N = 478)	White Women $(N = 5,207)$	Black Women $(N = 933)$
Constant Physical Leader	0.214 (0.174)	l .444** (0.455)	0.317† (0.188)	-0.262 (0.442)
Fnysical nearth Self-rated health	0.455*** (0.026)	0.344*** (0.077)	0.604*** (0.026)	0.490*** (0.071)
(I = exceilent, 5 = poor) Functional limitations (instrumental activities	0.131**** (0.019)	0.091 (0.059)	0.170*** (0.020)	0.286**** (0.052)
of daily living) Ethnicity				
Hispanic (0 = non-Hispanic) Social ries	0.101 (0.103)	0.432 (0.696)	0.089 (0.102)	I.478** (0.479)
Divorced and separated	0.654*** (0.101)	0.562* (0.228)	0.373*** (0.086)	0.414* (0.177)
(U = married and parrnered) Widowed (0 = married and partnered) Never married	0.939**** (0.085) 0.335* (0.167)	0.089 (0.238) 0.695† (0.408)	0.420*** (0.059) 0.210 (0.172)	0.299 [†] (0.157) 0.177 (0.289)
(u = marrea and parmered) Number of living children Frequency of interaction	-0.005 (0.012) -0.005 (0.004)	-0.004 (0.029) -0.023 (0.022)	-0.011 (0.012) -0.007^{\dagger} (0.004)	0.18 (0.026) 0.002 (0.005)
Relatives living nearby (0 = relatives not living nearby)	0.008 (0.033)	0.222 (0.174)	–0.021 (0.00) –	0.024 (0.134)
Friends living nearby (0 = friends not living nearby)	-0.234*** (0.053)	-0.282 (0.174)	-0.235*** (0.053)	-0.280* (0.132)
Has relatives and friends to help $(0 = no relatives and friends to help)$	-0.081 (0.051)	-0.113 (0.183)	-0.282**** (0.054)	0.319 [†] (0.163)

(continued)

	White Men $(N = 3,823)$	Black Men (N = 478)	White Women $(N = 5,207)$	Black Women $(N = 933)$
Covariates				
Income (In)	-0.010 (0.006)	-0.041* (0.020)	-0.015* (0.007)	-0.045** (0.017)
Net wealth (in 10,000 dollars)	<-0.001 (<0.001)	-0.001 (0.001)	<-0.001 (<0.001)	-0.001 (0.002)
Years of education	-0.049*** (0.009)	-0.084*** (0.023)	-0.066*** (0.010)	-0.081*** (0.022)
Aged 60 to 69 years ($0 = aged 80+$)	0.172* (0.073)	0.114 (0.265)	0.306*** (0.074)	0.601** (0.206)
Aged 70 to 79 years ($0 = aged 80+$)	-0.049 (0.070)	-0.048 (0.252)	0.186** (0.070)	0.261 (0.202)
Adjusted R ²	0.211	0.149	0.226	0.210
Model F	64.78***	6.22***	96.20***	16.49***
df	16	16	16	16

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Table 3. (continued)

The results also suggest that in addition to being important predictors of depression, gender and race moderate the relationship between social ties and depression. The clearest indication of the moderating influence of gender and race is the statistically significant interaction effect between gender and race (Table 2, Model 5) as well as the significant interactions between gender, race, and social ties (Model 6). Model 6 yields the greatest explanatory power of all of the models tested in Table 2. With an R^2 statistic of .224, Model 6 explains 22.4% of the variation in the dependent variable and is statistically significantly the best fit to the data according to incremental *F* calculations (*F* = 3.230, which is statistically significant at $\alpha = .01$, df = 5). The statistically significant three-way interaction effects indicate differences between Black and White women, as well as Black and White men in terms of social ties and depressive symptoms.

To thoroughly illustrate the intersectionality perspective, the second part of the analysis (Table 3) explores three-way interactions between race, gender, and social ties in more depth by splitting the sample by race and gender. Split sample analysis reveals further evidence of the moderating effect of race and gender on the relationship between social ties and depressive symptoms. Specifically, an absence of spousal or partner ties is statistically significantly associated with elevated depression for men, particularly White men, in this sample. White men who are divorced and separated, widowed, or never married report more depressive symptoms (Table 3). Divorce and separation is associated with elevated depression for Black men as well, but the effect of widowhood is nonsignificant and the effect of never being married is only marginally significant. Women, particularly White women, also benefit from marriage and partnership. Black women exhibit a similar pattern to Black men but never married Black women do not experience elevated depression (even marginally). Divorce and separation, compared with marriage and partnership, is associated with elevated depressive symptoms.

In addition to being less dependent upon marriage and partnership, Black respondents may not utilize more nonspousal ties to alleviate depression. Having friends living nearby is associated with fewer depressive symptoms for all groups except Black men (Table 3). Furthermore, having friends or relatives to help with future needs is associated with fewer depressive symptoms for White women only and is marginally associated with *increased* depressive symptoms for Black women. I will explore the potential meanings of this finding, including the possibility of reverse causality, further in the discussion section. Frequency of interaction is not associated with lower depressive symptoms for White women only associated with lower depressive symptoms for White women only marginally associated with lower depressive symptoms for White women only.

