

Day-to-Day Discrimination, Family Support, and Depressive Symptoms:
Racial and Ethnic Contrasts

By

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Discrimination is associated with poor mental health for both African Americans and Latinos (see e.g., Pascoe and Smart Richman 2009; Williams, Neighbors and Jackson 2003; Williams and Mohammed 2009). Existing research has shown that discrimination is often experienced on a regular basis through routine social contexts (Ajrouch et al. 2010; Taylor and Turner 2002; Williams et al. 1997; Williams, Neighbors and Jackson 2003; Williams and Mohammed 2009). Of particular concern is day-to-day discrimination, which reflects interpersonal discrimination that occurs in daily interactions and includes acts such as being treated with less courtesy or receiving poor service (Taylor and Turner 2002; Williams et al. 1997).

Day-to-day discrimination has both immediate and long-term effects on individuals. One feature that makes this type of discrimination so harmful is that it is often enacted without forewarning. This unpredictability makes such discrimination a powerful force in the lives of African Americans and Latinos, who must spend time and effort managing discriminatory actions. In turn, the cognitive burden associated with discrimination can challenge the individual's adaptive capability and lead to less favorable health outcomes (Bratter and Gorman 2011; Brown et al. 2000; Clark et al. 1999; Williams et al. 1997; Williams, Neighbors and Jackson 2003; Williams and Mohammed 2009). Additionally, several studies have found that whites report discrimination at comparable levels to racial and ethnic minority counterparts and these reports are associated with similar negative impacts on health (Borrell et al. 2007; Bratter and Gorman 2011; Canady et al. 2008; Hausmann et al. 2008; Mayrl and Saperstein 2013). While the majority of day-to-day discrimination research focuses on racial and ethnic discrimination (Williams, Neighbors and Jackson 2003; Williams and Mohammed

2009), other aspects of an individuals' identity (e.g., gender or disability status) are often targeted with unfair treatment (Schmitt and Branscombe 2002; Sue 2010a; Sue 2010b).

This study extends previous literature by examining the effects of day-to-day discrimination on mental health among African Americans, Latinos, and whites.

Managing the impact of unfair or unjust treatment is a challenge. However, one strategy that benefits racial and ethnic minorities is the utilization of social support from significant others (Ajrouch et al. 2010; Hammack et al. 2004; Plant and Sachs-Ericsson 2004; Seawell, Cutrona and Russell 2014). Social support is composed of interpersonal ties that provide comfort, understanding, advice, and assistance in difficult times (House, Umberson and Landis 1988; Thoits 1995; Thoits 2011; Turner and Marino 1994; Turner and Brown 2010; Uchino 2006; Uchino et al. 2012). For those who face discrimination, social support reduces the impact on mental health by encouraging individuals not to internalize the harm associated with discrimination as deserved or "natural" to their status in society (Brondolo et al. 2009). Nonetheless, less is known about racial variation in how social support buffers deleterious effects of discrimination on mental health.

To redress this gap in knowledge, I ask two specific questions: 1) Does social support moderate (i.e. buffer) the effects of discrimination on depressive symptoms? And, 2) Does this pattern vary among African Americans, Latinos, and whites? Several single group studies have shown that higher levels of social support reduce the negative impacts of discrimination stressors for African Americans (Ajrouch et al. 2010; Bowleg et al. 2013; Prelow, Mosher and Bowman 2006; Seawell, Cutrona and Russell 2014) and Latinos (DeGarmo and Martinez 2006; Finch and Vega 2003). Nevertheless, fewer studies have assessed whether this relationship is similar for whites. The ability to assess

day-to-day discrimination across all groups, including whites, is an important extension of the current paper. Because the majority of existing studies only assess levels of discrimination for racial and ethnic minorities, the extent to which social support might buffer the impact of discrimination on mental health is less understood among whites.

BACKGROUND AND THEORY

Depressive symptoms are one of the most common forms of psychological distress or mental health problems in the United States (Strine et al. 2008; Williams et al. 1997). These symptoms include sadness, hopelessness, an inability to carry out daily activities, thoughts of suicide, poor appetite, and distorted self-image (Mirowsky and Ross 2003; Radloff 1977). These symptoms disrupt intimate relationships, friendships, family cohesion, and work performance (Kessler et al. 2003). Recent prevalence estimates indicate that nearly 10% of the population is experiencing one or more depressive symptoms at any given time (Strine et al. 2008). Additionally, 16.2% or 32.6 to 35.1 million Americans report symptoms diagnosable as Major Depressive Disorder over their lifetime (Kessler et al. 2003; Kessler et al. 2005).

Research has shown that several social factors impact depressive symptoms. For instance, a lack of social support, low economic resources, experiences of discrimination, and stressful life conditions are positively related to depressive symptoms. Conversely, marriage, male gender, and physical health are negatively associated with such distress (Barrett and Turner 2005; Brown et al. 2000; Mirowsky and Ross 2003; Turner, Lloyd and Taylor 2006; Williams et al. 1997; Williams, Neighbors and Jackson 2003; Williams and Mohammed 2009). Further, controlling for physical disability and other issues related to maturation, age tends to have an inverse relationship with depressive symptoms

(Mirowsky and Ross 1992). Although racial and ethnic minorities do not espouse higher levels of clinical depression, African American and Latinos do have higher levels of depressive symptoms and other types of psychological distress (Christie-Mizell, Carr Steelman and Stewart 2003).

