Psychological Distress among Black and White Americans: Differential Effects of Social Support, Negative Interaction and Personal Control*

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Abstract

This study examines the relationships among social support, negative interaction, financial strain, traumatic events, personal control, personality, and psychological distress among African American and white adults. These analyses: (1) test the overall adequacy of various models (i.e., main, mediator, and artifactual effects) of these effects, (2) examine the role of social support and negative interaction within the context of financial strain and traumatic events, and (3) verify possible indirect effects of social interaction on distress by assessing their impact on personal control. Data from The National Comorbidity Survey were used to examine these relationships using structural equation modeling techniques. Findings indicated different models of these relationships for African Americans and whites. Overall, personal control mediated the relationship between negative interaction and psychological distress. For whites, negative interaction was an overall stronger predictor of distress and contributed to the impact of financial strain and traumatic events on psychological distress. Among African Americans, social support was a stronger predictor of distress. The findings suggest that the underlying models of these relationships are different for African Americans and whites.

Over 20 years of research has verified the importance of positive and negative aspects of personal relationships for health and well-being (Abbey, Abramis, and Caplan 1985; Finch et al. 1989; Lakey, Tardiff, and Drew 1994; Lepore 1992; Rook 1984; Swindle, Heller, and Frank 2000; Vinokur, Price, and Caplan 1996). In general, positive interaction[1] or social support (e.g., emotional aid, instrumental support, affirmation) is beneficial for one's health and well-being, while negative interaction (e.g., being too demanding or critical, getting on one's nerves) is detrimental. Despite increasing recognition that social relationships are consequential for health, not much is known about the specific mechanisms through which

[1]Currently, a number of different terms are used in the literature to describe positive social relationships (e.g., "positive interactions," "emotional support").For the purposes of this study, we use the broad term "social support" to refer to these exchanges.

these influences operate (Ryff and Singer 2001) and how positive and negative social interaction function to impact health and well-being outcomes in the context of coping with stressful events.

In addition to ambiguity about the nature of these relationships overall, there is little information about possible racial and ethnic differences in these associations. This is the case even for African Americans, a group for which we arguably have the most comprehensive information regarding social relationships and stressful experiences and for which there is ample evidence of important differences from whites in life circumstances and social conditions pertinent to these concerns. For example, although African Americans have greater exposure than whites to social and environmental stressors, findings for race differences in mental health problems are mixed. African Americans have overall lower levels of well-being than whites, but there are no consistent race differences with respect to rates of psychiatric disorders and psychological distress (Aneshensel 1992; Essed 1991; Williams, Yu, Jackson, and Anderson 1997). Further, African Americans and whites are distinct from one another in terms of patterns and characteristics of their personal and social networks, such as network composition (Billingsley 1992; Swindle et al. 2001; Taylor, Chatters, and Jackson 1997) and network transactions (Mutran 1985; Strogatz and James 1986), that are significant for social interaction.

The research strategy used in much of the traditional racial comparative studies in the social and behavioral sciences focuses on identifying social and psychological factors that may account for race differences in health and well-being outcomes (e.g., socioeconomic status, discrimination, health behaviors and attitudes, coping resources). This strategy is a useful approach for understanding these differences, given that the underlying causes for race and ethnic differences are complex and poorly understood. However, even after adjusting for these factors, racial and ethnic differences in outcomes are often attenuated, but rarely eliminated entirely. Furthermore, the focus on merely accounting for race differences by introducing factors that are thought to "explain away" these differences tends to overlook the possibility that social and psychological factors may operate *differently* within specific racial and ethnic groups. It is not necessarily the salience of a particular variable that explains how race and ethnicity may be linked to health and well-being, but rather the unique manner with which social and psychological processes operate for distinct racial and ethnic groups. The most significant question for this and other research is whether the underlying mechanisms and processes involved are different across diverse racial and ethnic groups.

Given apparent differences in social relations and life circumstances, we might reasonably expect that African Americans and whites would differ from one another in terms of the structure and patterns of relationships existing among positive and negative social interaction and psychological outcomes. However, the conspicuous absence of studies on this topic for African Americans and other racial and ethnic groups perpetuates an assumption of "race/ethnic similarity" that characterizes a good deal of social science research (Hunt 1996; Hunt et al. 2000). Failure to account for the social and cultural factors that characterize the life circumstances of African Americans and other racial/ethnic groups fosters the unfounded belief that social theories and models are equivalent across groups. We argue, instead, that the unique social and cultural conditions evident within the African American population may constitute specific risk (e.g., poverty) and protective (e.g., cohesive social and community networks) factors that are essential for understanding the nature and patterns of social interaction and how they interrelate with other factors to influence health outcomes.

SOCIAL INTERACTION AND PSYCHOLOGICAL OUTCOMES

Theory and research on stress, social relationships, and psychological outcomes (e.g., Aneshensel, Rutter, and Lachenbruch 1991; Barrera 1986; Cohen and Wills 1985; Lin and Ensel 1989; Wheaton 1985) focuses on how positive and negative aspects of social relationships affect the stress process and overall adjustment. Overall, the research indicates that negative interaction detracts from psychological health (Finch et al. 1989; Okun, Melichar, and Hill 1990; Swindle et al. 2001) and increases one's vulnerability to psychological distress, while findings for positive interaction (i.e., supportive exchanges), however, indicate that it is generally unrelated to psychological outcomes such as depression and overall satisfaction (Fiore, Becker, and Coppel 1983; Kiecolt-Glaser, Dyer, and Shuttleworth 1988). This differential suggests that attention should be focused on the distinctive meanings of positive versus negative interaction (e.g., rarity, salience, attributional qualities) and the specific mechanisms through which effects of interactions are conveyed on outcomes (Lincoln 2000).

