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Racial Differences in Effects of Religiosity and Mastery on Psychological Distress: Evidence from National Longitudinal Data

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Abstract

This research engages nationally representative longitudinal data and a multipopulation LISREL model to investigate variation among black and white Americans in the impact of religiosity and mastery on psychological distress. Guided by the stress and coping perspective and prominent theorizing about how religiosity influences mental health, the model assesses not only direct effects of religiosity and mastery on distress but also the possibility of religiosity and mastery inhibiting distress indirectly (via effects on other coping resources or stressors) and attenuating the distress-inducing properties of individual stressors. Findings solidly support the endorsed proposition of religiosity's being particularly beneficial to blacks' emotional well-being and moderately support the prediction of mastery's being primarily helpful to whites'. Public religiosity substantially eclipses private and subjective religiosity as a facilitator of blacks' emotional well-being, and although main effects dominate, there are significant mediation and moderation effects of religiosity or mastery within each race.

Keywords

race/ethnicity; religion; mastery; distress; coping

Religious involvement and favorable self-appraisals seemingly bode favorably for individuals' mental health (Ellison et al. 2001; Fiori et al. 2006; Greenfield, Vaillant, and Marks 2009; Ross and Mirowsky 2003). The mental health implications of these coping resources (Thoits 1995), however, are rarely assessed in the same empirical models—a feature that might mask their true potency if in fact they are associated nontrivially. While religiosity and favorable self-appraisals are manifestly different phenomena that should exert largely independent effects on mental health, the grounds for presupposing them to be completely unrelated are weak (Ai et al. 2005; Ellison 1993; Fiori et al. 2006; Greenfield et al. 2009; Schieman, Nguyen, and Elliot 2003). Furthermore, signs of propitious effects of religiosity in particular on mental health have come overwhelmingly from cross-sectional samples, many drawn from region-specific populations. Cross-sectional samples facilitate neither the unequivocal temporal sequencing of some independent and dependent variables nor statistical adjustment for prior mental health. Regional data may or may not foretell patterns obtaining nationally.

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This study engages nationally representative longitudinal data to examine simultaneously the effects of religiosity and personal mastery, alongside other potentially consequential variables, on psychological distress. In light of intriguing signs that religiosity and mastery may be differentially central to the coping efforts of black and white Americans (Ellison 1995; Schieman et al. 2006; Sherkat 2002), we test for variation across these two groups in the impact of religiosity and mastery on distress. In her influential review of research incorporating the stress and coping perspective, Thoits (1995) cautions that the model may not apply uniformly to individuals at different social structural locations. We formulate a model allowing for direct, indirect, and moderating effects of religiosity and mastery on distress. Both focal constructs potentially influence distress indirectly via effects on social support and stress exposure, with religiosity's possibly exerting an additional mediational effect via mastery. Moderating effects involve religiosity and mastery, possibly conditioning the impact of stress exposure on distress. The rationale for this model unfolds in the ensuing segments.

ON PERSONAL MASTERY AND RELIGIOUS INVOLVEMENT AS COPING RESOURCES AND STIMULATORS OF MENTAL HEALTH

Coping resources buffer the potentially injurious impact of stressors—environmental, social, or internal conditions requiring readjustment of individuals' typical behavior patterns—on mental health (Thoits 1995). While coping resources may reflect quite disparate facets of the individual's personality or social experience (as with mastery and religiosity), they share the capacity to either change the situation from which stressors spring, manage the meaning of stressors in ways that reduce their threat, or keep symptoms of stress within manageable bounds (Pearlin 1989). Specific coping resources may influence mental health directly, indirectly via mediational effects on stressors or other coping resources, or through moderating mechanisms involving deleterious effects of stressors being tempered by the resource (Pearlin 1989, 1999; Pearlin et al. 1981; Thoits 1995).

Mastery signals individuals' perceived level of control over forces consequential to their lives (Pearlin et al. 1981). This emphasis on perception of control unites mastery with essentially synonymous constructs such as self-efficacy, personal autonomy, instrumentalism, and internal locus of control. Perceived control may be paramount among all the beliefs about self and society with distress-inhibiting potential (Ross and Mirowsky 2003). This essentialness prevails because persons higher on mastery view stressors as less foreboding and because mastery facilitates more active coping with a richer repertoire of potent resources and more effective mobilization and usage of social support networks (Pearlin 1999).

As we address below, access to supportive others represents but one of the ostensible mental health–related derivatives of religiosity. Such involvement is best construed as multifaceted, with public, private, and subjective manifestations (Levin, Taylor, and Chatters 1995). Public (or organizational) religiosity signals behavior, for example, attendance or auxiliary group participation, occurring within the context of communal religious settings. Private (nonorganizational) religiosity denotes sacred activities, for example, prayer or consumption of religious material/programming, occurring outside public contexts. Subjective religiosity reflects religion-focused thoughts or dispositions (e.g., professed centrality of religion in daily life and impression of oneself as religious) (Levin et al. 1995).

Ellison et al. (2001) cogently elucidate the mechanisms through which religiosity may promote mental health. Religious involvement (1) reduces exposure to major stressors; (2) fosters access to social resources; (3) fortifies psychological resources, including mastery; and (4) enhances mental health over and above its impact on stressors and social-

psychological resources. The stressor-reduction mechanism is tied to three main factors: internalization of religious norms and moral messages; a "hellfire effect" -equivalent fear of divine punishment; and reduced exposure to deviant networks or activities. The social resource mechanism reflects the tendency for religious congregations to be fertile sources of social integration and support—via facilitation of regular contact with like-minded individuals, sponsorship of programs catering to needy members, and exposure to larger, more influential networks. The psychological resource route involves promotion of mastery and self-esteem. These favorable selfattitudes derive primarily from positive reflected appraisals obtained from nurturing and empowering theologies and from similarly uplifting coworshippers' absorbing the same teachings. The direct route to mental health forged by religiosity combines mechanisms not straightforwardly subsumed within the other routes. Prominent among these are daily guidance and reassurance and a broad sense of the world's coherence, predictability, and meaningfulness.Ellison et al. (2001) characterize empirical evidence about the impact of religiosity on distress as inconclusive. Effects run the gamut from the negative, anticipated by the stress and coping perspective; to nonsignificant; to even positive.

Social support, one of the coping resources most frequently examined by sociologists (Thoits 1995), evidently features in this investigation as well. Thoits (1995) terms support a social fund that persons handling stressors may draw from. Congruently, social support constructs have regularly been observed to enhance mental health (Ross and Mirowsky 2003). As indicated previously, support is modeled here as a function of mastery and religiosity—a potential mediator of the impact of distress. Given the persuasiveness of the above-citedEllison et al. (2001) and Pearlin (1999) propositions of religiosity facilitating mental health indirectly via fostering of social support, and mastery facilitating effective mobilization and usage of support networks, the theoretical rationale for this setup appears sound.

ON POSSIBLE BLACK-WHITE VARIATIONS IN EFFECTS OF RELIGIOSITY AND MASTERY ON MENTAL HEALTH

The likelihood of religiosity's and mastery's being differentially consequential to blacks' and whites' emotional well-being hinges on the appreciably different levels of exposure to each resource across these groups historically. High religiosity, particularly the public variety, has been substantially more delineative of the black vis-à-vis white American experience (Brown 2006; Krause 2003; Schieman et al. 2006; Sherkat 2002). Indeed, public participation levels place African Americans among the most religious people in the world (Sherkat 2002). By contrast, perceptions of control have typically been significantly stronger among whites (Hughes and Demo 1989; Oates 2004; Porter and Washington 1979). These differential exposure levels have deep structural foundations. Explanations for African Americans' greater religiosity usually emphasize religiosity's value to blacks as a coping mechanism and prominent facilitator of socioeconomic progress. Socioeconomic and psychic adversities wrought by racism necessitate this requirement (Ellison 1995; Krause 2003; Schieman et al. 2006).