In order to better understand the social conditions associated with depressive symptoms, this research is guided by micro-aggression theory (Sue 2010; Sue et al. 2007) and the stress process framework (Pearlin et al. 1981; Pearlin 1999). Day-to-day discrimination – one of the main foci of this study – is a micro-aggression that has the ability to challenge the mental health of those who experience it (Sue 2010). According to Sue and his colleagues “... micro-aggressions are brief and commonplace daily verbal, behavioral, and environmental indignities, whether intentional or unintentional, that communicate hostile, derogatory, or negative racial slights and insults to the target person or group” (2007, p. 273). Another important characteristic of micro-aggressions is that this type of discriminatory behavior (e.g., ignoring a customer) is either not recognized or easily denied by the perpetrator (Sue et al. 2007; Sue 2010b; Torres, Driscoll and Burrow 2010). Sue (2010a; 2010b) further contends that micro-aggressions affect individuals based on any socially marginalized status including, but not limited to race, ethnicity, disability status, and socioeconomic status.

Sue and colleagues (2007) identified three main types of micro-aggressions: micro-assaults, micro-insults, and micro-invalidations. Micro-assaults are the explicit use of derogatory language or (e.g., racial epithets) or non-verbal attacks (e.g., obscene hand gestures) aimed toward an individual and are most likely deliberate. Micro-insults are frequently unknown to the perpetrator and consist of rudeness or demeaning actions

toward a person based on their race, ethnicity, or other social status. This form of discrimination can include being served after a white person in a restaurant or having assumptions made about job qualifications or education based on race or ethnicity. Micro-invalidations are interactions that exclude or negate the experiences of racial minorities or make assumptions about life experience based on racial or ethnic stereotypes. For example, Latinos may be complimented on their English skills even though they are native born and fluently speak English. This micro-invalidation is based on the assumption that Latinos are immigrants and do not belong. According to micro-aggression theory, there are at least three ways these forms of day-to-day discrimination may deplete the individual's ability to maintain good mental health.

First, day-to-day discrimination as a micro-aggression is ever-present. That is, because marginalized individuals are always fielding these insults, they must expend a lot of time and energy managing and coping with messages of exclusion, invalidation, and inferiority. Second, day-to-day discrimination is not easily redressed. Micro-aggressions are often invisible to the perpetrators. Therefore, it may be nearly impossible to confront a perpetrator, who may respond with reactions ranging from disbelief to hostility. Third, day-to-day discrimination is a constant reminder that individual status and achievement do not matter. For example, consider the middle class professional black man. He has stresses and responsibilities that are similar to those of white professionals; however, when he is confronted with racially motivated aggressions—being served after a white person at the deli counter even though he arrived first—he is aware that his successes in life are diminished by his race. Therefore, the direct link between micro-aggressions – in

this case, day-to-day discrimination – and mental health is that such behavior interferes with the ability of marginalized individuals to cope.

The majority of the empirical studies investigating the relationship between day-to-day discrimination and mental health have found that unfair treatment contributes to psychological distress (Ajrouch et al. 2010; Banks, Kohn-Wood and Spencer 2006; Kessler, Mickelson and Williams 1999; Pascoe and Smart Richman 2009; Pérez, Fortuna and Alegria 2008; Schulz et al. 2006; Taylor and Turner 2002; Williams et al. 1997; Williams, Neighbors and Jackson 2003; Williams and Mohammed 2009). For instance, Banks and colleagues (2006) found that day-to-day discrimination contributed to psychological distress among African Americans and this effect did not differ by gender. Similarly, other studies not only confirm a positive relationship between day-to-day discrimination and depressive symptoms, but also demonstrate with longitudinal data that this relationship is robust over time (see e.g., Schulz et al., 2006). Among Latinos there has been less research focused on discrimination. Nevertheless, existing research does indicate that contending with discrimination is salient in the lives of Latinos (Araújo and Borrell 2006). Pérez and colleagues (2008) found that about 30% of Latino respondents reported high day-to-day discrimination. Further, other research confirms that day-to-day discrimination is associated with psychological distress among Latinos (Finch et al., 2000). These findings clearly link day-to-day discrimination as micro-aggressions to depressive symptoms. Managing these daily forms of discrimination is an extra burden that both African Americans and Latinos must confront on a daily basis in order to cope.

I supplement micro-aggression theory with the stress process model (Pearlin 1989; Pearlin 1999; Thoits 2010). Specifically, I employ the stress buffering hypothesis

associated with this framework. The stress buffering hypothesis purports that the impact of stressors such as day-to-day discrimination may be buffered or reduced by interpersonal resources (Cohen and Wills 1985). In this research, I explore whether social support—specifically family social support—reduces the impact of day-to-day discrimination on depressive symptoms. Social support refers to social ties that provide assistance to an individual through emotional, informational, or instrumental assistance (House, Umberson and Landis 1988). Thoits (2011) defines emotional support—the form of support in this study—as “demonstrations of love and caring, esteem and value, encouragement, and sympathy” (146). Such social support has been directly linked to positive psychological well-being and the reduction of negative mental states, including depressive symptoms (House, Umberson and Landis 1988; Thoits 1995; Thoits 2011; Turner and Marino 1994; Turner and Brown 2010).

The present study examines two ways in which social support might benefit individuals. I consider whether there are direct effects of social support and whether social support moderates day-to-day discrimination. The direct effects of social support are well established. For instance, Thoits (2011) argues that such support buffers stressors by providing emotional sustenance and active coping assistance. That is, social support can provide emotional sustenance through the validation of feelings, empathy for the situation, and the ability to vent pent up emotions or active coping assistance by way of information, advice, and encouragement. In the case of day-to-day discrimination, social support is likely to be most effective if it is coming from others who have experienced similar discrimination (Brondolo et al. 2009). Members of one’s racial or ethnic community most likely also encounter daily slights that make them feel

marginalized and isolated. For many people, family may be an important resource to receive support about racial slights since family members usually share racial or ethnic background. Friends also contribute to social support, though the range of support given from friends may not be as broad as the support available from family members due to the strength of the social ties (Granovetter 1973; Thoits 2011). Because families provide strong ties and are more likely the primary support of the individual, they are likely to provide more encompassing social support (Lin, Ye and Ensel 1999; Thoits 2011). Nevertheless, the racial and ethnic distribution of family support is not straightforward.

