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Relationship of Subjective and Objective Social Status With Psychological and Physiological Functioning: Preliminary Data in Healthy White Women

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This preliminary study compared the associations between objective and subjective socioeconomic status (SES) with psychological and physical variables among 157 healthy White women, 59 of whom subsequently participated in a laboratory stress study. Compared with objective indicators, subjective social status was more consistently and strongly related to psychological functioning and health-related factors (self-rated health, heart rate, sleep latency, body fat distribution, and cortisol habituation to repeated stress). Most associations remained significant even after controlling for objective social status and negative affectivity. Results suggest that, in this sample with a moderately restricted range on SES and health, psychological perceptions of social status may be contributing to the SES–health gradient.

Key words: social class, social hierarchy, waist-to-hip ratio, cortisol, health

Socioeconomic status (SES) is linked to risk of disease and premature death (Adler, Marmot, McEwen, & Stewart, 1999). Although some of the association may be due to health effects on SES, evidence is stronger for SES effects on health (Fox, Goldblatt, & Jones, 1985; Haan, Kaplan, & Syme, 1989). The pathways by which SES influences health are not well established, however. Based on research showing health effects of income inequality, independent of median income, Wilkinson (1999) argued that it is not absolute levels of SES that are important for health but rather inequality resulting from relative standing. If so, a person's subjective social status should be more strongly linked to health than traditional measures of SES. The current study presents a new measure of subjective social standing and provides suggestive evidence that higher subjective social status may foster better health.

Despite substantial research on SES and health, there is limited work on the correlates of subjective social standing. Most research on subjective status was conducted from the 1940s through the 1970s and examined determinants of class identification and associations of class identification with political attitudes and behaviors (Cantril, 1943; Centers, 1949; Jackman & Jackman, 1973; Kluegel, Singleton, & Starnes, 1977). Subjective status typically has been assessed by asking respondents to indicate the social class to which they belong (e.g., upper, middle, working). Two more recent studies examined the relationship of subjective class identification with objective class location and socioeconomic factors (Baxter, 1994; Ekehammar, Sidanius, & Nilsson, 1987). We now report on associations of subjective social status with psychological and physiological factors associated in prior research with objective SES and health.

A risk factor for a number of diseases is body fat, both overall body fat as reflected by body mass index (BMI) and abdominal fat distribution as reflected by the waist-to-hip ratio (WHR). High WHR may be a stronger predictor of mortality than BMI among women (Folsom et al., 1993). Although both are associated with SES (Sobal & Stunkard, 1989; Rosmond, Lapidus, & Bjorntorp, 1996), some research has found associations for WHR but not BMI (Larsson et al., 1989). Higher WHR has been found among those with less education (Kaye, Folsom, Prineas, Potter, & Gapstur, 1990; Kay, Folsom, Jacobs, Hughes, & Flack, 1993; Seidell, 1991; Georges, Mueller, & Wear, 1993) and among those of lower occupational status (Brunner et al., 1997; Rosmond et al., 1996).

SES may affect fat distribution partly through behaviors that covary with SES such as high-fat diet, alcohol consumption, and physical inactivity. However, studies that controlled for smoking and alcohol use found an independent relationship of SES with WHR (Georges et al., 1993; Rosmond et al., 1996). SES effects on fat distribution may also occur through differential exposure to stress. Abdominal fat has relatively greater sensitivity to cortisol than peripheral fat, so individuals with greater exposure to events that evoke a stress response may accumulate greater abdominal fat (McEwen, 1998; Rebuffe-Scrive, Walsh, McEwen, & Rodin, 1992). Animal research shows that subordinate animals have higher levels of cortisol and more central fat than dominant animals (Sapolsky, 1982; Shively & Clarkson, 1988). The current study examines the association of objective and subjective SES with WHR and with cortisol habituation to stress, which may

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reflect longer term levels of cortisol exposure (McEwen, 1998; Kirschbaum et al., 1995). Cortisol habituation to repeated stress may be a more valid indicator of cumulative exposure to elevated cortisol than baseline levels or responses to a single stressor.