Current conceptual models based in the stress and coping literature (e.g., Barrera 1986; Cohen and Wills 1985; Lin 1986) propose that social interaction affects psychological outcomes in several ways. The *main effect* model posits that positive and negative interaction impacts psychological outcomes independently of stress levels and that each has unique, additive effects on psychological outcomes (positive interaction increases, while negative interaction decreases). Alternatively, the *mediator effect* model suggests that the impact of a stressor is mediated by social interactions with others; these positive and negative social interactions, in turn, either increase or decrease one's vulnerability to psychological distress. For example, a stressful occurrence may precipitate negative interactions with others which, in turn, increases vulnerability to psychological distress. Alternatively, stressful events may mobilize support (e.g., instrumental, emotional) from others that, in turn, decreases one's vulnerability to poor outcomes. Finally, the *artifactual effect* model suggests that the associations among stress, social interaction, and psychological outcomes may reflect one or more unmeasured variables, such as personality. For example, neuroticism has been linked to smaller social networks, conflictual relationships, reduced perceptions of support availability (Russell et al. 1997), negative affect and chronic psychological distress (Costa and McCrae 1988; Larsen and Ketelaar 1991; Watson and Clark 1984), while extroversion has been associated with larger networks, more frequent contact with family and friends, and greater satisfaction with support (Berry, Willingham and Thayer 2000).

Theoretical refinements suggest that social relationships may affect the stress process and overall adjustment by virtue of their impact on the coping resources and strategies that individuals employ to confront stressful situations (Caplan 1981; Pearlin et al. 1981). Personal control and mastery have been widely recognized as being important for coping with stress and enhancing psychological outcomes (Mirowsky and Ross 1990; Pierce et al. 1996). Persons with high personal control believe that they can exercise control over problems by taking effective action, such as employing individual coping strategies. During stressful episodes, social support from others may enhance these coping resources by bolstering feelings of personal control (Krause 1987a, 1987b), facilitating the use of more effective coping strategies, and mitigating negative emotional reactions to stress, which, in turn, results in better outcomes (Heller, Swindle, and Dusenbury 1986; Pearlin et al. 1981; Smith et al. 2000). Conversely, negative interaction with others may contribute to disruptive emotional reactions and distress (Lakey et al. 1994), diminish coping abilities, and erode perceptions of personal control and mastery that one is capable of managing problematic situations.

SOCIAL INTERACTION AND COPING WITH TRAUMATIC EVENTS

Both social support and negative interaction have obvious relevance for coping with traumatic events. Social support is an important predictor of mental health outcomes for victims of traumatic occurrences because it provides an emotional outlet for the trauma victim, access to significant others who will listen and empathize with them, and the opportunity to acknowledge their trauma (Boscarino 1995; Davidson et al. 1991). Interactions with social networks can also be problematic in the aftermath of a traumatic event because providing and receiving support (Solomon and Smith 1994) may entail significant emotional costs, particularly for persons who are also affected by the event and may themselves be in need of support. Moreover, the special social support needs of trauma victims may result in conflict with or withdrawal by network members who may become annoyed with the victim, feel over-taxed in dealing with the crisis, or be otherwise ill-prepared to help the victim cope with his or her distress (Nolen-Hoeksema and Davis 1999). In some instances, negative interaction with close friends and relatives may increase vulnerability to emotional distress, with little evidence of a beneficial effect of social support (e.g., feel loved and cared for or willing to listen) on traumatic stress symptoms (Butler et al. 1999).

Relatively little is known about social interactions in connection with stressful events such as financial stress. However, some research speculates that repeated requests for aid from informal network members "may severely tax support providers and actually diminish potential resources for assistance" (Chatters and Taylor 1990:p.89). Eventually, support providers may withdraw assistance and limit interactions with the stressed family member (Barrera 1986). In situations involving chronic financial difficulties, social interactions between support provider and recipient may continue but become more conflictual, as both parties attempt to manage the stress associated with frequent requests for assistance. These strained social interactions may, in turn, further contribute to the stress associated with financial problems.

This study examines the relationships among financial strain, traumatic events, social interaction, personal control, personality, and psychological distress among African American and white respondents. The specific goals are to: (1) test the overall adequacy of three models (i.e., main, mediator, and artifactual models) of the effects of positive (i.e., social support) and negative interaction in the context of stressful and traumatic events, (2) explore possible indirect effects of positive and negative interaction on psychological distress via changes in perceptions of personal control, and (3) explore possible differences between African Americans and whites in the pattern of these relationships. The following section provides a conceptual model of the proposed relationships among these factors.

THE PROPOSED MODEL

The proposed model depicted in Figure 1 is a reflection of theoretical propositions and empirical findings concerning these relationships. The notation used in the model is in accordance with the notation devised by Jöreskog and Sörbom (2001). Specifically, η (eta) represents the latent or unobserved construct, and Ψ (psi) represents the correlation between the disturbance terms associated with the effect of variables that are not included in the model. The proposed relationships among the model components are described below.

First, social support and negative interaction may exert their impacts on psychological distress independently of financial strain and traumatic events (e.g., main effect). Specifically, individuals whose network members are understanding, appreciative, and reliable (i.e., provide social support) are expected to experience lower levels of psychological distress, while persons whose network members make them feel tense, make

critical remarks, and get on their nerves (i.e., negative interaction) will experience higher levels of psychological distress. Alternatively, the mediator effect model suggests that, in the face of problematic life situations, (1) social support intervenes to offset the impact of financial strain and traumatic events on psychological distress (negative events might also erode supportive exchanges with others), while (2) negative interaction contributes to the impact of stress on psychological distress. As a test of artifactual effects, the proposed model also incorporates personality factors (i.e., extroversion and neuroticism). Extroverted individuals are predicted to report lower levels of financial strain, more traumatic events, more social support, fewer negative interactions, higher feelings of personal control, and lower levels of psychological distress. Individuals high on neuroticism are expected to report a contrasting pattern of associations, except that they are similarly expected to experience more traumatic events than their less neurotic counterparts (Breslau, Davis, and Andreski 1995).