Krause (2003) stresses that the strong emphasis on religion in the African American community has solidly sociological explanations, with the black church's figuring centrally. Centuries of antiblack prejudice and discrimination underlie the church's sustained status as the social hub of the African American community. The church, for example, was the birthplace of African American formal education and many other vital community services. Such services originated in the black church because it was the only social institution built, financed, and controlled entirely by blacks. Alongside these historical foundations, Krause ties cultural factors to the black church's immense social reach. These include an emphasis

within African American culture on harmony, cooperation, collective responsibility, groupness, and sameness.

Brown (2006) and Pattillo-McCoy (1998) highlight another distinct facet to the black church's importance: its major historical and contemporary role in mobilizing community activism focused on social and economic justice. The black church's strong record of involvement in extrareligious civic and political activities substantially eclipses that of white congregations. Such activities, augmented by engaging, distinctively African American traditions such as the call-and-response worshipping style, offer continuing opportunities for recruitment of new African Americans into the public religious fold especially (Pattillo-McCoy 1998).

African Americans' lower sense of mastery also has been portrayed as racism and as socioeconomic inequality induced. Consciousness of a social-structural environment that routinely undermines their progress constitutes good reason for blacks' inefficacious streak (Oates 2004; Porter and Washington 1979). Social contexts that are especially conducive to efficacious activity are institutional in their essence and part of society's macrostructure. Thus, formal and informal discriminatory processes excluding blacks from positions of power and authority in America also undermine their self-efficacy (Hughes and Demo 1989).

The explicit predication of this "religiosity as more consequential to black mental health" hypothesis on traditional black-white religiosity differentials has multiple forbearers. For example, the various reasons Ellison (1995) delineates for religiosity's being likely more critical than mental health resources for African Americans than for whites include many highlighted in the earlier discussion of Krause's (2003) work: for example, the historically paramount position of religious institutions in the black community, greater involvement of black churches in sponsoring service programs for their congregations and communities, and the tendency for African Americans to utilize religious cognitions and activities when confronting adversity and express greater satisfaction than whites with the results of such religious coping. Krause's (2003) own prediction of religiosity's being more pertinent to black depressive symptomatology is hinged on the black community's strong foundation of religion. Similarly,Jang et al. (2003) posit that since African American culture elevates social and religious engagement, the positive effects of religiosity may be more salient among blacks.

Processes distinct from (although seemingly intertwined with) this differential exposure phenomenon add heft to the prediction of more positive religiosity effects on blacks' mental health. Young, Griffith, and Williams (2003) detail the substantial involvement of black church clergy in counseling-related activities. This pastoral counseling component routinely addresses varied stressors, eclipses pastoral counseling engaged in by nonblack church clergy, and is distinguished further by openness to referrals with secular professionals. Clergy-specific activities are but one aspect of the extensive and effective church-based social support networks that set black congregations apart (Chatters et al. 2011). These formal and informal networks (evoked earlier in the reference to black churches' greater involvement in servicing their congregations' and communities' needs) routinely deliver critical instrumental, material, and emotional assistance to churchgoers. Tangible forms of help such as money, transportation, job referrals, and caregiving augment nontangibles such as emotional support, information, advice, and the aforementioned counseling. African Americans are strongly invested in these church-based networks. Separate research finds that among blacks but not whites, church-based social support is a significantly stronger facilitator of physical health than secular-based support (Krause 2006). This pattern raises the possibility of applicability to mental health. Unavailability of suitable items precludes

explicit analysis of church-based social support here. However, to the extent that assessed public religiosity indicators tap receipt (or indeed rendering) of such support, these foregoing investigations point to more pronounced mental health–related benefits for blacks.

Regarding likely black-white variations in the impact of mastery, there is little prior theoretical work to invoke. Some congruence is decipherable though between the prediction advocated here—of mastery's being more consequential to white well-being largely because of whites' greater exposure to this resource—and theSchooler et al. (2010) discussion of probable variations in effects of mastery across American and Malian settings. Schooler et al. posit that propitious effects of mastery on psychological health are more foreseeable among groups with a stronger tradition of perceived control over their environments. As our earlier discussion of racial variations in mastery indicates, "traditions" of stronger/weaker perceptions of control are tied closely to superordinate/subordinate status (Hughes and Demo 1989; Oates 2004; Porter and Washington 1979). Applied to the present black versus white American scenario, the hypothesis of mastery's exerting a more positive effect on white mental health ensues.

Empirical support for the proposition that religiosity exerts an especially positive effect on black emotional well-being has been solid but hardly unequivocal. Meanwhile, attention to possible black-white variations in the impact of mastery appears too scant to warrant a summary description. Specific religiosity dimensions have been found more consequential to black vis-à-vis white psychological well-being by Krause (2003), Jang et al. (2003),Schieman et al. (2006), and others. By contrast, Ellison (1995) finds church attendance tied to reduced depression levels among whites but not blacks. We know of only one examination of black-white variations in the impact of mastery or its cognates on psychological distress. Lincoln, Chatters, and Taylor's (2003) investigation shows perceived control to exert similarly inhibitive effects on blacks' and whites' distress.

ON THE RELIGIOSITY-MASTERY RELATIONSHIP AND RACIAL VARIATIONS

The possibility of significant association between religiosity and mastery underlies the importance of including both constructs in models assessing how either influences emotional health. Further enhancing this importance is the mediational effect—via mastery—foreseen in prominent theorizing about the positive religiosity effect on mental health (e.g., Ellison et al. 2001). To be sure, however, contradictory hypotheses on the impact of religiosity on mastery have been proffered.

Some discussions have spotlighted an element of incongruity between religiosity and mastery, with this tension's being alternately portrayed as intensified or inhibited by the black experience. The notion of religiosity and mastery as incongruous is palpable, for example, in theAi et al. (2005) discussion of spiritual surrender and its concomitant New Testament–located "not as I will, but as you will, Lord" canon. Essential to surrender is the need for the believer to abandon the inclination to personally control uncontrollable fate. Similarly,Schieman et al. (2003) highlight a possible connection between dependence on an omnipotent other and blanket relinquishment of control to that potent deity. Congruent findings have been reported by Ai et al., Fiori et al. (2006), and Greenfield et al. (2009). Patterns signaling compatibility between religiosity and mastery are reported in the same Ai et al. and Fiori et al. investigations, and by Schieman et al. Ellison (1993) reports another contradictory pattern: ultimately nonsignificant effects of religiosity dimensions on mastery.

Calhoun-Brown's (1998) proposition of a pronounced intertwining of African American religious tradition, the "sweet ole' by and by," and ensuing neglect of the here and now is an

eyecatching example of portrayals of black religiosity as uniquely incongruous with mastery. This same theme is evoked by Ellison (1993) and Greenfield et al. (2009:208). Schieman et al. (2006:531) moot an alternate, similarly intriguing depiction of black religiosity as distinctively congruent with mastery. In this contending scenario, the divine other morphs into an empowering copilot who renders all things possible for the black religious. Stewart's (1999) depiction of African American religious tradition as fostering means of self-determination among blacks, emitting from conceptions of God as working directly at believers' sides, echoes this same activist sentiment. A portion of our model of course addresses this unsettled issue of whether the impact of religiosity on mastery varies across races.

MODELING BLACK-WHITE VARIATIONS IN THE IMPACT OF RELIGIOSITY AND MASTERY ON DISTRESS

Data

We pursue our research questions with data from the 874 black and 1,906 white participants in both the first (1986) and second (1989) waves of the Americans' Changing Lives (ACL) longitudinal face-to-face surveys (House 1995). Cases are weighted to adjust for differential probabilities of inclusion in wave 1. ACL is a stratified, multistage, area probability sample of noninstitutionalized persons in the contiguous United States. The data are well suited for the present study, with solid indicators of psychological distress and a range of its possible predictors. Utilization of the first two ACL waves (vs. any of the two later waves collected in 1993 and 2004) yields some critical pragmatic advantages: (1) a black sample across both waves large enough to permit the complex race-specific analyses that our research questions dictate, (2) a relatively short interwave time lag, and (3) a unique opportunity to gauge effects over time of all three forms of religiosity since items tapping the three dimensions are included only at waves 1 and 4. The inclusion of distress indicators at both waves facilitates controlling for prior distress in the equations predicting this outcome. As noted earlier, this feature has typically been absent from religiosity-focused studies.