Sympathetic activity at rest is another potential risk factor for disease that may be affected by SES. High resting heart rate is a risk factor for all-cause mortality (Greenland et al., 1999; Reunanen et al., 2000). High resting blood pressure is also a consistent predictor of heart disease and is related, although not consistently, to lower SES (Pickering, 1999).

Sleep may be another pathway by which SES influences health (Van Cauter & Spiegel, 1999). Insufficient sleep, poor sleep quality, and higher prevalence of sleep disorders are linked to poorer health and impaired immune function (Dement, 1993; Hall et al., 1998; Segovia, Bartlett, & Edwards, 1989). In a community sample, better sleep quality was associated with better psychological and self-reported physical health, and better sleep quality partially mediated the association of higher income with health (Moore, Adler, Williams, & Jackson, 2000).

Psychological variables related to perceptions of stress and adversity may also mediate the impact of SES on health (Taylor & Seeman, 1999). Stress, pessimism, and sense of control have been linked to both SES and worse health outcomes (Adler et al., 1999; Cohen, Kaplan, & Salonen, 1999; Taylor & Seeman, 1999). Passive coping has been linked to worse health (e.g., Billings, Folkman, Acree, & Moskowitz, 2000; Essex & Klein, 1989; Lehrer, 1998) but has not yet been linked to SES. In research reported here, we assess exposure to and evaluation of stress, active versus passive coping, pessimism, and sense of control.

The current study presents data on a new measure of subjective SES. The measure is a self-anchoring scale (Kilpatrick & Cantril, 1960) that uses a simple drawing of a ladder on which individuals place themselves. It is anchored at the top by those in U.S. society who are best off in terms of income, education, and occupation and at the bottom by those who are worst off. We present data on the association of ladder rankings with self-rated health and with psychological and physiological functioning in a sample of healthy adult White women.

Method

Study Participants

Participants were 157 regularly menstruating White women aged 30 to 46 years who were participating in a larger study of stress, body fat distribution, and physiological reactivity to stress; of these, 59 participated in a laboratory study examining habituation to stress (see Epel et al., 2000). One woman failed to provide SES data and was dropped from all analyses.

Exclusion criteria included factors that could influence fat distribution or cortisol reactivity: current smoking or having smoked 10 or more cigarettes a day within the last 2 years, more than 7 drinks of alcohol a week, history of endocrine or metabolic disorders, hypertension, use of medications including oral contraceptives, more than three pregnancies lasting more than 12 weeks, weight changes of greater than 5% of body weight in the last 3 months, exercising more than 2 hours a day, current depression, hospitalizations for psychiatric problems, and alcohol or drug dependencies. Women with less than a high school education were excluded, because one task in the larger study was a memory task, which could be affected by very low education. Exclusion criteria were assessed by self-report in a telephone interview and were rechecked at the initial visit.

Participants were recruited by advertisements requesting healthy nonsmoking women between the ages of 30 and 45 years. Women meeting screening requirements came to the laboratory, completed psychosocial and health surveys, and had anthropomorphic measurements taken by a trained research assistant (height, weight, waist and hip circumference, and percentage of body fat). Fifty-nine women who had either a low or a high WHR were included in a three-session laboratory stress study (for details, see Epel et al., 2000). Sessions took place over 3 consecutive days in the late afternoon. Those occurred about 1 month after the first visit, during the follicular stage of women's menstrual cycle. Participants performed difficult tasks and delivered a speech during each session while repeated saliva samples were taken.

Measures

Social Status

Subjective SES scale. Participants were given a drawing of a ladder with 10 rungs that was described as follows: "Think of this ladder as representing where people stand in our society. At the top of the ladder are the people who are the best off, those who have the most money, most education, and best jobs. At the bottom are the people who are the worst off, those who have the least money, least education, and worst jobs or no job." They were then asked to place an *X* on the rung that best represents where they think they stand on the ladder.