The proposed model also tests for the possibility that, in addition to direct effects of positive and negative social interaction on psychological distress, social interaction has indirect effects through changes in perceptions of personal control. Positive interaction or social support acts to bolster personal control perceptions, thereby reducing psychological distress, while negative interaction erodes control perceptions and increases distress. Finally, the effects of race, age, gender, education, and marital status were included in the estimation of these relationships.

METHODS

The data used for this investigation come from the National Comorbidity Survey, a collaborative epidemiologic investigation designed to study the prevalence and correlates of DSM-III-R disorders and patterns and correlates of service utilization for these disorders. The National Comorbidity Survey, the first survey to administer a structured psychiatric interview to a nationally representative sample, is based on a stratified, multistage area probability sample of persons aged 15 to 54 years in the noninstitutionalized civilian population in the 48 contiguous states. Interviews were administered by the staff of the Survey Research Center at the University of Michigan, Ann Arbor, between September 14, 1990 and February 6, 1992. A total of 8,098 respondents participated, with a response rate of 82.4 percent.

The National Comorbidity Survey was administered in two parts. Part 1 was administered to all 8,098 respondents, while part 2 was administered to a subsample of respondents consisting of (1) all persons aged 15 to 24 years (99.4% of whom completed part 2), (2) all others who screened positive for any lifetime diagnosis in part 1 (98.1% of whom completed part 2), and (3) a random subsample of other respondents (99% of whom completed part 2). A total of 5,877 respondents completed part 2. These analyses are based on data from 4,003 (87.9%) whites and 549 (12.1%o) African Americans between the ages of 18 to 54.

Measures

All analyses were conducted using covariance matrices as input and the maximum likelihood estimator in LISREL 8.51 (Jöreskog and Sörbom 2001). Standardized factor loadings provide information about the psychometric properties of the measures. Generally, items above. 40 are considered to have acceptable psychometric properties. The data in Table 1 indicate that individual factor loadings for the items used to develop these constructs were moderate to high in magnitude, ranging from. 52 to 1.01.

Psychological distress—The four items used to measure psychological distress assess how often respondents feel blue, have no interest in things, have trouble concentrating, and

feel everything is an effort in the 30 days prior to the interview. Response categories ranged from "never" (1) to "often" (4): High scores reflect greater psychological distress.

Financial strain and traumatic events—We assess financial strain by whether respondents: (1) have enough money to meet their needs ("more than need," "just enough," "not enough") and (2) have difficulty in meeting their monthly bills ("not at all difficult," "not very difficult," "somewhat difficult," "very difficult"): Higher scores reflect greater financial strain. Traumatic events were measured with a 10-item checklist containing major traumatic events (e.g., rape, sexual molestation, or witnessing someone being badly injured or killed). Respondents indicated whether each of these events had happened to them; the summary score was a count of events reported.

Social support and negative interaction—Three indicators measured social support from relatives and assessed the extent to which respondents feel that relatives understand the way they feel, appreciate them, and can be relied on for help. Response categories ranged from "not at all" (1) to "a lot" (4): Higher scores correspond to greater social support. Three indicators of negative interaction with relatives assessed the extent to which respondents' relatives make them feel tense, criticize them, and get on the their nerves. Response categories ranged from "never" (1) to "often" (4): A high score reflects more negative interaction.

Personal control—Perceptions of personal control were assessed by respondents" reports that: (1) their lives are determined by their own actions, (2) they can make plans work, (3) they get what they want by working hard, and (4) they can protect their own interests. Response categories ranged from "not true at all" (1) to "very true" (4): A high score reflects higher personal control.

Personality—Measures of extroversion and neuroticism were used as statistical controls. For extroversion, respondents were asked about the extent to which they characterized themselves as outgoing, lively and sociable. For neuroticism, respondents were asked about the extent to which they characterized themselves as irritable, envious, and emotional. Response categories for both extroversion and neuroticism ranged from "not at all" (1) to "very" (4).

Sociodemographic controls—All analyses account for the effects of age and education (coded continuously), gender (0 = male; 1 = female), marital status (0 = married, 1 = other), and race (0 = white, 1 = black) in these relationships.

RESULTS

Descriptive statistics (Table 1) for the study variables are presented in Table 1. These parameters indicate that, on average, African Americans were younger, had lower levels of education, and had greater financial strain than whites. White respondents were higher than black respondents on neuroticism and traumatic events,[2] one indicator of social support ("can rely on relatives for help"), negative interaction ("relatives make me feel tense"), personal control ("make plans work"), and two indicators of psychological distress ("no interest in things," and "everything an effort"). African Americans were higher than whites on two indicators of extroversion (outgoing, lively) and one indicator of negative interaction ("relatives criticize me").

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[2]Thirty-two percent of whites reported experiencing three or more traumatic events, compared to 12 percent of African Americans. Approximately 52.4 percent of whites reported experiencing no traumatic events, compared to 62 percent of African Americans.