Gerstel (2011) contends that family support tends to be greater for African Americans and Latinos than for whites (cf. Sarkisian, Gerena and Gerstel 2007); however, low-income families are more likely to rely on extended family members for support than middle and upper income individuals, regardless of race. Still, in another study, found very few differences between blacks and whites in levels of family social support (Mouzon 2013). Together, these findings all point to the fact that the family as an important site for social support may vary across racial or ethnic groups.

Although the weight of the evidence suggests that family social support reduces psychological distress, the precise relationships among social support, discrimination, and mental health has somewhat varied by race-ethnic group. Existing studies have found mixed support for social support reducing the effects of discrimination (Brondolo et al. 2009). One study found that, for African Americans, social support did not mediate the impact of discrimination but had direct effects that reduce distress (Ajrouch et al. 2010). In contrast, Seawell and colleagues (2014) found that social support moderates the impact of discrimination for African Americans with high levels of support such that levels of

discrimination do not increase depressive symptoms. However, for those with low social support, depressive symptoms increase as discrimination increases. Similarly, social support has been shown to reduce the relationship between perceived discrimination and distress among African Americans (Prelow, Mosher and Bowman 2006). Additionally, in in-depth interviews, respondents report that discussing everyday events with family and friends is helpful for coping with discriminatory incidents (Swim et al. 2003).

With respect to Latinos, existing research does show that social support generally benefits health outcomes for Latinos (Todorova et al. 2010). Finch and Vega (2003) found that discrimination whittles away at health such that Latinos with moderate and low levels of support have an increased probability of poorer outcomes, while those with high levels of support were not at risk for health problems.

Do whites experience discrimination?

In the U.S., whites are privileged in terms of life chances (e.g., economic opportunity and health) relative to African Americans and Latinos (Brown et al. 2000; Turner and Avison 2003). Nevertheless, previous research has shown that privileged groups report discrimination – even though these experiences are reported less often and with less severity (Schmitt and Branscombe 2002). Measures used to assess the perception of discrimination among whites have been inconsistent and few studies query whites about day-to-day discrimination. In those studies that have assessed whites' experiences of discrimination, Researchers have found that between 1% and 32% of whites report racial discrimination (Borrell et al. 2007; Borrell et al. 2010; Bratter and Gorman 2011; Canady et al. 2008; Hausmann et al. 2008; Mayrl and Saperstein 2013). While whites report less day-to-day discrimination than African Americans or Latinos

(Kendzor et al. 2013; Panter et al. 2008; Tomfohr et al. 2010), the health of whites appears to be challenged by their perceptions of discrimination. For example, Bratter and Gorman (2011) found an inverse relationship between discrimination and health for whites and African Americans. In fact, they found that whites are even more susceptible to poor health as a result of reported discrimination than their black counterparts. Moreover, research indicates that perceived discrimination leads to worse health outcomes for whites and African Americans, but not Latinos (Hausmann et al. 2008). Finally, the role of social support as a moderator of the effect of discrimination on mental health for whites is unclear. Given the underlying assumption that social support enables healthy coping, the bulk of existing research suggests that social support is likely to have a direct benefit for mental health across all racial and ethnic groups (Thoits 1995; Thoits 2011). Nevertheless, whether social support provides coping assistance for whites in response to discrimination is currently unexamined.

In sum, day-to-day discrimination has been shown to be an important predictor of depressive symptoms for both African Americans and Latinos (Ajrouch et al. 2010; Brown et al. 2000; Kessler, Mickelson and Williams 1999; Sue et al. 2007; Sue 2010a; Sue 2010b; Taylor and Turner 2002; Thoits 2010; Williams et al. 1997; Williams, Neighbors and Jackson 2003; Williams and Mohammed 2009). As daily micro-aggressions, this discrimination is a common occurrence but according to the stress process model this stress may be buffered by social support from family members, who have experienced similar forms of treatment (Sarkisian, Gerena and Gerstel 2007; Swim et al. 2003).

HYPOTHESES

This research assesses the relationships among day-to-day discrimination, family social support and depressive symptoms and includes three major goals. In addition to establishing the main effects of day-to-day discrimination and family social support on depressive symptoms, one main goal is to test whether these factors impact mental health differently for African Americans, Latinos, and whites. If day-to-day discrimination increases depressive symptoms, this result would support micro-aggression theory. It is likely that day-to-day discrimination would have a greater effect for African Americans and Latinos than for whites because prior work indicates that relatively privileged groups (i.e., whites) report lower levels of discrimination (Schmitt and Branscombe 2002). Furthermore, stemming from the stress process framework, family social support, as a social resource, should be associated with decreased depressive symptoms (Thoits 1995; Thoits 2011). Previous research on family support has indicated that family ties are often more extensive and readily utilized by African Americans and Latinos (Gerstel 2011; Mouzon 2013; Sarkisian and Gerstel 2004; Sarkisian, Gerena and Gerstel 2007). These findings make it likely that African Americans and Latinos may benefit more from family social support than white counterparts.

A second important goal of this paper is to assess whether family social support moderates the relationship between day-to-day discrimination and depressive symptoms such that family social support diminishes the deleterious effects of discrimination on depressive symptoms. This goal will assess the stress buffering hypothesis of social support (Cohen and Wills 1985). If family social support moderates day-to-day discrimination then this would show support for the buffering hypothesis. Finally, my

third goal is to test whether this moderation differs for African Americans, Latinos, and whites. I have developed six hypotheses for this research.

Main effect hypotheses

H1: Day-to-day discrimination will increase depressive symptoms.

H2: Family social support will decrease depressive symptoms.

Moderation hypotheses

H3a-b: Family support will decrease depressive symptoms more so for African Americans (a) and Latinos (b), compared to whites.

H4: Family support will reduce the negative impact of day-to-day discrimination on depressive symptoms.

H5a-b: Day-to-day discrimination will have a greater impact on depressive symptoms for African Americans (a) and Latinos (b), compared to whites.