Objective SES. Education was measured by highest degree earned and was coded into four categories: (a) high school degree, (b) college degree, (c) master's degree, and (d) higher degree (including doctorate and law degree). Household income was coded into four categories: (a) $10,000 or less, (b) $10,001–$30,000, (c) $30,001–$50,000, and (d) $50,001 or more. Occupation was coded into three categories: (a) blue collar or service, (b) clerical/self-employed, and (c) professional or managerial. Distributions of these variables are shown in Table 1. A composite measure of education, income, and occupation was created by standardizing each variable and taking their mean. This composite parallels the ladder measure in that it assesses the three traditional components of SES (education, income, occupation). Women who were not engaged in paid employment, including those who identified themselves as students (n = 21, 13%), homemakers (n = 14, 9%), or unemployed (n = 6, 4%), were not given a value for

Table 1
Sociodemographic Data of Sample

Variable	*M* (*SD*)	% (*n*)
Age (years) (n = 156)	37.4 (4.8)	
30–35		41 (64)
36–40		29 (44)
41–46		30 (48)
Education level (degree earned; n = 149)	15.7[a] (1.7)	
High school		32.2 (48)
College		31.5 (47)
Master's level		28.9 (43)
Higher		7.4 (11)
Income (household; n = 150)	$44,345 ($28,236)	
≤$10,000		8.0 (12)
$11,000–$30,000		26.7 (40)
$31,000–$50,000		33.3 (50)
$51,000–$120,000		32.0 (48)
Occupational status (n = 148)	2.2 (0.9)	
Blue collar/service		18.9 (28)
Clerical		16.9 (25)
Managerial/professional		36.5 (54)
Other (e.g., student, homemaker)		27.7 (41)

[a] Number refers to years of education.

occupation. Therefore, their objective SES score was based solely on household income and education.

Health-Related Variables

Self-rated health. This was assessed by the general health subscale of the SF-36 (Ware & Sherbourne, 1992). This five-item subscale assesses global perceptions of one's current health and how one's health compares with that of others. High scores reflect better health. Raw scale scores were standardized to a 100-point scale (Medical Outcomes Trust, 1994). Self-assessments of health have been shown to predict subsequent mortality, even when controlling for health as assessed by physical exam (Idler & Angel, 1990; Idler & Benyamini 1997; Mossey & Shapiro, 1982).

BMI. Body weight was assessed on a balance beam scale, with participants wearing T-shirts and briefs. Body height was measured to the nearest 0.25 inch. BMI was calculated as weight (kilograms) divided by height (meters squared).

Body fat distribution. Waist circumference was measured twice at the midpoint between the upper iliac crest and lower costal margin in the midaxillary line. Hip circumferences were measured twice at the maximum width of the buttocks or gluteofemoral fold (Calloway, Chumba, & Bouchard, 1988). WHR was calculated as the mean waist circumference divided by the mean hip circumference. Percentage of body fat was assessed with the Futrex-5000 body fat computer (Futrex, Gaithersburg, MD). Analyses of WHR controlled for percentage of body fat as well as for BMI. Controlling for both BMI and percentage of body fat creates a more stringent measure of fat distribution, independent of overall body size and fatness.

Sleep. This was assessed using the sleep quality and sleep-onset latency subscales from the Pittsburgh Sleep Quality Index (Buysse, Reynolds, Monk, Berman, & Kupfer, 1989). High scores on both sleep subscales indicate poor sleep. This questionnaire compares favorably with clinical and laboratory diagnoses of "good" and "poor" sleepers, the latter based on studies of depressed or sleep-disordered patients (Buysse et al., 1989).

