Race, Socioeconomic Status and Depressive Symptoms: The Role of Goal-Striving Stress

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Educational, occupational and financial success has been highly prized in American society since its founding, but unequal access to the means necessary to attain these goals has persisted despite decades of legal and political attempts to eradicate discrimination based on ascribed characteristics, including prominently race. African Americans attain fewer years of education than non-Hispanic whites (hereafter whites), on average, which translates into occupations that have less prestige and lower earnings. In addition, educational and occupational attainments often do not yield the same returns in income for African Americans as whites, discrepancies that can be attributed at least in part to discriminatory wage practices.

Race differences in socioeconomic status (SES) are consequential because low SES is associated with many forms of psychiatric disorder, including a well-documented inverse association with depressive symptoms and major depressive disorder. The influence of SES on depressive disorders is mediated to a large extent by exposure to stressors. Beyond the universal stressors that arise throughout society (e.g., death of a loved one), being the target of discriminatory acts increases the stress burden of African Americans (Thoits 2010). Furthermore, discriminatory acts, such as unfair hiring practices, can directly impede the status attainment process.

Low SES coupled with high exposure to stress should translate into relatively high levels of depressive symptom among African Americans, on average, but rates of most mental disorders among African Americans are comparable to or lower than rates among whites; the association between SES and depressive outcomes appears to be stronger for non-Hispanic whites than most other racial/ethnic groups. However, the reasons why SES may function differently for mental health by race remain opaque.

Previous research with African American samples suggests that SES may condition the impact of goal-striving stress—discrepancies between aspirations and achievements. For example, Sellers and Neighbors (2008) suggest that low income blacks may attribute these discrepancies to “the system” (e.g., discrimination, racism, the economy), while high income blacks may blame themselves. However, Neighbors and colleagues (2011) find stronger goal-striving stress effects among whites than blacks. Also, the measures used in these studies appear to capture achievement more so than discrepancies between aspirations and achievement, potentially generating misleading conclusions.

Our approach applies the stress process model (Pearlin et al., 1981), which seeks to explain how people’s mental health is affected by their location in society as manifest by their social status, participation in social institutions, and interpersonal relationships. Indicators of social placement, such as race and SES, are seen as being linked to mental health outcomes through differential exposure to stressors and differential access to coping resources.

This study focuses on stressors and coping resources that are linked to the status attainment process. Goal-striving stress arises from a mismatch between desired and actual social status, especially when the desired state seems out of reach (Dressler 1988). This form of stress is of particular relevance to the status attainment experiences of African Americans, who may encounter a disproportionate
number of structural barriers to accessing the opportunity structures that enable one to be successful. For this reason, we examine goal-striving stress in conjunction with experiences of discrimination related to education or work. Coping resources may mediate and/or moderate the mental health effects of exposure to stressors. In line with our emphasis, status attainment, we examine John Henryism, a coping strategy named after a figure in American folklore who worked himself to death to outperform a steam engine. It refers to expending high levels of individual effort in the pursuit of excellence, that is, a strong, self-reliant work ethic. It is conceptually similar to the construct of achievement motivation used in status attainment research—the drive to accomplish a task on one’s own, to do it well and to one’s own satisfaction. We also examine mastery, sometimes referred to as personal control, which refers to the belief that your life-chances are under your own control instead of being determined by fate, chance, or powerful others.

The “diminishing returns law” from economics has been adapted to argue that increased striving for success at some point produces few additional mental health benefits relative to the additional effort required to achieve that success. Indeed, negative effects may ensue if one’s efforts do not achieve the desired material, monetary, or social goals. Although this phenomenon may occur in general, it may be particularly germane when discriminatory practices block the attainment of sought-after goals, or when upward social mobility severs valued social relationships that are not easily replaced. In combination, goal-striving stress, discrimination, John Henryism and mastery, and their interactions, may help explain racial differences in the relationship between SES and depressive outcomes.

METHODS

This Stress and Health Study was conducted in a medium sized county (population = 650,000) containing a medium sized city within the middle South. This site provided the strategic advantage of having a wide range of education and income levels among both Whites and African Americans while holding contextual factors constant, such as racial composition (65.8% White, 28.1% African American, and 6.1% “other”) and region of the country. Although generalization is limited compared to a national sample, national estimates of race differences in risk factors and mental health outcomes may be misleading if there is regional variation that depends, for example, on racial composition and histories of race relations.

The study used a probability sample of persons aged 25 to 65 with equal quotas for African Americans and Whites and males and females. Of 2,099 known eligible persons, 1,252 (59.2%) were interviewed: 297 African American males, 330 African American females, 292 White males, and 333 White females. When weighted, the sample is representative of the African American and White population aged 25-65 living in this county.