Figures 2 and 3 and Tables 2 and 3 present the parameter estimates for the measurement models of traumatic events, financial strain, social support, negative interaction, personal control, and psychological distress for blacks and whites.[3] Although we originally planned to perform a multiple group analysis and compare the application of the conceptual model for blacks and whites, preliminary analyses (not shown) indicated that the model was inappropriate for both groups combined and required estimation of separate models.[4]

Overall, the findings indicate mixed support for the hypothesized effects of positive and negative interaction on psychological distress. Findings in support of the "main effect" model indicate that, among African Americans, social support from relatives was associated with lower (direct effect) psychological distress ($\beta = -.163$, $p < .05$), while among whites negative interaction was related (direct effect) to greater psychological distress ($\beta = .054$, $p < .05$). With respect to "mediated effects," financial strain operated indirectly through negative interaction ($\beta = .092$, $p < .01$), which, in turn, contributed to the overall impact of financial strain on psychological distress ($\beta = .130$, $p < .001$; total effect), but among whites only (direct effects of financial strain and negative interaction on psychological distress were ($\beta = .112$, $p < .001$ and ($\beta = .054$, $p < .05$, respectively). Among African Americans, traumatic events had direct effects on negative interaction ($\beta = .131$, $p < .05$) and psychological distress ($\beta = .200$, $p < .01$); however, negative interaction did not mediate this relationship. Further, the data indicate that financial strain was unrelated to both negative interaction and psychological distress. Social support from relatives did not offset the impact of financial strain or traumatic events on psychological distress for either group. In fact, white respondents who had financial difficulties ($\beta = -.133$, $p < .001$) and experienced a traumatic event ($\beta = -.138$, $p < .001$) reported lower levels of social support from relatives (mediation was not possible because social support and psychological distress were unrelated). Among African Americans, financial strain and traumatic events were unrelated to social support, although social support from relatives was related to lower psychological distress.

Neuroticism and extroversion were important predictors of these relationships, despite the fact that evidence for the "artifactual effect" model was mixed. For whites, higher levels of extroversion were associated with reduced financial strain ($\beta = -.040$, $p < .05$), negative interaction ($\beta = -.038$, $p < .05$), and psychological distress ($\beta = -.127$, $p < .001$), as well as more social support ($\beta = .162$, $p < .001$), greater feelings of personal control ($\beta = 349$, $p < .001$), and a greater likelihood to have had a traumatic event ($\beta = .084$, $p < .01$). The combined influence of extroversion results in lower levels of psychological distress ($\beta = -.165$, $p < .001$; total effect). Turning to neuroticism, white respondents who reported high levels of neuroticism reported more financial strain ($\beta = .271$, $p < .001$), traumatic events ($\beta = .176$, $p < .001$), negative interaction ($\beta = .292$, $p < .001$), and psychological distress ($\beta = .490$, $p < .001$), coupled with less social support from relatives ($\beta = -.135$, $p < .001$) and reduced feelings of personal control ($\beta = -.173$, $p < .001$). Overall, the total effect of neuroticism on psychological distress is substantial ($\beta = .586$, $p < .001$). A different profile emerged among African Americans, where extroversion was associated with a greater sense of personal control ($\beta = .376$, $p < .001$) and less psychological distress ($\beta = -.164$, $p < .001$). Consequently, the total effect of extroversion on psychological distress is largely attributable to its impact on personal control ($\beta = -.225$, $p < .001$; total effect). Neuroticism was

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[3]Table 2 presents only the significant coefficients for the pathways in the measurement models for African Americans and whites. Coefficients for all of the estimated pathways (significant and non-significant) are available upon request.
[4]The parameter estimates and the goodness-of-fit summaries for the estimation of the measurement models indicate that the model is an adequate fit of the data for African Americans and whites. Results from the multiple group analyses indicate that both groups have a common factor pattern, but the relations among the constructs are different across racial groups. Significance tests conducted by LISREL are sufficient for demonstrating that certain effect coefficients are reliably different from zero in one population and not the other.

associated with more financial strain (β =.132, $p < .05$), more negative interaction with relatives (β = .193, $p < .05$), less social support (β = −.238, $p < .01$), and more psychological distress (β = *326, $p < .001$*); neuroticism had a moderate overall impact on psychological distress (β.= .389, $p < .001$).

Findings for mediated effects of social support and negative interaction on psychological distress through personal control were mixed. Among whites (Table 3), although negative interaction was not associated with lower levels of personal control, high levels of social support from relatives were related to greater feelings of personal control (β = .101, $p < .01$). Further, the data indicate that a portion of the impact of financial strain on psychological distress was due to lower levels of personal control (β = −.085, $p < .01$). However, despite the beneficial effect of personal control on psychological distress (β = −.112, $p < .01$), it was not strong enough to offset the impact of financial strain on psychological distress. Findings for African American respondents (Table 2) indicated that negative interaction is totally mediated by personal control, such that respondents who report negative interaction with their relatives indicate diminished feelings of personal control (β = −.275, $p < .05$). Due in part to the beneficial impact of social support on distress, the effect of negative interaction on personal control is not strong enough to increase psychological distress (i.e., $p > .05$, total effect). In addition, financial strain is associated with lower feelings of personal control (β = −.291, $p < .01$), and, while personal control reduces psychological distress (β = −.129, $p < .05$), its effect is not strong enough to offset the noxious effects of financial strain.

DISCUSSION

This examination of the relationships among stressful events, social interaction, personal control, personality, and psychological distress for African Americans and whites addressed three primary concerns: the overall adequacy of three models of the effects of positive and negative social interaction, the role of social interaction with respect to perceptions of personal control, and possible differences in the pattern of observed associations across African American and white samples. The study's findings are complex and can only be fully discussed within the context of the group models. The present analyses revealed that, although the factor structure and pattern of relationships among the constructs were similar for African American and white adults (i.e., the latent constructs are comparable for both groups), the interrelationships among constructs were distinct. These findings call into question prior research within primarily majority samples which is based on the assumption that the relationships among these factors are similar across racial and ethnic groups. The absence of empirical evidence in our findings of "racial/ethnic similarity" (Hunt 1996; Hunt et al. 2000) compromises the generalizability of prior research investigating these relationships.