In general, Whites and women display more significant effects between social ties and depression. All but one of these effects (having relatives and friends to help with future needs for Black women) is associated with lower depressive symptoms (Table 3). Black men are the only subgroup to not display any statistically significant effects between non-spousal social ties and depression, positive or negative. In the case of Black men, a lack of statistically significant effects is theoretically and empirically significant. White women yield the highest number of statistically significant effects between social ties and depressive symptoms (all of which are associated with fewer depressive symptoms).

Not surprisingly, poorer self-rated health and more functional limitations are associated with more depressive symptoms for every subgroup (with the exception of Black men's depressive symptoms, which are not statistically associated with functional limitations; see Table 3). Hispanic ethnicity is a significant predictor of depressive symptoms only in early models of the full sample (Table 2) and only for Black women in the split sample analysis (Table 3). Higher income and more education are associated with fewer depressive symptoms. Younger age groups, particularly those in the age group of 60 to 69, report more depressive symptoms than those aged 80 and older (Table 2, Table 3).

Discussion

The purpose of this study was to examine how gender and race moderate the relationship between social ties and depression for a diverse sample of community-dwelling older adults and to explore the meaning of this variation for policy and programs aimed at promoting elder well-being. Although there is agreement in the literature that generalized social ties may lower depression, details with regard to variation by gender and race are inconsistent. Lack of clarity in the literature is largely due to a neglect of diversity as well as sample limitations. Using a large and diverse nationally representative sample of Black and White older adults from the HRS, I test the argument that gender and race moderate the relationship between social ties and depression. The analyses confirm that gender and race moderate the relationship between social ties and depression. There is mixed support for hypotheses that widowed men/nonpartnered Black men are more vulnerable to depression and that Whites and women benefit most from ties. I find a lack of support for the hypothesis that Black respondents utilize nonspousal ties more extensively to lower depression. Rather, the findings highlight the benefits of partnership for all, differences between Black and White friend/kin support among women, and the potential vulnerability of older Black men.

Benefits of Partnership

Divorce and separation was consistently and strongly linked with higher depression for the whole sample and marriage and partnership were associated with lower depression. This finding is consistent with previous literature that notes the overall positive physical and mental health benefits of marriage, especially for older adults (Dean et al., 1990; Waite, 1995). The effect of not being married or partnered, however, differed by gender and race. Thus, it is not only widowed men and nonpartnered Black men who are more vulnerable, as hypothesized. Widowed Whites (men and women) and never married men (Black and White) emerged as potential at-risk populations. Higher rates of marriage among Whites and the reliance of men upon the care of wives would typically suggest that widowed Blacks and never married women may utilize alternative ties in lieu of partner ties. The results suggest, however, that the utilization of nonspousal ties among Black respondents is more complex than predicted.

Black and White Women's Friend and Kin Support

The results do not support the hypothesis that Black respondents would utilize ties outside of marriage and partnership more extensively than Whites. Descriptively, White men were more likely to have friend ties available. White women also appear to benefit from nonspousal ties more extensively than Black women. Having friends or kin to help with future needs was tied to lower depression for White women but was marginally associated with *higher* depression for Black women. One explanation may be that extensive contact with friends and kin can lead to elevated depression among women, especially if this contact is stressful (Antonucci et al., 1998; Haines & Hurlbert, 1992; Israel & Antonucci, 1987). In addition, Black women may utilize friend and kin ties differently than White women (Armstrong, 2000) and may draw upon additional nonspousal ties not accounted for in the present analysis. Because Black populations are less likely to utilize friends/kin for emotional support (Sarkisian & Gerstel, 2004), Black women may interpret *help* to mean practical assistance rather than depression management.

Importantly, association between Black women's having friends/kin to help and their elevated depression may be the result of reverse causality. Black women may seek ties when depressed, yielding a cross-sectional relationship between social ties and elevated depression. Although the present crosssectional analytic focus cannot analytically address issues of reverse causality, this relationship should be explored further using multiple waves of HRS data. A longitudinal exploration of this particular effect may offer new insights into the causal mechanisms of social tie resource utilization among Black women. Despite issues of causality, Black women may, indeed, be at risk for "triple jeopardy" in older ages (Conway-Turner, 1999; Wallace, Fields, Witucki, Boland, & Tuck, 1999).

Potential Vulnerability of Older Black Men

The results yield partial support for the hypothesis that Whites and women benefit most from social ties. White women benefit but Black women, as previously noted, do not enjoy the same payoff from social ties. In addition to Black women, Black men may be distinctly disadvantaged. Although men are not typically identified as "at risk," Black men represent a unique category. Despite Black men's relatively strong social tie availability, no social tie besides marriage and partnership was associated (even marginally) with lower depression for Black men. Furthermore, Black men's depression was higher than that of total sample average, significantly higher than White men's average depression, and comparable to White women's average depression. A growing body of literature addresses the risk older Black women face (triple jeopardy), but there is a scarcity of research on older Black men (for an exception, see Locher et al., 2005), who may also be distinctly at risk. For Black men, a lack of statistically significant findings is extremely substantively informative and deserves attention in future studies. Overall, Black respondents report having social ties available, but these social ties are *not* translating to lower depression (especially for Black men) in this nationally representative sample.