H6a-b: Family social support will decrease the negative impact of discrimination such that African Americans (a) and Latinos (b) who experience high day-to-day discrimination will receive a greater benefit from family social support, compared to whites.

METHODS

Data

The data for this project are derived from the Physical Limitation and Health study, a community sample of Miami-Dade County which includes an overrepresentation of people with physical limitations and near equal representation of African Americans, Cubans, non-Cuban Hispanics, and whites (for a detailed description of sampling methodology see: Turner, Lloyd and Taylor 2006). These data have two waves, 2002 and

2004. A total of 1,986 interviews were completed for the first wave, with a total response rate of 82%. At wave two, 1,495 individuals were interviewed, which represents 24.7% attrition between samples. Interviews took place in either English or Spanish and were conducted by trained interviewers using computerized questionnaires. Most of the interviews took place in respondent's homes.

The first wave of the data includes 1,086 non-disabled participants. A total of 900 individuals were pre-screened (self-report or family member report) as having a physical limitation. Upon the initial interview, only 550 respondents confirmed their disability status. This discrepancy in reporting physical limitation creates three groups in the data: 1) a non-disabled sample, 2) those who were screened as having a physical limitation but do not identify as having a limitation, and 3) individuals who identify as having a physical limitation. Each model is adjusted for disability status by using two dichotomous variables for individuals either screened or confirmed as disabled. All study variables are derived from wave two (2004), with the exception of a wave one (2002) measure of depressive symptoms. The wave one measure of depressive symptoms creates a baseline-adjusted model to control for past levels of distress.

Measures

Dependent variable. Depressive Symptoms is measured using a 16-item version of the Center for Epidemiologic Studies-Depression scale (CES-D) (Radloff 1977). The CES-D is a well-known and valid measure of depressive symptoms and has been shown to function well across racial and ethnic minorities (Vega and Rumbaut 1991). In this version of the measure, respondents were asked if they had experienced symptoms in the past month rather than the past week. The 16 items are coded so that the response

categories of “not at all” and “Occasionally” both equal 0, while “frequently” equals 1 and “all the time” equals 2. This adapted coding scheme was utilized for several reasons. First, the goal of the CES-D is to capture major psychological distress. While experiencing symptoms occasionally may contribute to distress, frequent symptoms are a better indicator of experiencing psychological distress. Additionally, (Turner and Avison 2003) argue that racial and ethnic minorities’ psychological distress may be better captured by only coding frequent symptoms. Depressive symptoms for both waves of data show high internal consistency; the Cronbach’s alpha for time one (T1: 2002) and time two (T2: 2004) is .84.

Day-to-day discrimination is a 9-item scale, which queries respondents about their perceptions of discrimination (Williams et al. 1997). These items closely align with the three types of micro-aggressions (Sue et al. 2007). Micro-assault items include: “you are called names or insulted” and “you are threatened or harassed.” Micro-insult items include: “you receive worse service than other people at restaurants or stores,” “people act as if they think you are not smart,” “people act as if they are afraid of you,” “people act as if they think you are dishonest,” and “people act as if they are better than you are.” Micro-invalidation items include: “You are treated with less courtesy than other people,” and “you are treated with less respect than you deserve.” All items have five response categories: never, rarely, sometimes, often, and almost always. The responses are coded (1-5) so that higher values indicate more discrimination. All items were summed to create the scale. This scale had a high internal reliability ($\alpha=.88$).

Family social support is an 8-item scale that measures positive emotional support from family members. This scale is adapted from the Provisions of Social Relations Scale

and has been used in previous research (Barrett and Turner 2005; Turner and Marino 1994). Items include: “You have family who would always take the time to talk over your problems, should you want to,” and “No matter what happens you know that your family will always be there for you should you need them.” Each item is measured using a 4-point scale from “very true” to “not at all true.” Items are coded so that higher scores indicate higher social support then summed. This measure shows high internal consistency with a Cronbach’s alpha .91.

Control variables. For marital status, I compare those who are married and previously married (divorced, separated, or widowed) to those who were never married. Family size measures the number of family members living within a one-hour drive that do not live with the respondent. Frequency of family contact is a single item that asks “how often do you see relatives or talk to them on the phone?” responses categories are 1=you hardly ever see them, 2=one or twice a month, 3= once or twice a week, and 4=every day or about every day. Personal income is an interval measure that ranges from 0-15; the top category (15) captures all incomes \$135,000 and greater. Cuban and other Hispanic ethnicities are combined to create the dummy variable Latino (1=Latino). African Americans are coded as a dummy variable (1=black). Further, I compare men and women, utilizing the latter as the reference category. Both age and education are measured in years. With respect to employment status, I compare those who have full time employment to all others.

Following the stress process framework, the models presented below incorporate several well-known and valid stress measures. The *major life events* checklist is a count of lifetime stressful events (Turner and Avison 2003). This measure is a checklist of 36

dichotomous items that are potentially traumatic such as, “Have you ever had a serious accident, injury or illness that was life threatening or caused long-term disability?” and “Did you ever have sexual intercourse when you didn’t want to because someone forced you or threatened to harm you if you didn’t?” Respondents are able to answer yes (1) or no (0) to each event. All the yes answers are summed to equal the final score. Previous research has indicated that major life events should be used a sum of all stressful experiences and that weighting events based on severity does not add to the predictive power of the measure (Jones 2000; Turner and Avison 2003). The *recent life events* checklist is a measure of stressful events in the past year (Turner and Avison 2003). This measure contains 32 dichotomous items of potentially stressful life events including, “did a close friend die?” and “was demoted at work or took a cut in pay?” Yes responses are coded as ‘1.’ The score is a sum of all yes responses. The *chronic stressors* checklist is an index of chronic strains that may have been experienced (Wheaton 1994). Chronic stressors are ongoing sources of stress that are not easily remedied such as, “there is seldom enough time to complete the things you need to do” and “your job often leaves you feeling both mentally and physically tired.” The total score is a sum of all ‘yes’ responses.

