

Psychological buffers against poor health: the role of the socioeconomic environment

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Beliefs, emotions, and other psychological resources can protect physical health. Notably, however, the particular ways of thinking, feeling, and acting that are associated with better health can vary with one's socioeconomic status (SES). Those that are most protective reflect what is afforded in and valued by the context. Specifically, in higher SES environments, where people often have the resources to be independent and influence their own destinies, beliefs that reflect independence and a focus on the individual predict better health. In contrast, in lower SES environments, where people often encounter more constraints, beliefs and coping strategies that reflect connection to others, and adjustment to the environment predict better health. Understanding these differences will help to address health disparities.

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Lower socioeconomic status (SES) is linked to greater risk for a range of worse health outcomes [1,2]. For example, people with lower levels of educational attainment and fewer financial resources have higher rates of cardiovascular disease, diabetes, asthma, and mortality [1,3]. A large literature has uncovered a range of structural, social, and psychological factors that contribute to these disparities [4–6]. Increasingly, however, researchers have begun to focus not only on why people from lower SES backgrounds get sick, but on what factors might protect them and promote better health outcomes in this group [7^{**},8,9]. Here, I review some research on examples of beliefs and ways of coping with adversity that play this type of protective role. I focus, in particular, on beliefs and coping strategies that are specific to the socioeconomic context — that is, beliefs and coping strategies that

are protective specifically because they fit with the constraints and affordances of the socioeconomic environments in which people are located.

Psychological resources, such as beliefs and emotions, can play an important role in promoting health [10,11]. Notably, the *particular* psychological resources that are linked to better health are not the same for everyone. What is protective for one person might be less so for someone who has a different identity or lives in a different environment. The particular beliefs and experiences that predict better health are those that have meaning and value in a person's sociocultural context and that fit with the constraints and affordances of a person's environment [12–16]. Thus, understanding what psychological resources will be most protective requires understanding the contexts in which people live. With respect to SES, higher and lower SES environments allow for and place value on different ways of thinking, feeling, and acting [17–19]. As a result, people who are higher SES will be healthier when they think, feel, and act in ways that are valued in and afforded by higher SES contexts, and people who are lower SES will be healthier when they think, feel, and act in ways that are valued in and afforded by lower SES contexts. Below, I explain how higher and lower SES contexts differ and review two lines of research showing that thinking in ways that are valued in and afforded by these environments predict better health outcomes.

Higher and lower SES contexts

Higher and lower SES contexts differ in material and social conditions and, as a result, afford different ways of thinking, feeling, and acting. In general, North American cultural contexts tend to emphasize and value independence, or the idea that people are autonomous and in control of their own destinies [20,21]. Notably, however, the material resources and cultural capital that come with being higher, rather than lower, SES in North America make independence easier to attain. People with more education, higher status jobs, and greater financial resources have more opportunities to exercise choice, develop their own personal preferences, and control and influence their environments [22,23]. Accordingly, in higher SES environments, parenting practices, educational institutions, and workplaces are more likely to encourage and reward autonomy and the cultivation and expression of personal preferences [24–26]. Thus, people in higher SES contexts tend to value being

independent, expressing their unique preferences and attributes, and carving out their own paths [19,27].

In contrast, lower SES contexts tend to afford different ways of thinking, feeling, and acting. Specifically, these contexts often emphasize and require interdependence, attention to others, and adjustment to the environment. People with lower levels of educational attainment and fewer financial resources often have jobs that offer less autonomy and more supervision, and their children are more likely to attend schools that emphasize following rules [23,28,29]. Lower levels of geographic mobility and regular contact with family tend to foster deep lasting ties with family, friends, and others in the local community [30,31]. Furthermore, people in lower SES environments are more likely to experience frequent, recurring, and uncontrollable stressors and to live in neighborhoods with higher rates of violence [32,33]. As a result, people in lower SES contexts tend to value being in close connection with others and are more likely to acknowledge and adjust to constraints in the environment [17–19].

Predictors of health and socioeconomic status

Given the differences between higher and lower SES contexts, the ways of thinking, feeling, and acting that are most likely to promote health can differ between those contexts. Here, I review two examples of psychological patterns that predict health differently across SES contexts. First, I review research showing that when people's views about what constitutes a good life are consistent with what is valued in their socioeconomic context, they have better health. Second, I review research showing that a specific set of coping strategies — 'shift-and-persist' coping strategies, which involves adjusting to stressors in the environment and moving forward — are associated with better health outcomes among those from lower, but not higher, SES backgrounds. Together, these examples show that the constraints and affordances of the socioeconomic context, as well as the meanings and norms they afford, play a role in shaping what ways of thinking are most protective with respect to health outcomes.

Views about what constitutes a good life

Markus and colleagues [31] have shown that middle-aged adults conceptualize a 'good life' in ways that are consistent with the emphasis on independence in higher SES contexts and interdependence in lower SES contexts. Specifically, in interviews, those with a college education tended to emphasize how individual factors, such as personal fulfillment and accomplishment, were central to a good life. In contrast, those with a high school education were more likely to emphasize close relationships, such as relationships with family members, as an important factor.