Variables

Psychological distress, denoting an unpleasant emotional state manifested typically in symptoms of depression and anxiety, is positioned at the negative end of the emotional well-being continuum (Ross and Mirowsky 2003:411–16). Distress is gauged at both waves via 11 items from the Center for Epidemiologic Studies Depression Scale (CES-D) depression scale querying the frequency during the past week (1 = *hardly ever,* 2 = *some of the time,* 3 = *most of the time*) that the respondent felt depressed or like everything was an effort, endured restless sleep, and so forth (see Table 1). The second-wave distress measure is our ultimate dependent variable.

Our models feature three latent religiosity measures gauged at wave 1: Public religiosity indexes reported usual attendance at religious services (1 = *never,* 2 = *less than once a month,* 3 = *about once a month,* 4 = *2 or 3 times a month,* 5 = *once a week,* 6 = *more than once a week*) and volunteer work during the preceding year for a religious organization (0 = *no,* 1 = *yes*). Private religiosity indexes the frequency (1 = *never,* 6 = *more than once a week*) of reading religious material and consuming religious programming via electronic or other media. The two subjective religiosity items query the importance of religious beliefs in day-to-day life (1 = *not at all important,* 4 = *very important*) and frequency of seeking spiritual support and comfort when faced with work-/family-/personal life–related problems (1 = *never,* 2 = *rarely,* 3 = *sometimes,* 4 = *often,* 5 = *almost always*). Levin et al. (1995:168) emphasize that multidimensional operationalization of religiosity facilitates detection of the "distinctive ways" in which individual dimensions may influence specific outcomes.

Mastery is assessed at wave 1 with the three included items from the Pearlin Mastery Scale (Pearlin et al. 1981): "I can do just about anything I really set my mind to do" (1 = *strongly disagree,* 2 = *disagree somewhat,* 3 = *agree somewhat,* 4 = *strongly agree*), "Sometimes I feel that I am being pushed around in life," and "There is no way I can solve the problems I have" (for the latter two items, 1 = *strongly agree,* 4 = *strongly disagree*).

Stress exposure, which may suppress mental health substantially and also be influenced by access to coping resources (Pearlin 1999), is represented via chronic financial stress, illnesses, and (negative) life events indicators constructed by ACL personnel: Chronic financial stress is a standardized wave 1 measure reflecting responses across three items querying satisfaction with one's present financial situation (1 = *completely satisfied,* 5 = *completely dissatisfied*), difficulty posed by meeting monthly bills (1 = *not difficult,* 5 = *extremely difficult*), and whether finances usually work out at each month's end such that money usually is/isn't left over (1 = *some money left over,* 2 = *just enough,* 3 = *not enough*). Chronic illnesses, also gauged at both waves, are at each point the sum of *yes* (coded 1, vs. *no* coded 0) responses across items investigating the experience during the preceding year of the following ailments: arthritis or rheumatism, lung disease, hypertension, heart trouble, diabetes or high blood sugar (or medication for such), cancer or a malignant tumor of any kind, foot problems (e.g., circulation-, corn-, or callous-related), stroke, broken or fractured bones, and urine-control problems.

Negative life events also are assessed at both waves. The wave 1 measure denotes the total number of such events—excluding health-related ones—besetting the respondent during the three-year period preceding the interview. The wave 2 measure catalogues the same experiences, but the focal period shifts to the years since the base-year survey. The nine possible experiences include death of a spouse, child, parent, or other close relative/ friend; divorce; assault; job loss; burglary of home; and anything else bad.

The positive and negative dimensions that social support encompasses (Lincoln et al. 2003) are signaled by two latent variables gauged at wave 1. Positive social support is a second-order construct comprising two latent variables: Support network size reflects reports of the actual number of friends/relatives available to call on for advice or help and share very private feelings with (*seven or more* coded 7). Positive interactions with close friends and relatives (spouse and children aside) combines two items: "On the whole, how much do your friends and other relatives make you feel loved and cared for?" and "How much are these friends and relatives willing to listen when you need to talk about your worries or problems?" (for both items, 5 = *a great deal,* 4 = *quite a bit,* 3 = *some,* 2 = *a little,* and 1 = *not at all*). These same response options accompany the two items indexing the negative interaction with close friends and relatives first-order latent construct: How much do they make "too many demands?" and are they "critical of you or what you do?"

There are six single-indicator sociodemographic control variables, all assessed at wave 1: gender (*female* = 1), education and age (in actual years), marital status (*married* = 1, *not married* = 0), employment status (1 = *employed* vs. 0 = *not employed for pay*), and annual family income (1 = *\$5,000,* 2 = *\$5g–\$9,999,* 5 = *\$20g–\$24,999,* 6 = *\$25g–\$29,999,* 9 = *\$60g–\$79,999,* 10 = *\$80,000 or* .). Women, the unmarried, and the socioeconomically worse-off often report lower levels of emotional well-being than, respectively, men, the married, and the socioeconomically better-off (Ross and Mirowsky 2003). Age sometimes has been observed to inhibit distress (e.g., Ellison et al. 2001; Greenfield et al. 2009). We acknowledge that significant gender differences in both religiosity and mastery (see Fiori et al. 2006; Greenfield et al. 2009; Levin et al. 1995; Ross and Mirowsky 2003) raise the intriguing possibility of variations among black and white women and men in effects of

these constructs on distress. This issue is beyond the scope of this investigation but is obviously a worthwhile one to explore.

Missing values on all observed variables are replaced with imputed ones generated via the multiple imputation facility of PRELIS8.5 (Jöreskog and Sörbom 2003). This feature inserts simulated values reflecting within-case patterns occurring across other specified variables with nonmissing data. The black and white subsamples are separated during the imputation procedure. It bears noting that the overwhelming majority of variables assessed here have no missing data, and imputed values are required only for a small number of responses to items tapping mastery, distress, positive and negative interaction, and size of support network. Furthermore, to forestall inflation of correlations between constructs generated partially from imputed cases and other analyzed variables, the string of variables from which imputed values are generated is restricted only to indicators of the given construct. Notably, therefore, among the correlations not inflated by imputation are the stability relationships between wave 1 and wave 2 distress. Descriptive statistics and LISREL8.8-generated factor loadings (Jöreskog and Sörbom 2003) for indicators of all analyzed variables are presented in Table 1.

The Model

Solid utilization of ACL's longitudinal feature, rootedness in both the stress and coping perspective (Pearlin et al. 1981), and prominent theorizing about how religiosity influences mental health (Ellison et al. 2001) distinguish our multipopulation LISREL model (see Figure 1). Ovals in Figure 1 depict multi-indicator latent constructs, and rectangles signal single-indicator items. To minimize clutter, thick arrows are used to signal instances wherein multiple predictors are modeled as directly influencing the same outcome or cluster of outcomes (reiterated in note c beneath the diagram). Thin arrows signal instances wherein a single predictor is modeled as directly influencing an individual outcome (see note b).

Psychological distress at wave 2 is the ultimate dependent variable in the separate equations specified for blacks and whites. Distress at wave 1, along with same wave–assessed mastery, religiosity, financial stress, social support dimensions, and sociodemographic controls, and second wave–assessed recent illnesses and negative life events are the predictors. Given that the coverage period of the wave 2 illness and life events measures (i.e., the preceding year for illnesses and the three years since wave 1 for life events) precedes almost entirely the coverage period of the same wave–assessed distress outcome (i.e., the prior week), concerns about temporal separation of posited predictors and outcomes are minimal. In contrast, inclusion of available second-rather than first-wave measures of other potential mediating resources or stressors (e.g., mastery, financial stress, social support) in the wave 2 distress equations would have elevated such temporal sequencing concerns—since these measures would essentially tap conditions at approximately the moment of the follow-up interview.

