"Physical Health and Social Class"

Agrigoroaei, Stefan

ABSTRACT

As shown by researchers in multiple disciplines, one of the most well-established determinants of physical health is social class. Lower social class is associated with poorer physical health and higher risk of mortality. In this entry, conceptual and methodological aspects are discussed with a focus on understanding social health disparities and the efforts to decrease them. Specifically, empirical evidence is presented with regards to the nature of health inequalities across the lifespan and in specific social groups (e.g., race/ethnicity), the mechanisms that account for the association between social class and health, and the factors that explain individual differences in the health effects of lower social class.
Title: Physical Health and Social Class

Your Name: Stefan Agrigoroaei
Affiliation: Brandeis University
Email Address: stefana@brandeis.edu

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Abstract:
As shown by researchers in multiple disciplines, one of the most well established determinants of physical health is social class. Lower social class is associated with poorer physical health and higher risk of mortality. Conceptual and methodological aspects are discussed with a focus on understanding social health disparities and the efforts to decrease them. Specifically, empirical evidence is presented with regards to the nature of health inequalities across the lifespan and in specific social groups (e.g., race/ethnicity), the mechanisms that account for the association between social class and health, and the factors that explain individual differences in the health effects of lower social class.

Main Text:
Physical health is unevenly distributed across social classes. There is compelling empirical evidence that people with lower social classes have increased rates of morbidity from almost every disease condition. The construct generally used by researchers in multiple disciplines to indicate social class differences in health is socioeconomic status (SES), although the two terms, social class and SES, are not equivalent (Krieger, Williams, and Moss 1997). The term social class refers to a social group or category and its structural position within the economy (e.g., employers, employees, owners, or not, of capital), whereas SES represents a multidimensional concept that includes both rank-based and resource-based measures. Rank-based measures refer to an individual’s social position in a social hierarchy, such as occupational prestige. Resource-based measures refer to material and social resources such as income, wealth, and years of completed education. The multidimensionality of the SES construct translates into a high level of heterogeneity with regard to its operationalizations in the literature. Some researchers use composite indexes of SES based on some or all traditional measures (i.e., education, income, wealth, and occupational prestige or grade of employment), while others focus on single SES indicators.

Researchers have broadened the scope of SES measurement to include subjective indicators based on individuals' perceptions about their social standing relative to others (e.g., Demakakos et al. 2008). Typically, the measure of subjective SES requires participants to place themselves on a ladder with nine or ten steps, in order to indicate where they stand in their country in terms of income, education, and occupation. Empirical findings suggest that subjective indicators of SES may be equally predictive, if not more predictive, of physical health than objective measures of SES. The association
between subjective SES and physical health generally remains significant after controlling for objective SES (e.g., Adler et al. 2000).

There is ample, reliable evidence that SES plays a role in the incidence and prevalence of diseases. This robust association has been well-documented since the nineteenth century and has persisted despite improvements in living standards and medical care in the twenty-first century. Consistent results have been obtained by investigators from a range of disciplines (e.g., medicine, epidemiology, psychology, demography, sociology, economics), across countries, eras, generations, and a variety of SES indicators. Multiple cross-sectional and longitudinal studies have shown that lower SES groups are disadvantaged across a wide range of health indicators including relatively minor health problems (e.g., headaches, susceptibility to cold), tissue alterations (e.g., atherosclerosis), physiological parameters (e.g., cortisol, inflammation), health self-ratings (how would you rate your physical health), chronic medical illnesses (e.g., cardiovascular disease, arthritis, cancers), measures of functional limitations, and infant and adult mortality.

Those with low SES have poorer physical health when compared to individuals with high SES. However, SES disparities do not reflect a threshold effect of poverty versus nonpoverty, but rather a monotonic, step-wise association (Adler and Stewart 2010). The SES-health link takes the form of a gradient that operates at all levels of the SES spectrum: the higher the SES, the better the health. Yet, there is some evidence that this association is not perfectly linear. For instance, improvements in health are not observed at each successive, additional year of education, but there are discontinuities that correspond to the time of academic degrees. Along the same lines, the association between income and health tends to be steeper at the lowest SES levels.

The cross-sectional nature of the majority of the studies in the area of SES and health precludes inferences about directionality. Although the literature is marked by a few natural or quasi-experiments (e.g., periods of economical recession, economic changes due to reunification in Germany, winning from lotteries), the issue of causality is not completely elucidated. There is also evidence for reverse causation where, for example, poorer health in childhood and adolescence leads to lower SES in adulthood. Similarly, experiences of poorer health are associated with drops in income due to healthcare cost and reduced work hours. In addition, some theoretical models suggest the role of a third variable, which may influence both health and SES, and account for this association. For instance, childhood nutrition and stress may be common factors that influence both health and SES.

SES disparities in physical health are observed across the life cycle and emerge early in life. When examined from a lifespan perspective, the greatest health disparities due to SES occur during early childhood and middle and early old age (ages 40-65) and tend to diminish, but still exist, after age 65 (Adler and Stewart 2010). Birth outcomes represent one of the clearest demonstrations of the impact of parents’ SES on children’s health and mortality (Blumenshine et al. 2010). Mothers with low SES have children that are more likely to be born prematurely or have a low birth weight, which are birth outcomes associated with vulnerability to later health problems. Also, there are marked
SES differences in infant mortality. Furthermore, longitudinal studies identified early years of life as a sensitive period by showing that childhood SES (usually measured using the financial level growing up, parental education, and childhood welfare status) has long-term consequences and shapes future health in adulthood. Children raised in families with low SES have increased risks of developing infectious, metabolic, respiratory, and cardiovascular diseases later in life, irrespective of the traditional risk factors for those conditions or SES in adulthood. In addition, longer exposure to low SES is associated with greater risk. Studies that have focused on individual social mobility, defined as the movement up and down the SES hierarchy across the lifespan, has shown that the most vulnerable individuals are those with stable low SES (i.e., low SES in childhood and low SES in adulthood).