Resting physiological response. The subsample of 59 women in the laboratory study initially rested seated for 30 min, beginning at either 4:30 or 5:00 p.m. Blood pressure and heart rate were assessed at the end of the resting period, after 30 min. We used an SD-700A (IBS, Waltham, MA) electronic blood pressure and pulse monitor, applying the cuff to the participant's dominant arm.

Cortisol adaptation to challenge. This was also measured in the participants from the laboratory study. Salivary cortisol is a noninvasive, reliable method of measuring levels of cortisol, which strongly reflects levels of serum cortisol (Kirschbaum & Hellhammer, 1989). Eight saliva samples were collected each session, frozen after collection, and later assayed with a radioimmunoassay, using a commercial kit (Diagnostic Products Corporation, Los Angeles, CA). Intra-assay coefficients of variation were 4.8% for low concentrations and 5.1% for high concentrations of salivary cortisol. The interassay coefficient of variation was 4%. Cortisol responses to the stress task on the first day of the challenge were compared with those on the 2 subsequent days of challenge. Each individual's cortisol responses during the three sessions were plotted onto one graph. Participants showed one of three patterns:

1. Those showing "habituation" had higher cortisol on Stress Day 1 than Stress Day 2 or 3. This is taken to indicate healthy adaptation to novel stress.

2. Those showing "nonhabituation" had levels of cortisol on Day 2 or 3 equal to or higher than that on Day 1. This high reactivity without habituation is taken to be unhealthy, indicating overexposure of cortisol.

3. "Low reactors" showed little response on any day with cortisol staying at about 0.10 μg/dl throughout the sessions. Low cortisol could reflect low levels of stress, dysregulation, or lack of engagement with the task.

Reliability of ratings categorizing participants into these three groups was good (90% agreement). Another analysis on this sample found that nonhabituators showed the least psychological growth after experiencing a stressful event (Epel, McEwen, & Ickovics, 1998).

Psychological Variables

All of the psychological measures have established reliability and validity and were internally consistent in this sample (Cronbach's α = .70–.93).

Negative affectivity was measured using the Negative Affect subscale of the Positive and Negative Affectivity Scale (Watson, Clark, & Tellegen, 1988). Participants rated how much they generally tend to feel negative emotions.

Pessimism was assessed by the Life Orientation Test (Scheier & Carver, 1985), which measures relatively stable appraisals of expectancies for positive and negative outcomes. Four items that assessed negative expectations were used to obtain a measure of pessimism; negative expectations have shown consistently stronger associations with SES than have positive expectations (Taylor & Seeman, 1999).

A one-item question assessing perceived control over life was taken from MacArthur Midlife Survey (Lachman & Weaver, 1998). Participants were asked, "Using a 0 to 10 scale, where 0 means *no control at all* and 10 means *very much control*, how would you rate the amount of control you have over your life overall these days?"

Coping style was measured by combining two instruments. In addition to the COPE (Carver, Weintraub, & Scheier, 1989), which assesses relatively stable ways of responding to stress, 10 items assessing active coping through "emotional approach" (processing and expressing one's feelings) were used (Stanton, Danoff-Burg, Cameron, & Ellis, 1994).These yielded measures of active coping, which included both problem-focused and emotion-focused strategies, and passive coping, which included disengagement strategies such as denial, giving up, and distraction.

Subjective stress was measured using the Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983), which assesses the frequency of both stressful situations and feelings of stress over the last month. Chronic stress was measured using the Social Stress Index (Wheaton, 1994). Participants indicated how much they experienced each of 51 ongoing difficult situations or events.

Statistical Analyses

To examine relations among SES, physiological, and psychological factors, we performed bivariate correlations between subjective and objective SES and these measures. WHR was analyzed using partial correlations, controlling for BMI and percentage of body fat. Given previous findings that high WHR is most clearly related to income at the lowest levels of BMI (Larsson et al., 1989), we also examined relations between WHR and SES at varying levels of BMI by stratifying the sample into tertiles: low BMI ($\leq$22.6), medium BMI (22.7–26.2), and high BMI ($\geq$26.2).