As indicated in note a beneath Figure 1, effects of the individual religiosity constructs are estimated in separate iterations (rather than simultaneously in one equation). This alternating of religiosity dimensions is necessitated by the very high correlations between the public, private, and subjective constructs and the related evidence of multicollinearity when they are included simultaneously. Among whites/blacks, the correlation between public religiosity and the private and subjective constructs is .822/.908 and .756/.682, respectively, while the correlation between the private and subjective versions is .877/.911. While space limitations preclude detailed documentation, the multicollinearity evidence generally involves dramatic shifts (in either or both races) in the size/direction of the coefficients representing effects of private and subjective religiosity especially.Fiori et al. (2006) also encountered multicollinearity while modeling public and subjective religiosity effects on life satisfaction with wave 1 of ACL. Given the importance stressed by Levin et al. (1995) of assessing

religiosity dimensions individually, we forgo their strategy of combining the indicators into an umbrella "religiosity" construct. As forthcoming results reveal, effects of the religiosity constructs prove far from entirely duplicative when they are alternated as predictors—their high intercorrelations notwithstanding. Critically as well, irrespective of whether religiosity dimensions are included simultaneously or alternated in separate iterations, the story is unchanged as to which form of religiosity proves especially consequential.

Equations predicting stressors or resources clustered midway in Figure 1 (i.e., wave 1 financial stress and forms of social support as well as recent illnesses and life events at wave 2) are central to the calculation of indirect effects of religiosity and mastery on distress. Wave 1 measures of religiosity and mastery figure among predictors in all of these equations. Like the main equation predicting psychological distress at wave 2, the equations predicting wave 2–assessed chronic illnesses and life events include among predictors the corresponding construct at wave 1. This autoregressive approach to assessing causation is quite common in well-placed, directly relevant, panel data–based analyses (e.g., Levin and Taylor 1998; Oates 2004; Pearlin et al. 1981). The other critical mediation-focused equation in Figure 1 features mastery as a dependent variable and individual religiosity dimensions among its predictors. That equation expressly addresses the aforementioned notion of psychological resource elevation's being an indirect mechanism through which religiosity enhances mental health (Ellison et al. 2001).

We acknowledge that modeling stressors as consequences of our theoretically central coping resources reverses the stressors-on-resources formulation of the original stress and coping model (Pearlin et al. 1981). However, our central focus on the relative impact of religiosity and mastery across races justifies the coping resources–on–stressors direction of influence. The practical consequence of duplicating the stressors-on-resources formulation here would be the upending of the typical theorizing regarding how religiosity influences mental health (Ellison et al. 2001). We note also that in emphasizing how coping resources might alter situations from which stressors originate, and hinder stress proliferation, Pearlin (1989, 1999) seemingly acknowledges the potential for coping resources to influence stressors. Indeed, in the same article in which the original stressors-on-resources causal chain is presented, Pearlin and colleagues note that alternate approaches are not precluded: A personality theorist, for example, "might find reason to regard the self as *the initiating process* in the stress process" (1981:351, emphasis added). The potential for specific coping resources to influence others—reflected in our specification of religiosity-on mastery and religiosity–/ mastery–on–social support effects—also has been noted by Pearlin at multiple points (1989, 1999; Pearlin et al. 1981) and by Thoits (1995).

To assess possible moderating effects of religiosity and mastery on distress, multiplicative terms representing the interaction between the mastery and religiosity constructs and individual stressors are added to the equations predicting distress. These interaction terms are clustered in the dotted square immediately to the left of endogenous distress in Figure 1. They are added alternately rather than simultaneously to forestall multicollinearity. Effects of these interactions quantify the degree to which mastery and religiosity temper/neutralize any tendency for individual stressors to enhance distress. Latent factor score equivalents of all examined first- and second-order latent constructs are used throughout the structural phase of the analysis—so as to forestall problems obtaining model convergence. These latent factor scores, which LISREL8.8 generates at measurement phases, are effectively "single"-indicator equivalents of their multi-item counterparts (Jöreskog and Sörbom 2003). Latent factor scores also are used in the calculation of interaction terms involving mastery and religiosity constructs. Separate from these possible moderating and previously outlined mediating effects of mastery and religiosity constructs on distress, our model also of course

gauges the direct effects that guiding theory postulates (Ellison et al. 2001; Pearlin 1989, 1999; Thoits 1995).

To assess variation across races in the impact on distress of religiosity and mastery, or the interaction between religiosity and mastery and specific stressors, we estimate separate pairs of multipopulation models—with the impact of the focal predictor alternately freed (i.e., specified as different) and fixed (constrained to be equal) across races. Significance of the black-white difference in the impact of religiosity dimensions, mastery, or the multiplicative terms involving religiosity dimensions or mastery and specific stressors hinges on whether the difference between the two model chisquares exceed the .05 significance threshold of 3.84. The baseline or null hypothesis models during these significance tests are the ones with error variances of dependent variables and effects of all predictors freed across races—yielding the coefficients presented in Table 2. The alternative models are the ones with the path at issue (e.g., the direct mastery or religiosity dimension effect on distress, but no other path) fixed across races. The alternative models thus utilize one additional degree of freedom vis-à-vis their baseline model counterparts; the 3.84 benchmark is the value associated with the .05 significance level for one degree of freedom given a two-tailed test.

Limitations of the Model and Supplementary Analyses

In contrast to the equations predicting outcomes gauged at wave 2, equations involving wave 1–assessed constructs are vulnerable to queries about temporal sequencing—since posited predictors and outcomes are gauged contemporaneously. Feelings of mastery and levels of religiosity may not necessarily precede contemporaneously gauged exposure to financial stress or access to social support; religiosity levels are not unequivocally antecedent to same wave–assessed mastery. Substitution of second- for first-wave measures of mastery, financial stress, and aspects of social support in the baseline modelwould evidently have diminished those temporal sequencing issues and facilitated controls for prior levels of the given constructs (the wave 1 measures then assuming that role). However, as explained earlier, the even less appealing consequence of exposing the equation predicting our ultimate distress outcome to significant temporal sequencing limitations would then ensue.

We reiterate that all the causal relationships implied in the baseline model equations predicting mastery, financial stress, and social support have solid foundations in prior theoretical work. We, however, augment this invocation of theory with supplementary analyses that directly address the reasonableness of interpreting these problematic equations causally. In these equations, second-wave measures of mastery, financial stress, and social support become the dependent variables, and their predictors include their wave 1 counterparts alongside the other predictors indicated in Figure 1. To the extent that effects of the first-wave measures of religiosity dimensions and/or mastery on these second-wave outcomes parallel effects obtained when their wave 1 counterparts are the dependent variables, evidentiary grounds for causal interpretation of the latter set of equations are enhanced.

A second set of supplementary models addresses how much our coping resources–on–stressors design conceals the true causal relationship between the focal coping resources and assessed stressors (i.e., financial stress, chronic illnesses, and undesirable life events). As indicated earlier, Pearlin and colleagues (1981) specify a stressors–on–coping resources flow of influence in their original stress and coping model—while acknowledging the possible viability of the coping resources–on–stressors setup embraced here. Religiosity dimensions and mastery at wave 2 thus become the dependent variables in these alternate equations, with each outcome predicted by its counterpart at wave 1, alongside wave 1 measures of stress exposure, sociodemographic constructs, and positive social support and

negative interactions. Inclusion of the social support constructs among the predictors affords us the opportunity to gauge whether the lagged effects of social support indicators on religiosity and mastery exceed the reciprocal lagged effects. The theoretical grounds for assessing religiosity and mastery effects on social support appear solid. (Recall the earlier-referenced Ellison et al. 2001 and Pearlin 1999 hypotheses). However, the potential for significant reciprocal effects cannot be discounted.