The overall predictive models of these relationships were clearly divergent for African Americans and whites. The pattern of relationships for white respondents more clearly reflected the linkages suggested by the research literature. This is perhaps not surprising given that the majority of research on these issues involves white samples. Of particular note is the primary role of extroversion and neuroticism in the model for whites, each of which had direct effects on model components. Personality had a much more limited role among African Americans, and, comparatively speaking, neuroticism was the more dominant factor (extroversion was related only to personal control and psychological distress). Further, this investigation, as a direct test of both social support and negative social interaction, indicates that the causes and consequences of these components are different. For African Americans, social support was unaffected by financial strain and traumatic events, while for whites these difficulties were negatively associated with support from relatives. Given the noted importance of support from relatives among African Americans, it may be that support is

provided independently of life difficulties. Importantly, social support had a direct beneficial impact on psychological distress among African Americans. Similarly, both financial strain and traumatic events were associated with negative interaction with relatives for whites, whereas only traumatic events predicted negative interaction with relatives among blacks. Perhaps financial strain is a more normative occurrence among African Americans (who had higher levels of financial strain) and, as such, does not jeopardize interactions with relatives. Overall, the findings indicate that the relationships involving stress, positive and negative interaction, personality, and psychological distress are distinctive for the two groups. The specific details of the models and their differences are discussed below.

Empirical tests of theoretical models (e.g., main, mediating, artifactual) of these relationships were inconclusive, a finding which is not surprising given the relative lack of investigations that systematically focus on the pathways through which positive and negative social interaction affect outcomes. However, there were several important differences in the patterns of relationships that would not have been detected without the benefit of separate analyses. Of particular note, the relationships between social interaction and psychological distress were different for blacks and whites. Consistent with previous work (Lincoln 2000), among whites, negative interaction had a direct effect on psychological distress, whereas social support did not. For African Americans, the reverse pattern was observed, representing one of the few documented instances in which positive interaction directly influences psychological distress. Further, both social support and negative interaction operated through personal control to influence psychological distress in the manner anticipated. However, for whites social support from relatives indirectly reduced psychological distress by bolstering feelings of personal control, while for African Americans negative interaction with relatives increased psychological distress by eroding feelings of personal control (the direct effect of social support in reducing psychological distress, in part, offset this influence).

Contrary to previous findings, social support did not mediate the effects of traumatic events and financial strain on psychological distress in either group, and, overall, it did little to protect individuals from the impact of these events. In fact, among whites, those with financial problems reported fewer supportive exchanges and more negative interaction with network members, suggesting that stressful events may compromise supportive resources (Hobfoll 1985; Wilcox 1981; Wortman 1984). Among African Americans, neither social support nor negative interaction mediated the impact of financial strain on psychological distress. African Americans use social networks for assistance with financial problems (Chatters, Taylor, and Neighbors 1989; Neighbors and Jackson 1984; Taylor et al. 1997), and instrumental support is the most effective form of assistance for alleviating stress and mitigating its impact on psychological distress (Neighbors and LaVeist 1989). Emotional support may be largely ineffective for financial problems (Brown et al. 1992; Dressier 1985), underscoring the importance of a match between stressor and type of support (Cohen and Wills 1985).

Finally, despite the relatively important role of personality factors in the proposed relationships (particularly for whites), the "artifactual effect" model received only limited support. Specifically, for African Americans, personality in part accounted for the relationship between negative interaction and psychological distress. However, a number of key relationships remained significant net of the influence of personality factors (between negative interaction and psychological distress among white respondents, $\beta = .058$, $p < .05$; total effect, and between social support and psychological distress among black respondents, $\beta = -.147$, $p < .001$; total effect). Nonetheless, the direct effects of extroversion and neuroticism indicated that these traits are important for understanding reports of psychological distress, just as it has in prior research (Costa and McCrae 1988; Larsen and

Ketelaar 1991; Watson and Clark 1984). Further, the inclusion of personality factors (particularly for whites) clarified the impact of social support and negative interaction on reports of distress (Cohen, Sherrod, and Clark 1986; Sarason et al. 1987).

With respect to the role of perceptions of control, financial strain eroded feelings of personal control for both blacks and whites, possibly because financial problems indicate an inability to adequately provide for one's personal and family needs and to control events in one's life. Further, among whites, financial difficulties were associated with decreased social support from relatives. Quite surprisingly, whites reported higher levels of traumatic events than did African Americans. This is in contrast to a number of studies that indicate that blacks are more likely to experience traumatic events as well as experiencing multiple events (Breslau et al. 1995; Green et al. 1990). Other evidence, however, indicates that whites reported more traumatic events (robbery, physical assault, tragic death, or a disaster or hazard) compared to African Americans (Norris 1992). These disparate findings may reflect the various types of events included in the surveys. Of the ten types of traumatic events included in our data, whites reported more exposure to six events (e.g., life threatening accident, fire, flood or natural disaster, sexual molestation, physical abuse, childhood neglect), whereas African Americans reported more exposure to only one traumatic event (e.g., rape).