Hierarchical regressions examined the effect of subjective SES, independent of both objective SES and, for self-report measures, possible reporting bias as a result of greater negative affectivity. Individuals who are higher on negative affectivity may place themselves lower on the ladder. Because it is just as likely that feelings of relative standing influence negative affect (e.g., Sennett & Cobb, 1972), this may, in fact, overcontrol for negative affect. In cross-sectional data, we cannot tease apart these two possibilities. Step 1 of the regressions included the objective SES composite, Step 2 included negative affectivity, and Step 3 included subjective SES. For physiological data, in which negative affect is not an issue, only objective SES was controlled for. Initial beta weights from when each variable is first entered into the model are reported as is the change in R^2 after the last step when we entered subjective SES.

Participants with missing data on a variable were excluded from the analysis of that specific variable. The SES composite took an average of the available SES indices, so that those with missing data had a standardized SES score reflecting the available SES markers. Three participants had missing data on the ladder and were excluded from analyses of the ladder.

Results

The sample demographics are shown in Table 1. The average subjective SES score was 6.8 ($SE = 0.12$), on the 10-point ladder scale; these scores are slightly skewed, which may reflect the somewhat higher objective SES of the sample (Figure 1). The average woman was slightly overweight (average BMI = 25.47), with BMIs ranging from low (17.8) to obese (42.5). Average WHR was moderately high, at .78, ranging from low (.67), representing predominantly peripheral fat distribution, to high (.97), representing greater abdominal fat distribution.

Bivariate Associations

Occupational status was related to education ($r = .31, p < .001$) and income ($r = .20, p < .05$). Household income and education were unrelated ($r = .04$), even when students were excluded ($r = .06$). This may reflect the fact that household incomes are not simply a function of the woman's own income but also that of her partner. Subjective SES was significantly related to both income ($r = .22, p < .01$) and educational degree ($r = .32, p < .01$) but not to occupational status ($r = .11$). Subjective SES was more strongly related to the composite measure of objective SES ($r = .40, p < .01$) than to any one objective SES indicator, suggesting that participants take into account their relative standing on the various components of SES when indicating their rank on the ladder.

Bivariate associations of the composite objective and subjective SES indicators with physiological and psychological variables are shown in Table 2. Objective SES was significantly related to better sleep quality, which was not associated with subjective SES. In contrast, subjective status showed significant associations with other health-related indicators: The higher individuals were on the subjective ladder, the better was their self-rated health, the smaller their WHR, the shorter their sleep latency, and the lower their heart rate. Subjective SES was also associated with cortisol habituation using an analysis of variance: Nonhabituators placed themselves significantly lower on the ladder ($M = 5.5$, $SE = 0.47$) than did low reactors ($M = 6.8$, $SE = 0.27$) or habituators ($M = 6.8$, $SE = 0.41$), $F(2, 56) = 3.4$, $p < .04$. There were no significant differences in cortisol adaptation groups by objective SES, $F(2, 56) = 1.8$, $p = .17$.

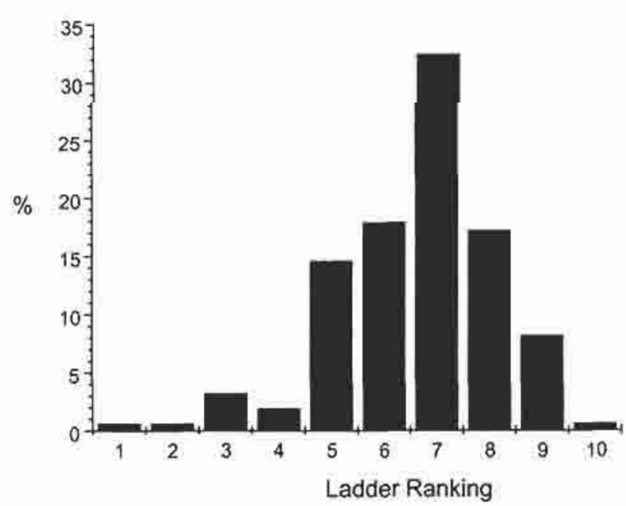

Figure 1. Frequency distribution of ladder rankings (1–10) by percentile.