The baseline model also ignores possible causal relationships among sociodemographic control measures. The seriousness of this limitation is, however, mitigated since our main interest is in their combined effect. The possibility of multicollinearity-related counterintuitive effects of individual control variables is thus not very bothersome. The utilization of multiple two-indicator latent variables is also less than ideal since three or more indicators are preferable for latent variable construction (Jöreskog and Sörbom 2003). Unavailability of additional viable indicators in ACL necessitates this circumstance. Finally, we are obliged to note the possible time boundedness of our findings, given the now somewhat distant (late 1980s) collection period of the data. Findings should thus be digested with this caveat in mind.

RESULTS

Findings from our multipopulation LISREL models indicate that effects of religiosity and mastery on mental health hinge substantially on race.

Racial Variations in the Impact of Religiosity and Mastery

Table 2 displays direct, indirect, and total causal effects of religiosity dimensions, mastery, and other predictors on distress. The fully standardized beta coefficients facilitate direct comparisons of effects of specific predictors. The magnitude of the indirect effects quantifies the degree of mediation involved in the effects of religiosity and mastery on distress. As note a beneath Table 2 reiterates, evidence of multicollinearity results in effects of religiosity constructs being obtained from separate iterations—each construct alternating as the indicator of religiosity in the given model. Effects of remaining predictors are from the model featuring public religiosity. These coefficients do not differ appreciably from their counterparts in the models featuring either private or subjective religiosity. As indicated in note b, where direct effects of religiosity dimensions and mastery differ significantly across races, the coefficient pairs are shaded in dark gray. Light gray shadings signal borderline-significant (i.e., $p < .10$) differences across races between effects of these same predictors. Direct effects of other variables on specific outcomes also may differ across races, but those significance tests were not performed due to the secondary theoretical import of those differences. Acknowledgement of .10-level, borderline-significant, across-races differences and within-race effects seems reasonable, given the relative smallness of the black sample.

Coefficients in Table 2 portray religiosity as an emotional boon to blacks primarily. Benefits to black mental health derive particularly, although not exclusively, from the public manifestation. Underscoring this point, the substantially inhibitive direct and total causal effects of public religiosity on distress among blacks (−.158 and −.180, respectively) far outstrip the in some instances nonsignificant corresponding effects of private and subjective religiosity. As to the effects on distress of the religiosity constructs among whites, it is only the borderline-significant total public religiosity effect (−.038) that even approaches consequentialness. Whereas the substantially inhibitive public religiosity effect on blacks' distress significantly exceeds the small impact among whites, the direct effects of private and subjective religiosity do not differ significantly across races. This inordinate pertinence of public religiosity to psychological distress—within the black subsample and in explanation of across-races differentials—affirms the utility of the multidimensional

approach to religiosity underscored byLevin et al. (1995). Had an overall religiosity construct or single dimension been examined, this evidence would have been missed.

Effects on the ultimate psychological distress outcome aside, Table 2 reveals signs in both races of religiosity's suppressing stress exposure and enhancing access to coping resources. Among whites especially, however, this pattern is not uniform. Furthermore, because effects of these mediating variables on distress typically trail substantially those of religiosity constructs among blacks and mastery among whites, the indirect effects on distress of religiosity indicators and mastery pale in comparison to the within-race direct effects. (Mastery effects on distress are discussed at length later.) Positive social support is enhanced noticeably by all three forms of religiosity in both races, with the public and private religiosity effects' being significantly higher among blacks. Public religiosity (but no other form) enhances mastery among blacks while exerting a trivial impact among whites. The difference between these two coefficients, however, is only borderline significant ($p < .10$). Significantly inhibitive effects of all religiosity constructs on negative interactions with friends and relatives are observed for whites, with none of the corresponding coefficients' being significant among blacks. Somewhat surprisingly, however, the public religiosity effect is the sole one within this cluster to differ even borderline significantly across races. The negative public religiosity effect on undesirable life events among whites (−.063) is twice the corresponding nonsignificant impact among blacks. Somewhat countervailingly, subjective religiosity seemingly elevates financial stress among whites while being inconsequential to blacks. However, neither of these within-race effects differs statistically. The sustainability of causal interpretations of religiosity effects on contemporaneously assessed constructs in Table 2—mastery, financial stress, positive social support, and negative interactions—is addressed in supplementary analyses that we discuss later.

Whereas religiosity (particularly the public variety) appears especially beneficial to blacks' emotional health, mastery appears more simulative of whites'. While mastery significantly suppresses subsequent distress levels in both groups, the direct and total effects among whites (−.207/−.236, respectively, in Table 2) nearly triple/double their counterparts among blacks. Surprisingly, the direct mastery effects on distress differ only borderline significantly across races. Similar to the patterns for religiosity dimensions, there are indications in both races of mastery, inhibiting stress exposure and boosting access to social support. The salutary impact of mastery on positive social support and inhibitive impact on negative interactions are both significantly more pronounced among whites. In contrast, mastery appears to forestall financial stress among blacks especially. The inhibitive mastery effects on subsequent illnesses and undesirable life events do not differ significantly across races. We address later the sustainability of causal interpretations of mastery effects on contemporaneously gauged outcomes in Table 2.

As we alluded to earlier, the disproportionate relevance to distress of public religiosity in particular among blacks and mastery among whites derives mainly from the direct impact of these constructs (see Table 2). Notwithstanding the substantial indication of religiosity constructs and mastery inhibiting stress exposure and enhancing other coping resources—principally among blacks in the case of religiosity and whites for mastery—the subsequent effects on distress of these mediating constructs generally pale in comparison to the direct impact of either a religiosity construct or mastery within each race. Thus, the indirect effects of religiosity constructs or mastery on distress, via these stressors or other coping resources, are relatively small. Notably, however, the indirect effects of public religiosity and mastery on blacks' distress attain significance (i.e., −.022 and −.039, respectively, in Table 2).

Racial Variations in the Impact on Distress of the Interaction between Religiosity/Mastery and Specific Stressors

Atop the direct and much tinier indirect inhibitive effects that have been detailed, there is fair evidence of religiosity's or mastery's operating within each race to temper the exacerbating impact of stressors on distress. Furthermore, in the lone instance wherein effects of interaction terms differ significantly across races, the discrepancy is consistent with the posited thesis of religiosity's being primarily beneficial to blacks' mental health. Among blacks, evidence of such moderating comes via the significantly negative coefficient for the intertwining of undesirable life events with private religiosity (−.103). Substantively, this coefficient indicates that private religious involvement buffers the intensifying impact of negative life events on blacks' distress.

This Private Religiosity × Undesirable Life Events interaction among blacks significantly eclipses its trivial .019 counterpart among whites. Among whites, mastery mitigates the tendency for chronic illnesses to elevate distress, given the significantly negative coefficient of −.066, but that coefficient does not exceed statistically its nonsignificant .021 counterpart among blacks. Space limitations preclude inclusion of a table with all coefficients signaling the impact on distress of interactions between religiosity dimensions or mastery and specific stressors, but one is furnishable on request.

Supplementary Models Predicting Second-wave Measures of Mastery, Financial Stress, and Social Support Constructs

These equations address whether observed baseline model effects of religiosity and mastery on contemporaneously assessed outcomes persist when (1) predictors and outcomes are separated temporally, and (2) a statistical control for the prior-wave level of each outcome construct is included. The setup of these equations thus parallels the baseline model equations predicting chronic illnesses and undesirable life events (see Table 2). These more rigorous equations yield stronger corroboration for the notion of religiosity's being especially beneficial to blacks and mastery's being especially beneficial to whites.

Blacks benefit more lopsidedly from religiosity in the revised equations with respect to the promotion of mastery and forestalling of financial stress. The image of religiosity as facilitating social support particularly among blacks also perseveres—although with less intensity and comprehensiveness. The public and private religiosity effects on blacks' mastery rise appreciably (from .078 to .119, and from−.044 to .051, respectively); the public, subjective, and private religiosity effects on whites' mastery decline into significantly or borderline-significantly negative territory. The effects of public and private religiosity on blacks' financial stress become significantly inhibitive—increasing markedly from the nonsignificant levels obtained with the wave 1 financial stress construct as the outcome. Furthermore, fully significant across-races differentials emerge for the public and private religiosity effects on mastery and the public religiosity effect on financial stress; a borderline-significant, across-races difference emerges for the private religiosity effect on financial stress. In the baseline model, of course, the public religiosity effect on mastery was the sole path in this cluster to differ even borderline significantly across races.