Friend social support is an 8-item measure adapted from the Provisions of Social Relations Scale and used previously in studies of social stress (Barrett and Turner 2006; Turner and Marino 1994). Friend support measures the closeness and appreciation of friends with items such as, “You feel very close to your friends” and “You feel that your friends really care about you.” Items are measured from one to four with items recoded

for higher score to indicate higher levels of social support from friends. Cronbach's alpha=.96.

Analytic Strategy

I proceed with analyses in three steps. First, descriptives were calculated for all study variables by race/ethnic group. Means and proportions were compared across groups. Second, additive regression models were calculated to assess the effects of focal independent variables and controls. I began with a baseline model including age, sex, race/ethnicity, and depressive symptoms T1. Successive models incorporated day-to-day discrimination, social support variables, socioeconomic variables, and finally stress and coping variables. The final model included all independent and control variables. Third, I estimated a series of interactions. All continuous independent variables were standardized (mean=0, SD=1) to assist with interpretation of coefficients. Significant interaction terms were interpreted and graphed and included the calculation of differences in slopes tests (Dawson and Richter 2006).

RESULTS

Descriptive Statistics

Table 1 presents descriptives for all study variables by race/ethnic group. The analysis includes 1,136 individuals consisting of 365 African Americans (31%), 509 Latinos (45%), and 262 whites (23%). This distribution roughly matches the racial and ethnic distribution of Miami-Dade County (U.S. Census Bureau 2000).

There are several differences in main study variables by race-ethnicity. Latinos (T1= 4.34; T2 = 4.26) report higher depressive symptoms than blacks (T1=2.25; T2=2.55) or whites (T1=1.81; T2=1.27) at both time one (T1) and two (T2). There are no

Table 1: Descriptive statistics by race/ethnicity (N=1136)

VARIABLE	African Americans (N=365)		Latinos (N=509)		Whites (N=262)	
	MEAN	SD	MEAN	SD	MEAN	SD
<i>Main study variables</i>						
Depressive symptoms (T2) ^{bc}	2.55	3.48	4.26	4.75	2.27	2.79
Depressive symptoms (T1) ^{bc}	2.25	3.49	4.34	4.49	1.81	3.20
Family social support ^{bc}	27.45	3.23	25.92	4.14	27.27	3.31
Day-to-day discrimination ^{abc}	15.83	5.18	12.34	4.81	14.03	4.34
<i>Support controls</i>						
Size of extended family ^{ac}	10.68	12.71	5.44	7.28	5.75	11.62
Frequency of family contact ^a	3.39	.82	3.29	.88	3.17	.84
Married ^{ac}	.40	-	.50	-	.50	-
Previously married (divorced, separated, or widowed) ^{bc}	.45	-	.35	-	.42	-
Never married (ref.) ^{ab}	.15	-	.15	-	.08	-
<i>Socioeconomic controls</i>						
Personal income ^{ab}	4.16	2.53	4.09	3.14	6.28	3.72
Education ^{ab}	12.07	3.55	11.81	4.69	13.47	4.21
Full-time employment ^{bc}	.50	-	.63	-	.47	-
Less than full-time employment (ref) ^{bc}	.50	-	.37	-	.53	-
<i>Demographic controls</i>						
Age ^{bc}	59.90	15.76	55.34	16.77	62.29	17.43
Male (1=yes)	.42	-	.49	-	.50	-
Confirmed disabled ^{bc}	.34	-	.21	-	.28	-
Screened disabled	.16	-	.21	-	.17	-
<i>Stress and coping controls</i>						
Lifetime traumatic events ^{bc}	5.78	4.26	4.49	3.58	6.16	4.21
Recent traumatic events ^{bc}	.49	1.07	.27	.77	.58	1.29
Chronic strains ^{bc}	4.70	4.21	3.94	4.21	5.03	4.48
Friend social support ^{bc}	27.38	6.42	24.67	6.86	27.60	5.91

^aAfrican Americans compared to whites, ^bLatinos compared to whites, ^c African Americans compared to Latinos

All significance levels p<.05

differences in depressive symptoms between blacks and whites. With regard to day-to-day discrimination, all groups differ significantly from one another. Latinos (12.34) report lowest levels of discrimination, followed by whites (14.03), while African Americans report the highest day-to-day discrimination (15.83). Whites (27.27) and blacks (27.45) report similar levels of perceived family support while Latinos (25.92) report significantly less family support than white or black counterparts.

Several other differences between groups on control variables are important to note. On demographic control variables, there are no significant differences in gender composition or those who were screened as disabled but not confirmed at the interview. However, Latinos in the sample are less likely to be confirmed as disabled (21%) as compared to African Americans (34%) or whites (28%). Latinos are also significantly younger (55.34) than African Americans (59.9) or whites (62.29).

Social support control variables also show several differences by race-ethnicity. African Americans have larger extended families (10.68) than Latinos (5.44) or whites (5.75). African Americans also have more frequent contact with their family (3.39) than whites (3.17). Additionally, a smaller percentage of African Americans (40%) are married than Latinos (50%) or whites (50%). Latinos are less likely to be divorced, separated, or widowed (35%) than African Americans (45%) or whites (42%). Whites are less likely to have never been married (8%) than Latinos (15%) or African Americans (15%).

Socioeconomically, whites report the highest personal income (6.28), compared to African Americans (4.16) and Latinos (4.09). Whites also report higher education (13.47)

than African Americans (12.07) or Latinos (11.81). Additionally, Latinos are more likely to be employed full time (63%) than blacks (50%) or whites (47%).