Table 2
Correlations Among SES, Health, and Psychological Variables

Index	Objective SES (n = 156)	Subjective SES (n = 153)
Physiological		
Physical health	.05	.18*
BMI	−.07	−.12
WHR[a]	−.10	−.18*
Sleep quality[b]	−.27*	−.10
Sleep latency[b]	−.17	−.44**
Resting heart rate[b]	−.10	−.29*
Resting systolic blood pressure[b]	.06	−.16
Psychological		
Negative affectivity	−.13	−.31**
Chronic stress	−.13	−.36**
Subjective stress	−.08	−.25**
Pessimism	−.20*	−.37**
Control over life	−.05	.26**
Active coping	.10	.24**
Passive coping	−.20*	−.33**

Note. SES = socioeconomic status; BMI = body mass index; WHR = waist-to-hip ratio.
[a] Partial correlations, adjusted for BMI and percentage of body fat. [b] $n = 59$.
* $p < .05$. ** $p < .01$.

Because WHR may be a more sensitive indicator of stress and disease among lean people (Larrson et al., 1984), we also examined whether the correlation between subjective SES and WHR varies across tertiles of BMI. As predicted, the partial correlation between subjective SES and WHR controlling for BMI and percentage of body fat was significant only among the leanest women ($r = -.30, p < .05$), whereas there was no significant relationship among average weight and heavier women ($rs = -.11$).

More of the psychological variables were related to subjective than to objective SES as well. As shown in Table 2, higher objective SES was related only to less pessimism and passive coping, whereas subjective SES was significantly related to all of the psychological variables. The higher the women placed themselves on the ladder, the lower was their chronic stress, subjective stress, negative affect, pessimism, and passive coping and the greater was their perceived control over life and active coping.

Associations With Subjective SES Controlling for Objective SES and Negative Affect

Hierarchical multiple regression analyses were performed on all variables significantly related to the ladder to test whether subjective SES showed independent associations with physical and psychological variables while controlling for objective SES and for negative affectivity for self-reported outcomes. Although objective

SES was not related to most health outcomes, we entered it first to remove any association of subjective social standing that overlapped with objective SES. Negative affectivity was entered for self-reported outcomes in Step 2, and the subjective SES rankings were entered as the last step. Initial beta weights, changes in R^2 after entering subjective SES, and total variance accounted for are shown in Table 3. Sleep latency was still significantly related to self-related health once objective SES and negative affect were entered, but self-reported health was not. Heart rate was significantly predicted by subjective SES after controlling for objective SES, but WHR and cortisol habituation showed only marginal independent associations ($ps = .07$ and $.09$, respectively).

Negative affect was strongly related to all of the psychological measures. Despite this, and its correlation of −.31 with subjective SES, the associations between subjective SES with chronic stress, pessimism, control over life, active coping, and passive coping all remained significant after controlling for objective SES and negative affect. The association of subjective SES with subjective stress no longer reached significance once objective SES and negative affect were entered, most likely because of the strong relationship between negative affect and subjective stress ($r = .64$, $p < .0001$).

Discussion

In the present sample, subjective SES, a simple one-item measure of where individuals place themselves on the social hierarchy, was related to indicators of both physiological and psychological functioning. These results show that high subjective status is strongly linked to psychological factors that may predispose individuals to better health trajectories and shows some associations, although weaker, to current physiological functioning and self-reported health.

