Socioeconomic Status and Mental Health: What Difference Does "Feeling Poor" Make?

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Background

An association between socioeconomic status and both physical and mental health outcomes has been documented in a variety of contexts and throughout the life course (e.g. Case, Lubotsky, and Paxson 2002; Marmot et al. 1997; Adler et al. 1994; Goodman 1999). This association remains even after accounting for factors such as access to health care and health behaviors. In addition, the extensive body of literature on the association between socioeconomic status and health lacks consensus about whether this association is patterned according to absolute deprivation ("threshold effects") or status differences ("gradients"). A recently-available dataset includes a new measure that may help to more closely examine the patterning of the association between socioeconomic status and health: perceived relative economic position (PREP), which reflects "feeling poor" or "feeling rich" compared to peers or other social groups. While traditional socioeconomic status measures (e.g. income) are sometimes used to rank individuals by economic status (e.g. income quintiles), PREP measures may provide a clearer picture of the effects of socioeconomic status on health by better capturing how socioeconomic status differences are actually *felt* by individuals. In addition, these measures may be particularly important given the role that social and neighborhood context play in the production of physical and mental health (e.g. Cagney, Browning, and Wallace 2007). The value of exploring the relationship between "feeling poor" and mental health outcomes is threefold. First, little is known about the relationship between PREP and mental health outcomes, a relationship that may be stronger and differently patterned than that between PREP and physical health outcomes, which has already been established (e.g. Pham-Kanter 2009; Demakakos, Nazroo, Breeze, and Marmot 2008). Second, this measure allows for a closer examination of the patterning of socioeconomic status differences by specific measure and health. Finally, psychological and psychosocial factors such as stress (e.g. Baum, Garofalo, and Yali 2006; Sapolsky 2005) are often incorporated in explanations of residual socioeconomic health effects. Understanding the role that perceived relative economic position plays in mental health may further understanding on how socioeconomic status "gets underneath the skin" and affects physical health.

Research Question

This research examines how "feeling poor" or "feeling rich" is associated with mental health net of traditional measures of socioeconomic status. "Feeling poor", etc. are measured using perceived relative economic position (PREP) relative to respondent-defined peer groups as well as relative to American families in general. In addition, variation in the association between PREP and mental health by gender, race, and age is examined. I expect that PREP will be related to several mental health outcomes consistent with the general gradient pattern (rather than threshold pattern) that is sometimes observed between traditional socioeconomic measures and health outcomes. In addition, I expect that PREP relative to peers will be more strongly related to mental health compared to PREP relative to American families, as economic position in relation to peers may be more acutely internalized, or "felt more strongly" because this measure more accurately reflects the salient social context of respondents.

Data and Methods

Analyses use data from the National Social Life, Health, and Aging Project (NSHAP). The NSHAP is a nationally representative study of non-institutionalized older adults, collected from summer 2005 to spring 2006. The NSHAP data contains information on the demographic characteristics; romantic, sexual, and social relationships; and physical and mental health of 3,005 Americans aged 57 to 85. Most data were collected in an in-home interview. Data were also collected via a written questionnaire that respondents completed and mailed back to researchers. NSHAP oversampled by race/ethnicity, age, and gender. The final response rate was 75%.

Outcome variables include measures of self-rated mental health, depression (CES-D 11-item scale), happiness, self-esteem, loneliness (UCLA 3-item scale), anxiety, and stress. Models included three traditional measures of socioeconomic status: income (quintiles), assets (quintiles), and education (<high school, high school or equivalent, some college or associate's degree, college or more). The survey does not contain information on current or past occupational status. Respondents were asked two questions to ascertain their perceived relative economic status (PREP). "Compared with <u>most of the people you know personally</u>, like your friends, family, neighbors, and work associates, would you say that your household income is far below average, below average, average, above average, or far above average?" was used to ascertain perceived relative peer economic position. "Compared with <u>American families in general</u>, would you say that your household income is far below average, below average, average, above average, or far above average?" was used to ascertain perceived relative national economic position.

Outcome variables are modeled appropriately according to outcome measure and response distribution. Logit models are employed for self-rated mental health and happiness. Ordinary least-squares regression models are used for depressive symptoms, loneliness, stress, and anxiety scales, which each contain many values. Multiple imputation (10 iterations) was used to impute missing values for income and assets. Pessimistic personality characteristics may downwardly bias self-reports of perceived relative economic position net of other factors. Analyses address this by including a measure of self-esteem. While NSHAP did not collect information of personality, self-esteem is correlated with the Big Five personality characteristics of emotional stability, extraversion, and conscientiousness (Robins et al. 2001). Preliminary analyses also reveal that self-esteem is not related to SES in this sample. Controls for age, age-squared, race/ethnicity, marital status, and self-rated physical health are also included. Interactions are included to test for differences in socioeconomic status variables by gender and age group. Future models will include a measure of receipt of social support.

Results and Discussion

Overall, results indicate that PREP measures have associations with mental health outcomes (stress, self-rated mental health, depressive symptoms, anxiety, loneliness, and happiness) independent of education, income, and assets. Associations between PREP and mental health outcomes were generally larger for PREP relative to peers compared to PREP relative to American families, consistent with expectations. While the inclusion of PREP measures usually does not "explain away" the association of traditional socioeconomic status measures with mental health outcomes, these findings suggest that PREP is an independently important factor in mental health. The association between PREP measures and mental outcomes follows a pattern consistent with a gradient for stress, self-rated mental health, and loneliness. Graduated relationships between traditional socioeconomic status measures and mental health are generally not observed. These results suggest that the patterning of the association between socioeconomic status and health varies by the socioeconomic status measure used. In addition, the relationship between SES and PREP and mental health outcomes did not generally vary by age group, gender, or race/ethnicity. These results

are limited by the possibility of reverse causality, as both SES/PREP measures and mental health outcomes are measured at the time of the survey and there remains the possibility that negative affect has not been eliminated as a plausible explanation for the results. However, this finding that "feeling poor" does have an independent and negative effect on mental health net of traditional socioeconomic measures has important implications. For example, from a mental health perspective, mixed income neighborhoods may be detrimental to the extent that they remind poorer residents of what they do not have. More immediately, these results call for further examination of the patterning of socioeconomic status and health.

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