The dependent variable is operationalized with the Center for Epidemiological Studies-Depression Scale (CES-D), a 20-item instrument that asks about symptoms (e.g., you felt depressed), experiences in the past month (past week in the original) scored from 0 = “not at all” to 3 = “almost all of the time”. The primary independent variable is goal-striving stress, a 3-category typology of the discrepancy between one’s current standing and future goal on a ladder with nine steps representing the worst to best possible way of life, combined with the likelihood of reaching the desired step: (1) 0-2 steps, somewhat likely or likely to reach goal, (2) 3 or more steps somewhat likely or likely, and (3) somewhat unlikely to reach goal. Lifetime SES Discrimination counts discrete unfair treatment pertaining to occupation and education (e.g. “been unfairly fired or denied a promotion”, “been unfairly discouraged by a teacher or advisor from pursuing a job/career”), scored 0 to 2+ events. John Henryism is a 12-item (e.g., “hard work has really helped me get ahead in life”) scale averaged across response codes of 1= “completely false,” to 5= “completely true” (α = .781). Mastery is a 7-item (e.g., “you have little control over the things that happen to you”) scale averaged across response codes of 1= “strongly
agree” to 5 “strongly disagree.” For SES, education is in years; annual income is in thousands of dollars, and occupational status is scored from 0 to 100 (Nam and Boyd 2004). A composite SES index was created by standardizing these three components, averaging across components with valid scores, and then standardizing the composite average. Thus, each component is weighted equally and the composite has a mean of 0 and standard deviation (SD) of 1.00.

Analysis was conducted using the survey procedures in Stata to account for the complex sample design. Negative binomial regression was used to accommodate the distribution of the dependent variable.

RESULTS

In preliminary analysis (not shown), the regression of depressive symptoms on race, gender, and their interaction reveals that depressive symptoms scores do not differ significantly between non-Hispanic Whites and African Americans, but net of race, females have significantly (p < .05) higher levels of symptoms than men; the magnitude of the gender difference is not conditional upon race. Adding controls for age, and martial and employment status does not alter these patterns (not shown).

Model 1 is a base model containing the main effects of SES, race, and other sociodemographic controls. There is a significant inverse association between SES and depressive symptoms. In addition, symptoms decline with age and are higher among previously married than married persons and among part-time workers and unemployed persons than full-time workers.

Model 2 adds a product interaction term between SES, which is positive and significant, meaning that the SES-symptom relationship is significantly smaller among African Americans than whites. Net of other variables in the model, SES has a strong inverse association with depressive symptoms among non-Hispanic whites, but depressive symptoms do not vary by SES among African Americans.

With the addition of the 3-category measure of goal-striving stress in Model 3, the interaction between SES and race becomes non-significant, which means that the slopes for the two groups do not significantly differ from one another. The coefficient for the lower-order term of SES gives this relationship for Whites: it is statistically significant although reduced in magnitude by 37.4% from the previous model. In other words, this type of stress accounts for about a third of the association between SES and depressive symptoms for Whites. The SES-symptom association is not statistically significant for African Americans even though the interaction term is not significant. Both categories of high goal-striving stress are significantly different from the low category. That is, persons with a large discrepancy between their aspirations and achievements and persons who think it is unlikely that they will achieve their goals are more depressed, on average, than persons with smaller discrepancies who believe they will achieve their goals.

Model 4 add the interaction between goal-striving stress and race, which is statistically significant. For whites, both high stress categories have higher average levels of depressive symptoms than the low stress category, other things being equal, and the two high stress categories do not differ significantly from each other. For African Americans, in contrast, only those who have a large discrepancy differ from the low stress group; the group that is unlikely to achieve their goals does not differ from the other two groups.

ADDITIONAL ANALYSES

We plan to conduct the following analyses:

1. Test whether discrimination alters the impact of goal-striving stress and whether this occurs for both African Americans and Whites.
2. Test whether the two coping resources, John Henryism and mastery, mediate and/or moderate the depressive effects of goal-striving stress and discrimination and whether these coping resources function differently for African Americans and Whites.

3. Take into consideration a broader array of stressors to identify the unique contributions of goal-striving stress and discrimination.

4. Test functional forms for relationships that better operationalize the process of declining returns.

**CONTRIBUTIONS OF THE STUDY**

The question of why African Americans have low levels of depressive symptoms relative to their average levels of SES and exposure to discrimination does not yet have a satisfactory answer. It is important to better understand the interaction between SES and race because research in this area routinely controls for SES to estimate race effects, but these controls do not address the presence of an SES effect for Whites only. Previous research on goal-striving stress has used an operationalization of the construct that we argue is faulty and may have produced some erroneous conclusions because the measure has a stronger component of achievement than discrepancy between aspirations and achievements.

The focus on low SES and high exposure to discrimination is a deficit model that ignores the relatively good mental health of African Americans and overlooks coping resources that may account for resiliency in the face of these challenges. Although the concept of John Henryism has been linked conceptually to the idea of declining returns, the concept aligns well with the concept of achievement motivation, which does not carry the implicit idea that high achievement may be detrimental to the health and well-being of African Americans.

**REFERENCES**