With respect to facilitation of positive social support, it is only the public religiosity effect that differs significantly across races in the revised model. Effects of all three religiosity dimensions on positive support decline noticeably—to nonsignificant levels in some instances—vis-à-vis their counterparts in the baseline model. Public religiosity enhances positive social support exclusively among blacks in the supplementary model, with the .165 coefficient among blacks significantly exceeding the trivial −.010 impact among whites. (Positive social support in both races of course was enhanced substantially by all three

religiosity dimensions in the baseline model—with the public and private effects' being more pronounced among blacks.) Whereas public religiosity forestalled contemporaneously assessed negative interactions to a borderline-significantly greater level among whites in the baseline model, the public religiosity effect on the second-wave negative interactions construct is trivial in both groups. Private religiosity exerts an even more inhibitive impact on negative interactions in the revised model among whites (−.117 vs. −.043), but that enhanced impact does not significantly exceed the still trivial .012 impact among blacks.

The baseline model results (see Table 2) portray mastery as an inhibitor of financial stress and stimulator of social support within both races—with the mastery effect on financial stress being larger among blacks and the impact on the social support constructs higher among whites. Significantly inhibitive mastery effects on financial stress persist in both races in this revised setup predicting financial stress at wave 2. However, the within-race effects become far less pronounced (each declining more than two thirds). In addition, the impact among blacks no longer exceeds significantly the effect among whites. The effects of mastery on the two social support constructs decline to mere fractions of their baseline model magnitudes in both races. This shift redounds noticeably to mastery's remaining an overall facilitator of social support among whites exclusively. The mastery effect on positive social support actually becomes nonsignificant in both races—as does the impact on negative interactions among blacks. That .029 coefficient trails statistically the still-significant −.076 impact of mastery on negative interactions among whites. A table detailing findings of these supplementary equations is furnishable on request.

Alternate Models Specifying Stress Exposure and Social Support Constructs as Predictors of Religiosity and Mastery

Coefficients from these supplementary models belie the notion that the coping resources–on–stressors setup of our baseline model conceals the true causal relationship between focal coping resources and assessed stressors. Within each race, the effects of stressor constructs at wave 1 on religiosity dimensions and mastery at wave 2 are generally no more pronounced than effects of religiosity constructs and mastery at wave 1 on stressors at wave 2. The same pattern emerges vis-à-vis the relationship between our focal coping resources and social support constructs. Lagged effects of positive social support and negative interactions on public/subjective religiosity and mastery are generally no larger than the reciprocal lagged effects. As there are no private religiosity indicators at wave 2, this dimension is excluded from these supplementary models. A table with coefficients from these supplementary models (which is excluded because of space limitations) is furnishable.

DISCUSSION

Our multipopulation LISREL analysis addressed the possibility of variation among black and white Americans in the impact of religiosity and mastery on psychological distress. Grounded in prior theoretical work, the model assessed not only direct effects of religiosity and mastery on distress but also the possibility of religiosity's and mastery's inhibiting distress indirectly via effects on other coping resources or stressors and mollifying the distress-enhancing properties of individual stressors. The meticulous separation of direct, mediating, and moderating effects; simultaneous assessment of religiosity (in its various manifestations) and mastery; assessment of across-races variation in relevant structural relationships; and utilization of nationally representative longitudinal data distinguish this investigation. Observed patterns solidly support the endorsed proposition of religiosity's being particularly beneficial to blacks' mental health and moderately support the prediction of mastery's being primarily helpful to whites'.

Assessment of the direct effects of latent public, private, and subjective religiosity constructs revealed the palliative power of religiosity among blacks to be derived lopsidedly from public expression. Further underscoring the importance of public religiosity to black distress, the indirect impact of that dimension was also statistically significant (although small magnitude-wise). No other manifestation of religiosity indirectly influenced distress significantly in either race. One prominent route through which public religiosity indirectly inhibited black distress was elevation of mastery. That pattern affirms the psychological resource–enhancing function of religiosity posited byEllison et al. (2001). The inordinately positive public religiosity effect on blacks' mastery—an advantage enhanced in a more rigorous supplementary model separating the constructs temporally and adjusting for prior mastery levels—corroborates the notion of religiosity's being uniquely empowering to African Americans' self-appraisals (Schieman et al. 2006; Stewart 1999). The realm of interaction effects yielded the strongest indication of a nonpublic religiosity dimension's being disproportionately beneficial to blacks. Private religiosity undercut significantly the distress-inducing property of negative life events. This substantial interaction effect among blacks exceeded the nonsignificant impact among whites.

The clear preeminence of public over private and subjective religiosity as a facilitator of blacks' mental health substantiates avowals of the importance of organizationally grounded religious activity for African Americans (e.g., Brown 2006; Chatters et al. 2011; Ellison 1995; Jang et al. 2003; Krause 2003, 2006; Pattillo-McCoy 1998; Young et al. 2003). Inasmuch as such activity among African Americans still occurs disproportionately within black church contexts (Brown 2006; Sherkat 2002), this institution warrants distinct acknowledgment. For African Americans especially, the black church may represent a potent structural mechanism not merely for fostering public religious activity but also for translating such activity into palpable rewards. The scope of this investigation precludes pinpointing some of these purported benefits (e.g., civic and political engagement, provision/receipt of economic support, fulfillment with style of worship). It bears emphasizing, however, that the disproportionately inhibitive impact of public religiosity on blacks' distress represents one highly palpable reward. The pattern also comports with the intriguing notion of black churches as therapeutic systems of primary prevention in African American communities (McRae, Carey, and Anderson-Scott 1998). That assertion hinges on the multifaceted ways in which these institutions attend to the psychological and physical needs of their congregations—processes overlapping substantially with ones addressed here.

The additional patterns seemingly congruent with this posited African American, black church–facilitated cultural valuing of public religious expression (Brown 2006; Ellison 1995; Jang et al. 2003; Krause 2003; Pattillo-McCoy 1998) are noteworthy. Aracial context that nurtures public manifestations of religiosity above other forms also should mete a substantial social support payoff to such expression. Precisely such a pattern is apparent—in both the baseline model and, to a lesser extent, the more rigorous supplementary formulation wherein religiosity and social support indicators were separated temporally. This enduring disproportionately salutary public religiosity effect on positive social support among blacks also notably affirms the social-resource-enhancement function of religiosity specified byEllison et al. (2001). The finding also raises the possibility that for blacks especially, assessed social support items partially capture church-based support—given the earlier-discussed prominence of such networks in African Americans' lives (Chatters et al. 2011; Krause 2006). (The possibility of the public religiosity items themselves partially tapping church-based social support among blacks in particular was of course raised earlier.)

We termed support for the proposition of mastery's being more simulative of whites' mental health moderate mainly because the inhibitive direct effect of mastery on distress among whites proved only borderline-significantly stronger than its black counterpart. Thus,

similarly to how blacks' mental health apparently is sustained inordinately by their social-structurally induced tradition of higher religiosity (Ellison 1995; Krause 2003; Jang et al. 2003), whites' mental health seemingly benefits more (although marginally) from their structurally infused tradition of stronger perceived control (Hughes and Demo 1989; Oates 2004; Porter and Washington 1979).

The statistical significance of the direct mastery-to-distress path among blacks does, however, warrant reacknowledgement. That effect portrays blacks as clearly deriving emotional well-being rewards once endowed with mastery—albeit to a somewhat lesser degree than whites. Within both races, then, there is decent evidence of the criticalness of perceived control to mental health (Pearlin 1999; Ross and Mirowsky 2003).