These divergent findings suggest that different types of events may yield different results. Accordingly, it is important to consider the different types of events under study for understanding studies of victimization and trauma. Findings also highlight the need for additional studies on the prevalence and range of traumatic events among representative samples of diverse populations. For both blacks and whites, traumatic events had both direct and indirect (via negative interaction) effects on psychological distress. White respondents, however, may be even more vulnerable to distress because of the erosion of social support associated with the presence of a traumatic event. Moreover, for both groups, any apparent benefit of either social support or personal control in this situation is negligible. The failure of traumatic events to "mobilize" support from relatives may be attributable to several factors associated with the difficulties of providing support under these circumstances(e.g., dissatisfaction with supportive efforts, misdirected and inappropriate support).

Interpretation of these findings should be considered within the context of the study's limitations. With respect to measurement, the analysis focused on one indicator of mental health status—psychological distress—and, due to methodological considerations, was restricted to four items. Notably, the items used did not assess somatic symptoms that may be particularly important in the expression of distress among African Americans and other ethnic and racial minority groups. The cross-sectional nature of the data limits the ability to determine the temporal ordering of the constructs considered in the model. For example, one could argue that psychological distress resulting from major traumatic events distorts one's perceptions of social interactions. Clearly, determining the causal order of the constructs and the dynamics of this process is only possible with prospective data. Social support that restores or maintains feelings of belonging and being loved and cared for is assumed to be most effective for stressful situations that lead to internal attributions of failure or feelings of inadequacy (Cohen and McKay 1984). However, other types of supportive interactions (e.g., informational, instrumental)may mediate the stress-distress relationship. Along these same lines, because traumatic events were aggregated, it was not possible to distinguish whether particular events were responsive to negative interaction or personal control. For example, issues of personal control may be more pertinent for specific types of stressful and traumatic events.

The analysis used global measures of social support and negative interaction with relatives, as opposed to source-specific measures of relationships with spouse, children, or non-

relatives. The measures assessing relations with relatives were the most generous with respect to sample size considerations, thus allowing for more rigorous statistical techniques (structural equation modeling) in testing these relationships. Further, given the prominence of extended family for supportive exchanges, it is important to examine these relationships involving relatives. However, given the importance of non-kin (e.g., church members, friends) for the supportive relationships of African Americans(Taylor and Chatters 1986), future research should explore the nature of social interactions with other social networks with respect to these issues. Finally, although the measures of financial strain were designed to assess more recent financial problems, it is possible they were actually chronic in nature. Similarly, accounts of traumatic events were based on lifetime prevalence, with no information regarding the recency of events. It is important to point out that this investigation examined only two types of stressors. Future research should consider the role and function of emotional support and negative interaction in the context of other role-related stressors (e.g., work, marital, and parental stressors)and major life events (e.g., death of significant others, divorce). The inclusion of a broader range of stressors may have produced different results in our investigation and would certainly be a useful strategy to clarify the potentially unique interrelationships among the factors examined in this study, as well as the specific role of stress in relation to mental health status (e.g., Turner and Wheaton 1997).

Despite these limitations, this investigation contributes in important ways to our under-standing of the mechanisms through which stressful events, social interaction, personal control, and personality influence psychological distress within diverse populations. Future research on this topic should advance along two related fronts. First, refinements in this model should focus on (1) other potential intervening factors that mediate the effects of stress and negative interaction on distress and (2) clarifying the relative importance of negative interaction versus social support(e.g., rarity and salience, alteration in mood) for psychological distress. As discussed previously, additional research on specific types of stressors and appropriately matched social support are needed as well.

More fundamental to issues of race/ethnicity and psychological distress, however, the major finding of the study was that the pro- posed conceptual model of these relationships, while adequate for white respondents, was largely inappropriate for African Americans. Again, this is not surprising given that the pro- posed model was based on research findings from studies of primarily majority samples. Echoing the sentiments of Hunt and associates (Hunt 1996; Hunt et al. 2000), the present findings indicate the processes underlying psychological distress are sufficiently different for African Americans and whites and that the assumption of "race/ethnic similarity" is unjustified. The observed differences in the patterns of association between model components clearly challenge the utility of this conceptual model and suggest that the processes underlying psychological distress among African Americans are very different.

Moving beyond this specific example, these findings generate a host of unanswered questions regarding the usefulness and validity of the overall conceptual model of psychological distress, as well as the individual model constructs when used within diverse populations. For example, one might question whether positive and negative social interaction are equally valid and meaningful constructs across different race and ethnic groups and, by extension, whether they are valid with respect to their role in the processes assumed to underlie reports of psychological distress. There may be important cultural differences in expected norms for emotional support and the customary fashion that groups give expression to these feelings (e.g., emotional demonstrativeness, reserve/reticence). Further, given the different cultural meanings that may be attached to such social

interactions, these constructs will have different meanings and significance for the processes underlying psychological distress.

Similarly, there are circumstances within specific cultural contexts in which seemingly negative social interactions (e.g., criticism) are construed as normative, benign, and paradoxically supportive. Linguistic analysis of African American language and discourse emphasizes the use of negative commentary and, specifically, criticism (i.e., signification or signifyin') as a means of shaping behavior and expressing solidarity and interpersonal closeness (Smitherman 1977):

> Signification, our second mode of discourse, refers to the verbal art of insult in which a speaker humorously puts down, talks about, needles,—that is, signifies— on the listener. Sometimes signifyin'(also siggin) is done to make a point, sometimes it's just for fun. This type of folk expression in the oral tradition has the status of customary ritual that's accepted at face value. That is to say, nobody who's signified on is supposed to take it to heart. It is a culturally approved method of talking about somebody—usually through verbal indirection. Since the signifier employs humor, it makes the put-down easier to swallow and gives the recipient a socially acceptable way out. (Pp. 118–119)

Of particular importance for the present context is the use of signification as a social and behavioral corrective: "The point of the above examples, like all effective heavy signification, is to put somebody in check, that is make them think about and, one hopes, correct their behavior" (Smitherman 1977:120–121). This example suggests that the use of criticism (i.e., negative interaction) within African American discourse can be subtle, nuanced, and employed as a customary means to interact with others.