Finally, Latinos report significantly less stress on all stress measures and lower levels of friend social support than whites or African Americans. Latinos report fewer lifetime events (4.49) than African Americans (5.78) or whites (6.16). Additionally, Latinos report the fewest recent traumatic events (.27) as compared to African American (.49) and white (.58) counterparts. Chronic strains are lower for Latinos (3.94) than African Americans (4.70) or whites (5.03). Friend social support is also lowest for Latinos (24.67) compared to African Americans (27.38) or whites (27.60).

Main effects of Day-to-Day Discrimination and Family support

Table 2 examines the role of day-to-day discrimination, family support, socioeconomic factors, and stress and coping variables on depressive symptoms. Model 1 shows that after adjusting for prior levels of depressive symptoms, men are less likely to report depressive symptoms than women ($b = -.68$, $SE = .22$, $p < .01$) and Latinos report greater depressive symptoms than whites ($b = 2.13$, $SE = .29$, $p < .001$). There is no difference between blacks and whites in the models. Model 2 adds day-to-day discrimination to the model and shows a significant association with higher depressive symptoms ($b = .06$, $SE = .03$, $p < .01$). Family support variables are added in Model 3. The addition of these variables reduces the effect of day-to-day discrimination to non-significant. Higher levels of perceived family support are associated with lower levels of depressive symptoms ($b = -.31$, $SE = .02$, $p < .001$). Size of extended family has a small negative effect on depressive symptoms ($b = -.03$, $SE = .01$, $p < .01$) while frequency of family contact and being married do not impact distress. Being divorced, separated, or

Table 2. Depressive Symptoms regressed on Selected Variables (N=1,136)

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	b	(se)	b	(se)	b	(se)	b	(se)	b	(se)
Depressive symptoms T1	.26***	(.03)	.25***	(.03)	.19***	(.03)	.18***	(.03)	.18***	(.03)
Age	-.01	(.01)	.01	(.01)	.01	(.01)	.01	(.01)	.01	(.01)
Male (1=yes)	-.68**	(.22)	-.73**	(.22)	-.67**	(.22)	-.50*	(.22)	-.60**	(.22)
African American	.30	(.30)	.20	(.31)	.48	(.29)	.07	(.29)	.06	(.29)
Latino	2.13***	(.29)	2.27***	(.30)	1.75***	(.28)	1.27***	(.29)	1.12***	(.29)
<i>Discrimination</i>										
Day-to-day discrimination			.06**	(.03)	.03	(.02)	.03	(.02)	.03	(.02)
<i>Support Variables</i>										
Family support					-.31***	(.02)	-.30***	(.02)	-.27***	(.02)
Size of extended family					-.03**	(.01)	-.02*	(.01)	-.02	(.01)
Frequency of family contact					.09	(.13)	.08	(.13)	.10	(.13)
Married					.40	(.34)	.60	(.34)	.72*	(.34)
Previously married					.74*	(.36)	.92*	(.36)	.87*	(.36)
<i>Socioeconomic Variables</i>										
Personal income							-.18***	(.04)	-.16***	(.04)
Education							-.03	(.03)	-.02	(.03)
Full time employment							.74**	(.26)	.71**	(.25)
<i>Stress and coping Controls</i>										
Lifetime stressful events									-.02	(.03)
Recent stressful events									.27*	(.11)
Chronic stress									-.04	(.03)
Friend support									-.08***	(.02)
Screened disabled	-.12	(.30)	-.12	(.30)	-.27	(.27)	-.30	(.27)	-.24	(.27)
Confirmed disabled	.62*	(.27)	.58*	(.27)	.40	(.24)	.13	(.25)	.16	(.25)
Intercept	.80		-.31		9.32		9.67		11.15	
R ²	.16		.17		.31		.33		.35	

*p<.05, **p<.01, ***p<.001

widowed is associated with higher levels of distress than never married individuals ($b=.74, SE=.36, p<.05$).

Model 4 assesses the role of socioeconomic status predictors in shaping depressive symptoms. Income is inversely related to depressive symptoms ($b=-.18, SE=.04, p<.001$) while full-time employment is positively associated ($b=.74, SE=.26, p<.01$). Model 5 adds stress and coping variables to the model. Recent stressful events is associated with higher depressive symptoms ($b=.27, SE=.02, p<.001$). Friend social support reduces symptoms of depression ($p=-.08, SE=.02, p<.001$). The addition of these variables does not change the impact of day-to-day discrimination, but family social support's is slightly reduced in effect size ($b=-.27, SE=.02, p<.001$) The final model does not support H1, which predicted that day-to-day discrimination would be positively related to depressive symptoms. The model supports H2, because family social support is inversely related to depressive symptoms ($b=-.27, SE=.02, p<.001$).

Day-to-day discrimination, family support, and race/ethnicity interactions

The results in Table 3 test hypotheses 3-6. H3a-b predicts that (a) African Americans and (b) Latino will benefit more from family support compared to whites. Model 1 of Table 3 shows two interactions that test this hypothesis. The interaction term testing H3a (i.e., African American X Support) is not significant, and therefore, does not support the contention that African Americans benefit more from family support than whites. However, I do find support for H3b, because family support provides a greater protective effect for Latinos ($b=-.88, SE=.20, p<.001$) compared to whites. The interaction term in Model 2 of Table 3 tests hypothesis 4, which details that family