Limitations and Application of Findings for Diverse Community-Dwelling Older Adults

The results of this study support the intersectionality perspective and partially support previous findings that social ties improve health. Race and gender moderate the relationship between social ties and depression. White men, Black men, White women, and Black women differ in their responses to social ties. Despite these findings, this study contains important limitations. The HRS is available in multiple waves yet this analysis utilizes the most recent wave of data (HRS, 2006). Focusing solely on the most recent wave of data (HRS, 2006) allows me to test a broad range of social ties in depth and to offer contemporary policy and program suggestions for enhancing quality of life for diverse older adults. However, cross-sectional data limit my ability to suggest causal pathways concerning how these ties accumulate across the life course (Ferraro et al., 2009; O'Rand, 1996) or change with time (McPherson, Smith-Lovin, & Brashears, 2006). Longitudinal analysis may clarify the marginal positive effect of social ties on depression for older Black women. Are these interactions causing higher depression, or are Black women mobilizing social networks more extensively when depressed? The present detailed cross-sectional examination may provide a foundation for future elaboration with multiple HRS waves of data.

By focusing on Black and White older adults, this study does not explore variation in other racial and ethnic groups. The statistically significant covariate for Hispanic ethnicity in the analysis reveals that Hispanic ethnicity may be a predictor of depression, particularly for Black women. Hispanics are a rapidly growing minority in the United States and recent research indicates that social ties reduce depression for older Hispanics in public housing (Jang, Chiriboga, Herrera, & Schonfeld, in press). Furthermore, the Black category provided by the HRS includes African Americans but may also include Caribbean Americans and others who self-identify as Black, such as African immigrants. There are likely strong cultural differences between these groups that affect the relationship between social ties and depression. An analysis that directly examines older Hispanics, Asians, Caribbean Americans, and so on is necessary but beyond the scope of this article. Follow-up studies are encouraged to explore these nuances in more depth. In addition, social ties are quantitative proxies for actual qualitative relationships. Mixed (qualitative) methods are essential to gain a complete account of the relationship between social ties and depression for diverse populations. Similarly, social ties are embedded within communities (Ferlander, 2007). Communities possess socioeconomic characteristics and cultural/normative tendencies that affect interactions. The addition of community-level variables and/ or qualitative findings would enhance our understanding of community context.

Aside from key limitations, how does this study inform community care programs for older adults? The findings provide a foundation for new solutions aimed at addressing the needs of community-dwelling aging populations. Most importantly, we must stop treating elderly populations as a homogeneous group. As Calasanti (1996) reminded us, it is not enough to merely discuss diversity. A consideration of diversity must be an intricate part of program development. Nonpartnered older adults, Black women, and Black men are at elevated risk for different reasons. Gerontologists should consider gender–race contexts and explore alternative pathways to lower depression, particularly for Black women and Black men.

Depression can influence older adults' ability to remain autonomous in their communities. Community-based care programs and aging-in-place initiatives desiring environments that are amenable to long-term independent living should continue to cultivate alternative ties for divorcees, widows/widowers, and the never married. More visits from extended kin and more opportunities to form new friendships in the community will likely yield positive results. Using networks already available within (and led by) the Black community may also be a viable solution. Encouraging friendships and other ties, however, is not a blanket solution for Black communities. Older Black men and women utilize different community-based services (Laditka et al., 2006), yet community-based care

studies only highlight the triple jeopardy (Wallace et al., 1999) of being older, female, and a minority (Armstrong, 2000; Conway-Turner, 1999). Researchers focus less on the experiences of older Black men, assuming their advantage over Black women due to their higher earning potential across the life course. Geron-tologists should continue to explore triple jeopardy but not at the expense of older Black men, who remain unique actors due to their dual position in an advantaged group (men) and a disadvantaged group (racial minority).

It is my hope that the results of this study will help address crucial gaps in gerontological literature and open new pathways for exploring the role of social ties for diverse community-dwelling older adults. Although not without flaws and limitations, the present study demonstrates the need for further research on the unique social desires, experiences, and perceptions that influence depression in aging populations. Specifically, gender and race moderate the effect of social ties on depression for this diverse, nationally representative sample and may also moderate other aspects of older adults' well-being that this study does not explore. Gerontological research has enthusiastically called for theoretical advancement in the study of diverse populations, yet too many modern policy-related studies ignore the intersecting effect of gender and race (as well as other inequalities such as class and age). If we truly desire to provide for continually aging and diversifying communities, it is essential to maintain focus on intersectionality. Intersections of gender and race not only create vulnerabilities but also provide new opportunities to enhance elder well-being via the creation and application of policy and program development beyond "one-size-fits-all" solutions.

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Bio

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