Focusing still on mastery effects, the especially positive impact on whites' perceptions of social support warrants noting. It constitutes an intriguing bookend of sorts to the especially positive public religiosity effect on blacks' social support. This pattern crystallizes noticeably in the alternate model featuring temporal separation of predictors and outcomes. Indeed, those equations portrayed social support as fostered by (public) religiosity exclusively among blacks and by mastery exclusively among whites. Ultimately, then, the proposition that religiosity facilitates access to social support (Ellison et al. 2001) is affirmed here among blacks, and the thesis of a positive mastery effect on this major coping resource (Pearlin 1999) among whites.

We acknowledged earlier the possible time boundedness of these findings, stemming from the late-1980s collection period of our data. Reestimation of the present models with the availability of suitable, more recent longitudinal data would thus be judicious. With that caveat in mind, we offer this final observation: Ultimately, our main finding (of religiosity's being substantially more simulative of blacks' emotional well-being and mastery's being moderately more simulative of whites') portrays both black and white Americans as sentient activists for their own emotional well-being. Evoking this theme, Rosenberg (1979) asserts that individuals do not merely ensconce themselves behind lines of defense but venture forth actively and aggressively. They do not merely protect their reputations but also seek fame. They do not merely strive to avoid others' negative options but work equally assiduously to obtain positive ones. This predisposition of individuals rests on its own foundations and is a "major determinant of human thought and behavior and a prime motive in human striving" (Rosenberg 1979:56–57). Rosenberg explicitly represents this motive as a self-esteem-focused impulse, but extending it to other emotional well-being dimensions (e.g., distress reduction) seems reasonable. As activists for their own emotional health, black and white Americans here each utilize exceptionally a coping resource to which they have traditionally experienced considerable exposure: religiosity (the public form primarily) for blacks and mastery for whites.

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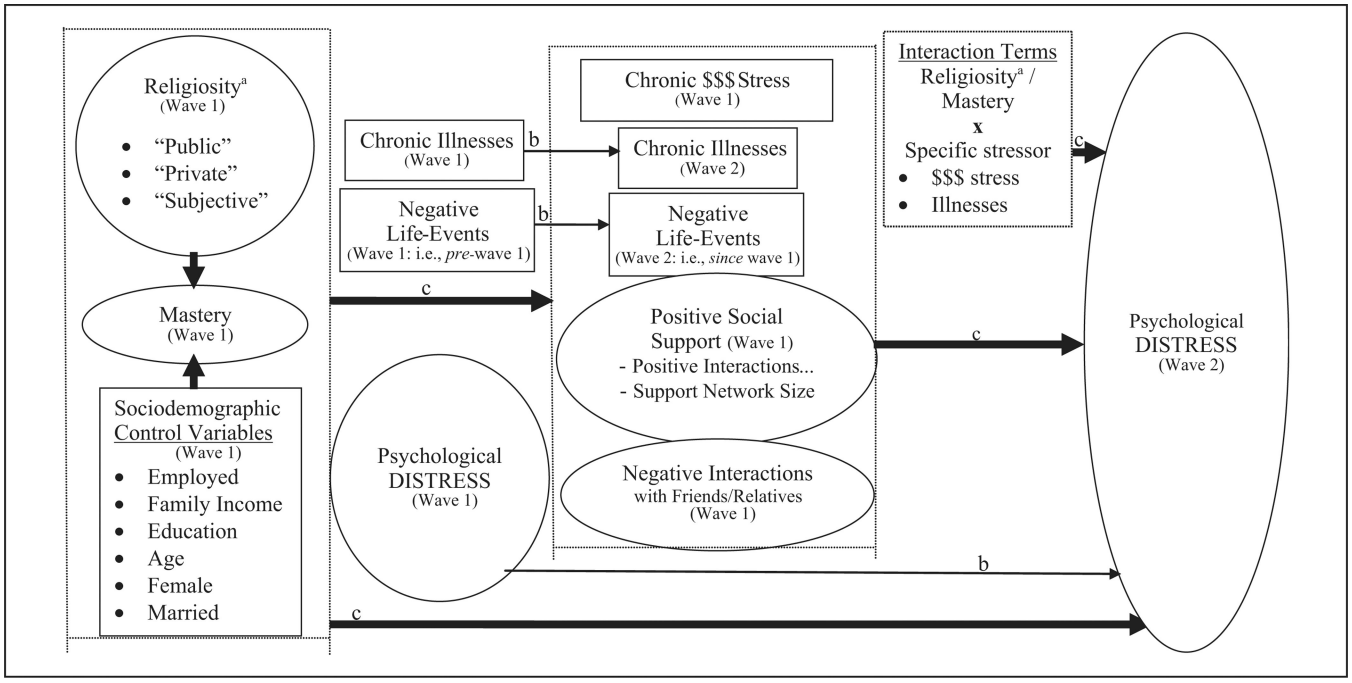

Figure 1.

Assessed relationship between religiosity dimensionsa and mastery, stressors, and other coping resources as well as psychological distress, across black and white American subsamples (Americans' Changing Lives waves 1 and 2: 1986 and 1989)

[a] Effects of individual religiosity dimensions are estimated in separate iterations (vs. simultaneously in a single model).

[b] Thinner arrows signify single causal paths that are estimated.

[c] Thicker arrows represent the multiple causal paths emitting from/to individual variables within the clusters enclosed in dotted squares (see Table 2).

Table 1

Completely Standardized LISREL Loadings[a] and Descriptive Statistics for Analyzed Variables: Blacks and Whites in Americans' Changing Lives Wave 1 (1986) and Wave 2 (1989)

	Factor Loading		Mean		Standard Deviation	
Variable	**Blacks**	**Whites**	**Blacks**	**Whites**	**Blacks**	**Whites**
Psychological distress (wave 2)						
Number of times in past week respondent …						
Felt depressed	0.784	0.752	1.509	1.402	0.640	0.559
Felt everything was an effort	0.491	0.490	1.685	1.499	0.749	0.652
Had restless sleep	0.534	0.431	1.635	1.667	0.690	0.701
Was happy	−0.507	−0.598	2.521	2.624	0.623	0.598
Felt lonely	0.670	0.606	1.553	1.357	0.668	0.573
Felt people were unfriendly	0.434	0.274	1.388	1.200	0.599	0.459
Enjoyed life	−0.442	−0.561	2.626	2.695	0.598	0.579
Did not feel like eating	0.470	0.396	1.421	1.284	0.635	0.547
Felt sad	0.690	0.749	1.533	1.379	0.641	0.573
Felt people disliked me	0.531	0.380	1.269	1.147	0.528	0.394
Could not get going	0.498	0.524	1.597	1.510	0.644	0.585
Psychological distress (wave 1)						
Number of times in past week respondent…						
Felt depressed	0.704	0.746	1.578	1.354	0.641	0.548
Felt everything was an effort	0.415	0.480	1.789	1.412	0.750	0.622
Had restless sleep	0.503	0.483	1.662	1.614	0.686	0.665
Was happy	−0.562	−0.652	2.548	2.593	0.615	0.633
Felt lonely	0.670	0.626	1.520	1.388	0.631	0.592
Felt people were unfriendly	0.494	0.339	1.356	1.173	0.567	0.426
Enjoyed life	−0.499	−0.576	2.649	2.683	0.585	0.583
Did not feel like eating	0.500	0.385	1.471	1.267	0.624	0.543
Felt sad	0.483	0.738	1.498	1.405	0.611	0.572
Felt people disliked me	0.524	0.444	1.293	1.143	0.540	0.390
Could not get going	0.499	0.483	1.597	1.444	0.640	0.580
Public religiosity (wave 1)						