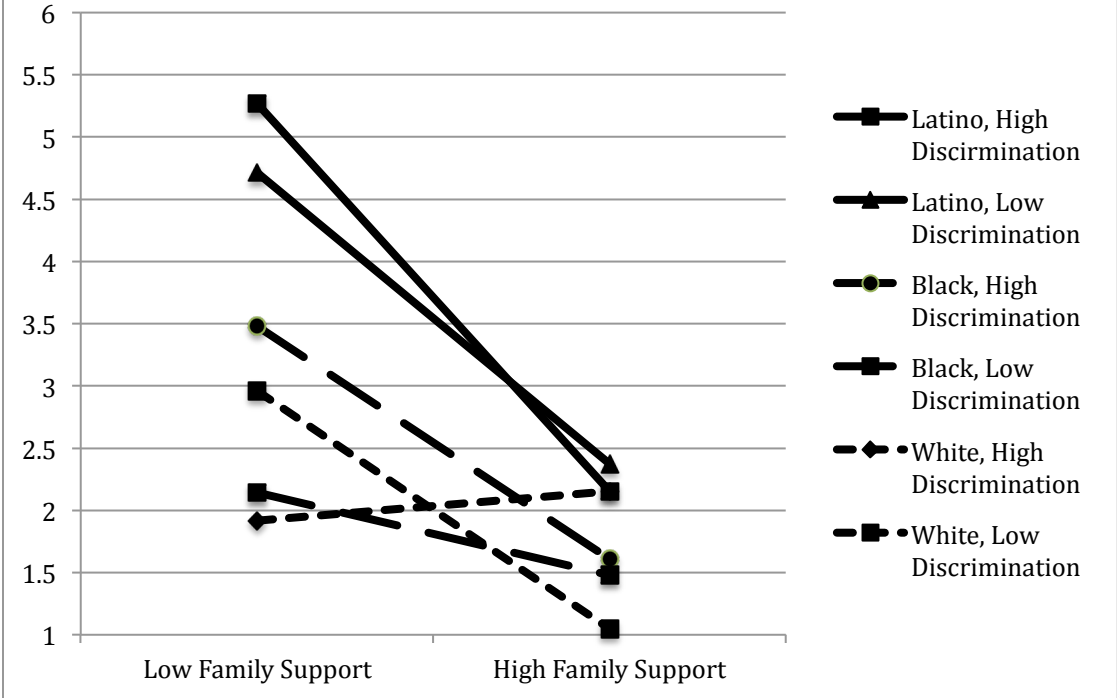
Table 3. Depressive Symptoms regressed on selected interactions (N=1,136)

Variable	Model 1		Model 2		Model 3		Model 4	
	b	(se)	b	(se)	b	(se)	b	(se)
Family Social Support	-.42*	(.18)	-1.03***	(.08)	-1.03***	(.08)	-.42*	(.18)
Day-to-day Discrimination	.21	(.15)	.23	(.15)	.38	(.33)	.02	(.39)
African Americans	.36	(.34)	.06	(.29)	.08	(.29)	.16	(.37)
Latino	1.67***	(.31)	1.12***	(.29)	1.12***	(.29)	1.61***	(.32)
<i>Interaction terms:</i>								
African American*Support	-.41	(.23)					-.21	(.27)
Latino*Support	-.88***	(.20)					-.95***	(.21)
Day-to-day Discrimination*Support			.00	(.09)			.54	(.30)
Day-to-day Discrimination*African American					-.20	(.39)	.35	(.46)
Day-to-day Discrimination*Latino					-.16	(.38)	.07	(.43)
African American*Discrimination *Support							-.84*	(.35)
Latino*Discrimination*Support							-.73*	(.34)
Intercept	2.62		3.08		3.07		2.02	
R ²	.36		.35		.35		.37	

*p<.05, **p<.01, ***p<.001 *p<.05, **p<.01, ***p<.001

All Models adjust for previous distress, social status variables, support controls, socioeconomic status, stress, and coping resources

Figure 1: Interaction of Day-to Day Discrimination by Family social support and race



support will decrease the otherwise deleterious effects of day-to-day discrimination. This prediction was not supported.

In hypothesis 5a-b, I anticipated that day-to-day discrimination would be more damaging for African Americans (H5a) and Latinos (H5b), compared to whites. Because neither interaction term in Model 3 of Table 3 is significant, I do not find support for the assertion that day-to-day discrimination is more harmful for minorities. Finally, Model 4 of Table 3 tests hypothesis 6. This hypothesis predicted that family social support will decrease the negative impact of discrimination such that African Americans (H6a) and Latinos (H6b) who experience high day-to-day discrimination will receive a greater benefit from family social support, compared to whites. As indicated by the significant three-way interactions in Model 4 of Table 3, hypothesis 6a-b is supported and family support plays a larger role in decreasing the impact of day-to-day discrimination for African Americans ($b=-.84, SE=.35, p<.05$) and Latinos ($b=-.73, SE=.34, p<.05$), compared to whites. The interaction effects are displayed graphically in Figure 1. Latinos and African Americans, regardless of discrimination level, and whites experiencing low day-to-day discrimination show similar declines in depressive symptoms due to family social support. Whites, who report high day-to-day discrimination, do not experience a benefit in which family support moderates or decreases the impact of discrimination. The slope test indicates that this slope for high discrimination whites differs from all other slopes on the graph (compared to whites, low discrimination: $t=1.96, p<.05$; African Americans, high discrimination: $t=-2.73, p<.01$;

African Americans, low discrimination: $t=-1.96, p<.05$; Latinos, high discrimination: $t=-4.08, p<.001$; Latinos, low discrimination: $t=-3.15, p<.01$).

DISCUSSION AND CONCLUSIONS

Utilizing micro-aggression theory, coupled with the stress process framework, this study examines the relationships among day-to-day discrimination, family social support, and depressive symptoms for African Americans, Latinos, and whites. Micro-aggression theory argues that everyday experiences of discrimination have a cumulative negative effect on mental health for racial and ethnic minorities (Sue et al. 2007; Sue 2010b). The stress process framework suggests that social resources, such as family social support, may reduce the effect of stressors, including micro-aggressions (Cohen and Wills 1985). These two perspectives provide an important avenue for examining the effects of everyday unfair treatment and the role of supportive others in buffering the negative effects.