The results are consistent with the hypothesis that low subjective standing is linked to greater stress. Low subjective SES could either increase stress directly or increase vulnerability to the effects of stress. Consistently high cortisol reactivity and abdominal fat distribution, particularly in lean women, reflect hyperactivity of the hypothalamic-pituitary-adrenal (HPA) axis, a system that responds to perceptions of threat. Sleep latency, too, may be associated with HPA axis activity. Individuals with higher levels of cortisol at night have more sleep problems (Van Cauter, Leproult, & Plat, 2000). Sleep difficulties or lack of sleep, in turn, may increase nocturnal cortisol and are associated with poorer health status (Van Cauter & Spiegel, 1999). The findings of longer sleep latency as well as greater activity of both the sympathetic and HPA axis response systems being associated with lower ladder rankings are consistent with there being greater chronic stress among those with lower subjective social standing.

Negative affect is associated with ladder ranking, and it is not possible to determine the causal direction because of the cross-sectional nature of the data. The same is true for the other psychological factors (e.g., pessimism or low control over life could either reflect or influence subjective status). Although some reciprocal causation is likely, there is reason to believe that subjective social status is affecting both the mental and physical outcomes. Even when controlling for negative affect (which provides a very conservative test), ladder rankings continued to show significant relationships with indices of stress, including heart rate, sleep latency, chronic stress, pessimism, perceived control, and coping. Self-perception of lower social status, although related to negative affect, has independent associations with physical and psychological outcomes, suggesting that the associations are neither spurious relationships resulting from reporting bias of those with negative affect nor wholly mediated by negative affect.

There are several limitations to the present research. The women in this sample had at least a high school degree. This restriction may underestimate the impact of education on health, limiting our ability to draw conclusions about the relative associations of

Table 3
Summaries of Hierarchical Regression Models for Subjective Social Status Predicting Physical Health and Psychological Indices

	Initial beta weights				
Index	Step 1: objective SES	Step 2: negative affectivity	Step 3: ladder	ΔR^2 for ladder	Overall R^2 (adjusted)
Physiological					
Physical health	.05	−.31**	.10	.01	.09
Sleep latency[a]	−.17	.08	−.44**	.15**	.14
Heart rate[a]	−.09	—	−.32*	.09*	.06
WHR	−.10[b]	—	−.16	.02	.10
Psychological					
Subjective stress	−.08	.64***	−.06	.00	.39
Chronic stress	−.13	.47***	−.24**	.05**	.26
Pessimism	−.20**	.44***	−.23**	.04**	.26
Control over life	−.05	−.35***	.23**	.04**	.15
Active coping	.10	−.21**	.18*	.03*	.06
Passive coping	−.20*	.48***	−.17*	.02*	.28

Note. Dash indicates that for physiological measures, negative affect was not controlled for. SES = socioeconomic status; WHR = waist-to-hip ratio.
[a] $n = 59$. [b] Body mass index and percentage of body fat were included in Step 1.
* $p < .05$. ** $p < .01$. *** $p < .001$.

subjective and objective SES with health. Despite this, there was still substantial variation in education as well as in income within the sample, and significant associations were found. In addition, scores on the subjective ladder were similarly skewed toward the upper end. One study (Ostrove, Adler, Kuppermann, & Washington, 2000) that had a wide range of income and education yielded similar findings about the association of subjective versus objective social status and self-reported health among White women. A second limitation of this study is that the participants were all White women. Associations between SES and health may not be the same for all ethnic groups, particularly Latinas and African Americans (see Ostrove et al., 2000). We also do not know whether similar findings would emerge for men and for either older or younger people. Finally, the women in this sample were recruited to be healthy. As a result, the range of health outcomes was constricted. Despite the stringent exclusion criteria (e.g., hypertension, medication or alcohol use, smoking), we found significant associations of both physical and psychological factors with ladder rankings. These effects might well be magnified with a less healthy sample. Further research is needed to explore the importance of subjective SES to healthy psychological and physiological functioning. The preliminary data reported here suggest that it is a promising concept that may broaden the definition, measurement, and understanding of social status.

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