Variable	Factor Loading		Mean		Standard Deviation	
	Blacks	Whites	Blacks	Whites	Blacks	Whites
Attendance at religious services	0.726	0.870	4.222	3.516	1.834	1.899
Volunteer for religious organizations	0.602	0.593	4.589	2.887	1.577	1.856
Private religiosity (wave 1)						
Reads religious material	0.748	0.810	3.760	3.292	0.543	0.873
Follows religious programs	0.658	0.784	3.914	3.315	1.240	1.486
Subjective religiosity (wave 1)						
Importance of religious beliefs	0.726	0.870	4.222	3.516	1.834	1.899
Seeks spiritual support and comfort	0.602	0.593	4.589	2.887	1.577	1.856
Personal mastery (wave 1)						
I can do just about anything I set my mind to	0.269	0.293	3.462	3.412	0.786	0.752
Sometimes I feel pushed around in life (reversed)	0.587	0.500	2.827	3.406	1.049	0.971
There is no way I can solve problems I have (reversed)	0.589	0.531	3.089	3.354	1.003	0.910
Financial stress (wave 1)	1.000	1.000	0.478	−0.129	1.092	0.978
Illnesses (wave 1)	1.000	1.000	1.579	1.254	1.413	1.334
Illnesses (wave 2)	1.000	1.000	1.608	1.312	1.463	1.357
Negative life events (wave 1)	1.000	1.000	0.865	0.882	0.847	0.859
Negative life events (wave 2)	1.000	1.000	0.957	0.813	0.872	0.807
Positive social support (wave 1)						
Positive interactions	0.764	0.932	0.056	0.047	0.981	0.966
Support network size	0.939	0.700	−0.047	−0.017	0.939	0.987
Positive interactions with friends and relatives (wave 1)						
How often friends/relatives make respondent feel loved/cared for	0.743	0.798	4.071	4.102	0.984	0.887
How often friends/relatives willing to listen regarding problems	0.777	0.753	3.781	3.819	1.121	1.060
Support network size (wave 1)						
Number of friends/relatives respondent can call on for advice or help	0.489	0.485	7.594	10.088	10.782	12.390
Number of friends/relatives respondent can share private feelings with	0.544	0.537	2.037	2.355	1.675	1.823
Negative interactions with friends and relatives (wave 1)						
How often friends/relatives make too many demands	0.642	0.620	1.719	1.635	1.039	0.910
How often friends/relatives are critical of respondent	0.632	0.663	1.852	1.713	1.095	0.900
Employed (wave 1)	1.000	1.000	0.517	0.539	0.500	0.499

	Factor Loading		Mean		Standard Deviation	
Variable	**Blacks**	**Whites**	**Blacks**	**Whites**	**Blacks**	**Whites**
Family income (wave 1)	1.000	1.000	3.367	5.056	2.413	2.575
Education (wave 1)	1.000	1.000	10.420	12.258	3.719	3.033
Age (wave 1)	1.000	1.000	52.383	53.728	16.809	17.201
Gender (female)	1.000	1.000	0.678	0.622	0.467	0.485
Married (vs. not) (wave 1)	1.000	1.000	0.420	0.721	0.494	0.449

[a] All factor loadings of latent variable indicators are statistically significant ($p < .001$).

Table 2

Selected Standardized Coefficients from Baseline Multipopulation LISREL Models Predicting Psychological Distress among Blacks and Whites in Americans' Changing Lives Wave 1 (1986) and Wave 2 (1989)[a,b,c]

Predictors (All Gauged at Wave 1 Unless Otherwise Denoted)		Mastery (Wave 1)	Financial Stress (Wave 1)	Illnesses (Wave 2)	Life Events (Wave 2)	Positive Social Support (Wave 1)	Negative Interactions (Wave 1)	Distress (Wave 2)		
								Direct Effect	Indirect Effect	Total Effect
Public religiositya	Blacks	.078**	−.006	.001	−.031	.290****	.023	−.158****	−.022**	−.180****
	Whites	.009	.005	.000	−.063***	.222****	−.046**	−.027	−.011	−.038*
Private religiositya	Blacks	−.044	.013	−.001	−.034	.271****	.019	−.045	−.016	−.061****
	Whites	.008	.049**	−.003	−.034	.172****	−.043**	.005	−.001	−.004
Subjective religiositya	Blacks	−.005	.017	.011	−.005	.146****	.003	−.037	−.013	−.050****
	Whites	−.036	.046**	.006	−.008	.259****	−.068***	.007	.010	.017
Mastery	Blacks	—	−.283****	−.037	−.095***	.158****	−.296****	−.078**	−.039****	−.117****
	Whites	—	−.225****	−.037**	−.059***	.376****	−.384****	−.207****	−.029	−.236****
Distress	Blacks	—	—	—	—	—	—	.385****	—	.385****
	Whites	—	—	—	—	—	—	.390****	—	.390****
Financial stress	Blacks	—	—	—	—	—	—	.024	—	.024
	Whites	—	—	—	—	—	—	.039*	—	.039*
Illnesses (wave 2)	Blacks	—	—	—	—	—	—	.155****	—	.155****
	Whites	—	—	—	—	—	—	.152****	—	.152****
Illnesses	Blacks	—	—	.557****	—	—	—	—	.087****	.087****
	Whites	—	—	.620****	—	—	—	—	.094****	.094****
Life events (wave 2)	Blacks	—	—	—	—	—	—	.101****	—	.101****
	Whites	—	—	—	—	—	—	.056***	—	.056***
Life events	Blacks	—	—	—	.177****	—	—	—	.019****	.019****
	Whites	—	—	—	.206****	—	—	—	.011***	.011***
Positive social support	Blacks	—	—	—	—	—	—	−.035	—	−.035
	Whites	—	—	—	—	—	—	−.027	—	−.027

Predictors (All Gauged at Wave 1 Unless Otherwise Denoted)		Mastery (Wave 1)	Financial Stress (Wave 1)	Illnesses (Wave 2)	Life Events (Wave 2)	Positive Social Support (Wave 1)	Negative Interactions (Wave 1)	Distress (Wave 2)		
								Direct Effect	Indirect Effect	Total Effect
Negative interactions	Blacks	—	—	—	—	—	—	.040	—	.040
	Whites	—	—	—	—	—	—	.003	—	.003
Employed	Blacks	.056	−.026	−.003	.058	−.028	−.034	−.041	−.002	−.043**
	Whites	.014	.056**	−.035*	.058**	.022	.003	−.045*	−.004	−.049*
Family income	Blacks	.061****	−.365****	−.072**	.047	.069	.101**	−.123***	−.020**	−.143****
	Whites	.166****	−.416****	−.006	−.051*	−.027	.027	−.028	−.058****	−.086***
Education	Blacks	.222****	−.018	−.049	−.008	.009	.100**	−.017	−.031****	−.048**
	Whites	.067**	.007	−.020	−.002	.052***	−.044**	−.020	−.020***	−.040*
Age	Blacks	.226****	−.169****	.160****	−.085**	.076*	−.267****	−.101**	−.027***	−.128****
	Whites	.150****	−.361****	.156****	.061*	−.087****	−.221****	−.041	−.021	−.062**
Female	Blacks	−.096***	−.010	.038	.023	.022	−.057*	.053	.018****	.071****
	Whites	−.038	.006	.029*	.068***	.125****	.008	−.006	.014**	.008
Married	Blacks	.107***	.011	.050*	−.041	.015	−.090***	.054	−.013***	.041**
	Whites	.028	−.007	.010	.150****	−.018	−.017	−.015	−.003	−.012

Note: n = 874 blacks, n = 1,906 whites. Goodness of Fit Index for iteration featuring public/private/subjective religiosity = .905/.904/.904.

[a] Due to multicollinearity, coefficients for religiosity indicators are obtained from separate iterations of the model (with the public, private, and subjective constructs alternately inserted). Effects of the remaining predictors are from the model featuring public religiosity. They do not differ substantially from their counterparts in the versions featuring either private or subjective religiosity.

[b] Effects of religiosity dimensions and mastery that differ significantly across races are shaded in dark gray. Light gray shadings signal borderline-significant (i.e., $p < .10$) differences between effects of these same constructs across races. Effects of other predictors on specific outcomes may differ significantly across races, but those significance tests were not performed.

[c] The model's design allows for nonzero indirect effects of predictor variables on financial stress, illnesses, life events, positive social support, and negative interactions. These indirect coefficients are not of substantial theoretical interest given our focus on distress.

* $p < .10$ (borderline significant).

** $p < .05$.

*** $p < .01$.

**** $p < .001$.