One main finding from this research is that family social support is an important personal resource for managing depressive symptoms. While day-to-day discrimination did not have main effects on depressive symptomatology in our pooled model, this stressor did impact mental health in combination with family support. The effect varied by race and ethnicity. For instance, regardless of levels of day-to-day discrimination, African Americans and Latinos experienced a decrease in depressive symptoms as family social support increased. Whites who reported day-to-day discrimination did not benefit from family support. Therefore, family support more uniformly decreases distress for African Americans and Latinos as compared to whites. Additionally, the findings show that Latinos benefit more from family support than African Americans or whites. These

race/ethnic differences may be due to several factors. First, as suggested by previous studies, supportive family ties are often more present among African Americans and Latinos families, compared to their white counterparts (Gerstel 2011) (cf. Sarkisian, Gerena and Gerstel 2007). Racial and ethnic minorities are more likely to maintain in closer communication with relatives and to live in close quarters with extended family members, which boosts the likelihood that they will receive family social support. Additionally, family support is an inexpensive resource that is available across socioeconomic statuses and lower income individuals often rely on family support for support in times of need (cf. Sarkisian, Gerena and Gerstel 2007). Given the historical marginalization and socioeconomic inequality faced by African Americans and Latinos in the United States, inexpensive social resources, like family social support, contribute to beneficial mental health outcomes.

With regard to whites, when levels of day-to-day discrimination were low for whites, this group received a similar benefit to African Americans and Latinos as family social support increased. However, when whites reported high levels of day-to-day discrimination, depressive symptoms were not affected by family support. Additionally, whites with high discrimination report the lowest amount of depressive symptoms when family support is lacking. This pattern suggests the processes that links family support and day-to-day discrimination to depressive symptoms for African Americans and Latinos do not apply to all whites. That is, in the case of whites who report high discrimination, family support does not qualify the effects of this micro-aggression on mental health. There are at least two reasons that may account for this unexpected pattern.

First, although privileged groups often report experiences of discrimination, the characteristics of unfair treatment reported by whites is unclear. Specifically, because my measure of day-to-day discrimination is general and does not account for type of discrimination (e.g., racial, class), I cannot rule out that my findings might have been different with a more refined measure of discrimination. Other social characteristics of whites reporting discrimination may contribute to a selection effect on how day-to-day micro-aggressions affect mental health. For example, Maryl and Saperstein (2013) found that whites reporting discrimination tend to be politically and religiously conservative compared to whites who do not report discrimination. High levels of conservatism or fundamentalism may contribute to some whites perceiving themselves as targets of discrimination. Persecution based on philosophical beliefs may not have the same effect on mental health as discrimination aimed toward ascribed social statuses (e.g., race, ethnicity, sexual orientation). While conservatism and fundamentalism are important aspects of an individual's identity, those statuses do not face the same marginalization as groups that have been historically and structurally disadvantaged. Additionally, several previous studies (see e.g., Bratter & Gorman, 2011 or Canady et al., 2008) show that the social settings where discrimination takes place may affect the impact of day-to-day discrimination on health outcomes. The data utilized for this study does not allow an assessment of the social contexts (e.g., medical interactions, at work) in which the reported day-to-day discrimination occurred; such a finer grained analyses of the social context may have allowed a better understanding of when and how discrimination impacts whites. Ultimately, this study demonstrates that the impact of discrimination is less straightforward for whites than was predicted.

While this study shows that family social support has substantial salubrious effects on mental health for all groups except whites reporting high discrimination, there are limitations. The data come from a community sample of Miami-Dade County, which has a larger proportion of Latinos than would be representative nationally. In the 2000 census, Miami-Dade County was composed of 57.3% Latinos, 20.3% African Americans, and 20.7% whites (U.S. Census Bureau 2000). The high proportion of Latinos in Miami-Dade County may reduce how often Latinos experience daily micro-aggressions compared to nationally representative samples. Furthermore, about half of the Latino sample was comprised of Cubans. Previous research has shown that there is considerable heterogeneity in health outcomes among Latino ethnic groups (Zsembik and Fennell 2005). While ethnic heterogeneity is an important avenue for future research, the findings for this study did not differ when Latino ethnicities were separated in supplemental analyses.

Several additional factors should be addressed in future research. This study did not measure racial or ethnic identity, the strength of identification with racial or ethnic communities. Racial and ethnic identity is another variable that can assist with coping from day-to-day discrimination (Brondolo et al. 2009). Other identities such as religious identity, sexual identity, family identity, and worker identity may all impact the exposure and impact of discrimination. This study was able to examine differences by categories but not in individuals' perceptions of self. Additionally, racial and ethnic groups other than African Americans, Latinos, and whites were not included in this analysis. Future research should explore whether family support has similar effects for groups (e.g., Asian Americans, Native Americans) not included in this analysis. Furthermore, reports of

discrimination may differ based on gender (Schmitt and Branscombe 2002). A more nuanced analysis of how gender affects coping with discrimination may provide further evidence of how racial and ethnic groups differ in relationship to coping with discrimination.

In conclusion, this study provides evidence that the relationships among day-to-day discrimination, family support, and depressive symptoms are complicated and moderated by race-ethnicity. This study elucidates the processes through which these three concepts are related. While many studies find direct effects for both day-to-day discrimination and family supports on depressive symptoms, this study found that day-to-day discrimination's effect on mental health was not independent of other predictors. Overall, the moderation analysis shows that day-to-day discrimination has a greater impact for African Americans and Latinos than whites. Family support, however, is an effective resource for reducing depressive symptoms for African Americans and Latinos regardless of day-to-day discrimination level. These results indicate the need for further investigation into the theoretical mechanisms linking day-to-day discrimination to mental health and how they differ among racial and ethnic groups.

Finally, this study provides an analysis of how day-to-day discrimination might matter for whites. Much of the existing research has not examined the effect of day-to-day discrimination on whites. The findings suggest that whites reporting high discrimination do not have increased depressive symptoms due to day-to-day discrimination and family support does not reduce distress. Low discrimination whites report family support effects similar to African Americans and Latinos. While further research is needed to fully explicate these relationships, these findings suggest that the

relationships among day-to-day discrimination, family support, and depressive symptoms are complex and vary by race and ethnicity.

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