Further, there may be other yet unidentified constructs that are significant contributors to psychological distress among specific cultural groups. For example, the use of the construct of personal control reflects a particularly individualistic orientation toward the efficacy of one's actions in life. Specific cultural beliefs and life experiences (e.g., discrimination) of other racial and ethnic groups may focus more centrally on the roles of fate, luck, blocked opportunities, or the contributions of others (e.g., family, community) to the success of one's efforts. These possibilities argue for the development of programs of research within diverse samples of the population that would explore the varied ways that stressful events, social interaction, and personal resources operate to affect psychological status and outcomes across race/ethnic groups.

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Biographies

Karen D. Lincoln is Assistant Professor in the School of Social Work at the University of Washington. The primary focus of her research has been the role of informal social support networks in the stress process among African Americans across the life course. Dr. Lincoln has published in the areas of positive and negative interaction and psychological well-being, and religious participation among African Americans. Her most recent work examines racial differences and the influence of personal and sociocultural factors in mental health. Dr. Lincoln's recent work has appeared in *Social Service Review* and the *Journal of Gerontology: Social Sciences*.

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Robert Joseph Taylor is the Sheila Feld Collegiate Professor of Social Work at the University of Michigan. He is a Faculty Associate with the Program for Research on Black Americans at the Institute for Social Research and the Center for Afro-American and African Studies. He also is affiliated with the Center for Research on Race, Religion, and Health. Professor Taylor has published extensively on the informal social support networks(e.g., family, friends, and church members)of adult and elderly black Americans. He has been principal investigator for several National Institute on Aging funded projects which examine the role of religion in the lives of black and white elderly adults. He has also co-edited two books: *Family Life in Black America* (1997) and *Aging in Black America* (1993), with James S. Jackson and Linda M. Chatters.

FIGURE 1.
Proposed Measurement Model of Financial Strain, Traumatic Events, Personal and Social Resources, and Psychological Distress

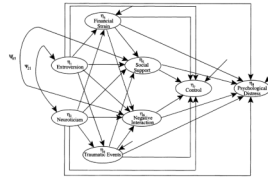**FIGURE 2.**
Estimated Measurement Model of Financial Strain, Traumatic Events, Personal and Social Resources, and Psychological Distress for African Americans

FIGURE 3.
Estimated Measurement Model of Financial Strain, Traumatic Events, Personal and Social Resources, and Psychological Distress for Whites

TABLE 1

Financial Strain, Traumatic Events, Personal and Social Resources, and Psychological Distress (Ranges, Means, Standard Deviations, and Factor Loadings)

Variable	Whites (N = 4,003)			African Americans (N = 549)		
	Range	M	SD	M	SD	Loadings
Age	18–55	33.87 *	9.81	32.28	9.80	—
Education	0–17	13.35 ***	2.19	12.89	2.06	—
Extroversion						
Outgoing	1–4	3.08 **	.79	3.18	.83	.78
Lively	1–4	3.12 ***	.71	3.28	.76	.85
Sociable	1–4	3.14	.74	3.21	.80	.82
Neuroticism						
Irritable	1–4	2.11 ***	.74	1.93	.85	.74
Envious	1–4	1.79 ***	.73	1.50	.70	.66
Emotional	1–4	2.43 ***	.91	2.21	.97	.64
Financial Strain						
Enough money to meet needs	1–3	2.10 ***	.64	2.45	.58	1.01
Difficulty paying monthly bills	1–4	2.20 ***	.92	2.34	.96	.67
Traumatic Events						
Life event summary score	0–8	1.51 ***	1.70	1.36	1.56	1.00
Social Support						
Understand way R feels	1–4	3.12	.85	3.09	.89	.80
Appreciate R	1–4	3.52	.73	3.53	.74	.89
R can rely on for help	1–4	3.61 ***	.79	3.46	.89	.80
Negative Interaction						
Make R feel tense	1–4	2.35 ***	.90	2.13	.96	.80
Criticize R	1–4	2.03 ***	.87	2.17	.95	.66
Get on R nerves	1–4	2.50	.88	2.55	1.00	.80
Personal Control						

| Variable | Range | Whites (N = 4,003) | | African Americans (N = 549) | | |
		M	SD	M	SD	Loadings
Life by own actions	1–4	3.62	.60	3.61	.69	.52
Make plans work	1–4	3.27***	.66	3.10	.78	.65
Work hard for what want	1–4	3.56	.59	3.60	.69	.61
Protect interests	1–4	3.44	.64	3.38	.79	.76
Psychological Distress						
Feel blue	1–4	3.08	.93	3.12	.96	.79
No interest in things	1–4	3.45*	.78	3.36	.86	.82
Have trouble concentrating	1–4	3.22	.87	3.26	.91	.78
Everything an effort	1–4	3.22***	.91	3.00	1.03	.78