There is extensive work that has examined efforts to decrease health disparities. Such efforts imply a better understanding of the mechanisms or mediators responsible for the association between SES and physical health. Multiple theoretical and empirical studies have postulated a myriad of interrelated mechanisms (Matthews and Gallo 2011). Although they contribute importantly to understanding how SES “gets under the skin”, they by no means completely explain the SES-health association. In the United States, differential access to healthcare has been considered one of the most salient pathways. Even in countries that provide universal health coverage, people with lower SES are more likely to be uninsured and have fewer opportunities for screening and treatment. Another mechanism is based on differential environmental exposure. Specifically, the level of SES shapes exposure to a variety of environments that more directly affect physical health. Lower SES is associated with a higher likelihood to live and work in worse physical and social environments characterized by air-pollution, residential crowding, higher rates of crime, isolation, and limited social networks and social integration. Multiple studies have also examined the mediational role of health-related behavioral patterns and lifestyle. Lower education levels may imply less exposure to information about health risks. Also, low SES profiles tend to be characterized by frequent adverse health behaviors such as tobacco use, higher levels of alcohol consumption, improper diet, or physical inactivity that lead to poorer physical health. As an example, those with a lower level of education and lower income are more likely to smoke. Another set of explanations that has been advanced regards the role of psychosocial factors. Lower SES profiles are characterized by greater frequency and intensity of exposure to stress and little personal resources to help cope with stress. Although the literature is characterized by mixed results, there is ample evidence that, compared with their higher SES counterparts, those with lower SES are exposed to more chronic stressors. In turn, chronic stress affects physical health directly or indirectly through its effect on health behaviors. Much stronger and consistent evidence is obtained with respect to the SES inequalities in personal psychosocial resources. Lower SES is associated with lower levels of protective factors for physical health, such as self-esteem, sense of control and mastery, self-efficacy, social support, and social integration.

To better understand the mechanisms of the SES-health association, it has been recognized that SES indicators are not interchangeable and should be considered separately. For example, education and income have distinct characteristics, lead to different pathways, and therefore to different intervention strategies (Kawachi, Adler, and
In addition, the role of contextual factors should be taken into account by measuring SES not only at the individual level, but also at the family and community or neighborhood levels. Research suggests that neighborhood SES predicts physical health over and above individual SES. Also, within households, spillover effects of education have been documented, with children's education impacting parental smoking cessation rates. Any attempt to understand SES disparities in health needs to consider the extent to which SES is associated with race/ethnicity (Williams et al. 2010), although race and SES are often confounded. SES differences in physical health can reflect race differences, especially because blacks are disproportionally represented in lower SES groups. Moreover, there is evidence that the traditional measures of SES are not equivalent across race groups. For example, over and above the level of education and job experience, within the same occupational categories, black employees are more likely to be exposed to occupational hazards and carcinogens, compared to whites (Williams et al. 2010).

Efforts to decrease health disparities are also informed by the patterns of resilience to the negative health effects of low SES. There are marked individual differences within SES groups and despite the risk and challenges associated with lower SES in childhood or adulthood, some individuals are able to maintain, recover, or improve their level of physical health (Ryff et al. 2012). Therefore, an important, relatively unexplored research question asks what personal or environmental factors can explain the patterns of resilience. For example, there is evidence for compensatory, buffering effects of higher personal control beliefs. Among those with a lower SES, individuals with higher control beliefs had a level of health comparable with those in the highest income group (Lachman and Weaver 1998). The level of control beliefs can also moderate the association between education and mortality rate. Recent findings have shown that among those low in education, higher control beliefs were associated with a decreased mortality risk (Turiano et al. 2014). Other studies highlighted the protective influence of the quality of parental relationships in childhood. As shown by Miller et al. (2011), maternal nurturance buffers the negative effects of low childhood SES on metabolic syndrome at midlife.

On the basis of empirical evidence summarized here, understanding the patterns of resilience and examining the mechanisms accounting for the association between SES and physical health represent two promising lines of research with direct applications for prevention and intervention programs. As we learn more about the SES-health association, efforts to reduce social inequalities in physical health imply multiple conceptual and methodological challenges. In summary, they require health researchers and policy makers to focus on distinct facets of SES, using objective and subjective indicators, in multiple contexts (e.g., family, neighborhood), at various periods in the lifecycle, in diverse populations (e.g., race/ethnicity), by incorporating longitudinal and experimental approaches, non-linear statistics, and an integrative, interdisciplinary perspective.

SEE ALSO: Cardiovascular; Control beliefs; Cross-Sectional Designs; HPA; Longevity, Social Determinant; Mortality rate; Physical Health of African Americans; Resilience
References:


Author Mini-Biography:
Stefan Agrigoroaei is a postdoctoral fellow in psychology in the Lifespan Developmental Psychology Laboratory at Brandeis University, Waltham, MA. His research program is in the area of health and human development and aging. He approaches his research with an interdisciplinary, lifespan perspective. His projects focus on the contribution of psychosocial, behavioral, and physiological factors for optimizing and maintaining good health, and reducing health disparities.

Key Words: health, poverty, individual differences, risk, social issues