*
$p < .05$

**
$p < .01$

***
$p < .001$ (two-tailed test)

TABLE 2

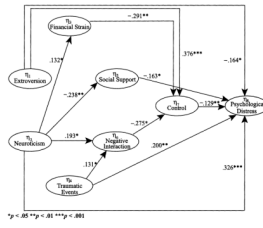Completely Standardized Maximum Likelihood Parameter Estimates for the Relationships between Financial Strain, Traumatic Events, Personal and Social Resources, and Psychological Distress for African Americans (Measurement Models)

| | African Americans | | |
| | Causal Effects[a] | | |
Dependent Variable/Independent Variable	**Direct (A)**	**Indirect (B)**	**Total (A + B)**
Financial Strain (η_3)/Extroversion (η_1)	−.095	.000	−.095
Financial Strain (η_3)/Neuroticism (η_2)	.132[*]	.000	.132[*]
Traumatic Events (η_4)/Neuroticism (η_2)	.082	.000	.082
Social Support (η_5)/Extroversion (η_1)	.061	.009[*]	.071
Social Support (η_5)/Neuroticism (η_2)	−.238[**]	−.016[**]	−.253[**]
Social Support (η_5)/Financial Strain (η_3)	−.107	.000	−.107
Negative Interaction (η_6)/Extroversion (η_1)	−.095	−.003	−.099
Negative Interaction (η_6)/Neuroticism (η_2)	.193[*]	.022[**]	.214[*]
Negative Interaction (η_6)/Financial Strain (η_3)	.080	.000	.080
Negative Interaction (η_6)/Traumatic Events (η_4)	.131[*]	.000	.131[*]
Control (η_7)/Extroversion (η_1)	.376[***]	.040[**]	.422[***]
Control (η_7)/Neuroticism (η_2)	−.004	−.061[**]	−.068
Control (η_7)/Financial Strain (η_3)	−.291[**]	−.007	−.300[**]
Control (η_7)/Traumatic Events (η_4)	.013	−.024[***]	−.021
Control (η_7)/Social Support (η_5)	−.126	.000	−.126[**]
Control (η_7)/Negative Interaction (η_6)	−.275[*]	.000	−.275[*]
Psychological Distress (η_8)/Extroversion (η_1)	−.164[*]	−.061[*]	−.225[**]
Psychological Distress (η_8)/Neuroticism (η_2)	.326[***]	.063[*]	.389[***]
Psychological Distress (η_8)/Financial Strain (η_3)	.047	.053[*]	.099[*]
Psychological Distress (η_8)/Traumatic Events (η_4)	.200[**]	−.001	.199[**]
Psychological Distress (η_8)/Social Support (η_5)	−.163[*]	.016	−147[*]
Psychological Distress (η_8)/Control (ηs_7)	−.129[*]	.000	−.129[*]

[*]
$p<.05$

[**]
$p<.01$

[***]
$p<.001$ (two-tailed test)

[a]Standardized regression coefficients

TABLE 3

Completely Standardized Maximum Likelihood Parameter Estimates for the Relationships between Financial Strain, Traumatic Events, Personal and Social Resources, and Psychological Distress for Whites (Measurement Models)

	Whites		
	Causal Effects[a]		
Dependent Variable/Independent Variable	**Direct (A)**	**Indirect (B)**	**Total (A + B)**
Financial Strain (η_3)/Extroversion (η_1)	$-.040^*$	.000	$-.040^*$
Financial Strain (η_3)/Neuroticism (η_2)	$.271^{***}$	.000	$.271^{***}$
Traumatic Events (η_4)/Extroversion (η_1)	$.084^{**}$	.000	$.084^{**}$
Traumatic Events (η_4)/Neuroticism (η_2)	$.176^{***}$	.000	$.176^{***}$
Social Support (η_5)/Extroversion (η_1)	$.162^{***}$	$-.006$	$.156^{***}$
Social Support (η_5)/Neuroticism (η_2)	$-.135^{***}$	$-.060^{***}$	-195^{***}
Social Support (η_5)/Financial Strain (η_3)	-133^{***}	.000	$-.133^{***}$
Social Support (η_5)/Traumatic Events (η_4)	$-.138^{***}$	.000	$-.138^{***}$
Negative Interaction (η_6)/Extroversion (η_1)	$-.038^*$	$.007^*$	$-.030$
Negative Interaction (η_6)/Neuroticism (η_2)	$.292^{***}$	$.048^{***}$	$.340^{***}$
Negative Interaction (η_6)/Financial Strain (η_3)	$.092^{**}$	.000	$.092^{**}$
Negative Interaction (η_6)/Traumatic Events (η_4)	$.131^{***}$	.000	$.131^{***}$
Control (η_7)/Extroversion (η_1)	$.349^{***}$	$.023^{**}$	$.373^{***}$
Control (η_7)/Neuroticism (η_2)	$-.173^{***}$	$-.049^{**}$	$-.222^{***}$
Control (η_7)/Financial Strain (η_3)	$-.085^{**}$	$-.017^{**}$	$-.102^{**}$
Control (η_7)/Traumatic Events (η_4)	.034	$-.019^{**}$	.015
Control (η_7)/Social Support (η_5)	$.101^{**}$	.000	$.101^{**}$
Psychological Distress (η_8)/Extroversion (η_1)	$-.127^{***}$	$-.038^{**}$	$-.165^{***}$
Psychological Distress (η_8)/Neuroticism (η_2)	$.490^{***}$	$.096^{***}$	$.586^{***}$
Psychological Distress (η_8)/Financial Strain (η_3)	$.112^{***}$	$.017^{**}$	$.130^{***}$
Psychological Distress (η_8)/Traumatic Events (η_4)	$.122^{***}$	.006	$.128^{***}$
Psychological Distress (η_8)/Social Support (η_5)	$-.006$	$-.011^*$	$-.017$
Psychological Distress (η_8)/Negative Interaction (η_6)	$.054^*$	.004	$.058^*$
Psychological Distress (η_8)/Control (η_7)	$-.112^{**}$	.000	$-.112^{**}$

*
$p<.05$

**
$p<.01$

***
$p<.001$ (two-tailedtest)

[a]Standardized regression coefficients