Building on this work, my colleagues and I [34] tested whether similar definitions of a good life (i.e. those focused on individual characteristics versus relationships) would predict physiological health outcomes among individuals in higher and lower SES contexts. We examined the way that adults with less than a bachelor's degree and a bachelor's degree or higher in educational attainment described what it meant to have a good life and how these descriptions related to participants' levels of allostatic load, a marker of cumulative biological risk that included inflammatory markers, cholesterol, blood pressure, and other indicators of physiological dysregulation. Among those with a bachelor's degree or higher, seeing individual factors as an important part of a good life predicted lower levels of allostatic load (i.e. a healthier physiological profile). In contrast, among those with less than a bachelor's degree, seeing supportive relationships as an important part of a good life predicted lower levels of allostatic load. Thus, in higher SES contexts, which tend to offer more opportunities to develop and assert one's independence, people who value independence are healthier. However, in lower SES contexts, which tend to foster and require deep ties with others, people are healthier when they recognize the important role that supportive relationships play in helping life go well.

Shift-and-persist coping strategies

The idea that people in lower SES environments will be healthier when their thoughts, feelings, and actions fit with the affordances and constraints in their environment is further supported by research on SES and approaches to coping with adversity. Chen and colleagues [7,35] have shown that when children in lower, but not higher, SES environments cope with stressors by (1) shifting, or accepting stressors and adjusting to the environment, and simultaneously (2) persisting, or finding meaning and enduring, despite adversity, they have better health. This 'shift-and-persist' approach to coping with adversity is effective in lower SES environments in particular, because of the nature of these environments, which tend to be characterized by frequent, recurring, and uncontrollable stressors and higher rates of violence [32,33]. In these circumstances, it is often not an option to cope with adversity by changing the situation. Instead, it is beneficial and effective to adjust or shift one's perspective in the face of adversity. Importantly, however, this coping strategy involves not just 'shifting,' but also 'persisting.' People who employ shift-and-persist strategies, shift while still continuing to find meaning in life and look toward the future (i.e. while simultaneously persisting). Thus, adjusting to the situation and accommodating oneself to stressors is not the equivalent of giving up, but rather a means of moving forward.

In multiple samples, shift-and-persist strategies have been linked to better health outcomes among children in lower, but not higher, SES environments. Children from lower SES backgrounds (i.e. in families with lower

levels of savings or less income or who qualify for free or reduced price lunch) who endorse shift-and-persist beliefs as a way of coping with adversity have multiple indicators of lower risk of cardiovascular disease, such as a lower body mass index and lower levels of inflammation [36°,37°,38°]. Among children with asthma whose families have fewer financial resources, this approach to coping is also linked to lower levels of asthma-relevant inflammatory markers, fewer days of school missed due to asthma, and less frequent use of a rescue inhaler [39°]. Shift-and-persist coping strategies are not related to such outcomes among children in families with more financial resources, suggesting that this approach to coping is uniquely protective of health in contexts where it fits with the constraints and affordances of the environment.

Implications and conclusions

In sum, people's psychological experiences matter for their health, but the *particular* ways of thinking, feeling, and acting that protect health vary with the SES context. Understanding what beliefs and other psychological patterns will be associated with better health requires attention to the characteristics of that person's socioeconomic context or environment. In general, among those in higher SES contexts, psychological patterns that reflect independence and a focus on the individual predict better health outcomes. In lower SES contexts, psychological patterns that place greater value and a higher priority on connecting with others and adjusting to the environment are more beneficial.

These insights have theoretical implications not only for those who want to understand what will predict better health among people in higher and lower SES environments, but also, practically, for understanding how to promote better health across the socioeconomic spectrum. For instance, interventions that acknowledge and support the tendency of people from lower SES backgrounds to be attuned to others and the social and structural context are likely to be the most physiologically protective and to buffer against poor health outcomes [40°,41]. Overall, continued attention to the ways in which the socioeconomic environment shapes psychological tendencies and their relationship to health will be a key part of ongoing efforts to understand and address health disparities.

Conflict of interest statement

Nothing declared.

References and recommended reading

Papers of particular interest, published within the period of review, have been highlighted as:

- of special interest
- of outstanding interest

1. Centers for Disease Control Prevention: *CDC health disparities and inequality report — United States*. 2011. Available from: <https://www.cdc.gov/mmwr/pdf/other/su6001.pdf>.
 2. Stringhini S, Carmeli C, Jokela M, Avendaño M, Muennig P, Guida F, Ricceri F, d'Errico A, Barros H, Bochud M *et al.*: **Socioeconomic status and the 25 × 25 risk factors as determinants of premature mortality: a multicohort study and meta-analysis of 1.7 million men and women**. *Lancet* 2017, **389**:1229-1237.
 3. Meara ER, Richards S, Cutler DM: **The gap gets bigger: changes in mortality and life expectancy, by education, 1981–2000**. *Health Aff* 2008, **27**:350-360.
 4. Adler NE, Newman K: **Socioeconomic disparities in health: pathways and policies**. *Health Aff* 2002, **21**:60-76.
 5. Adler NE, Rehkopf DH: **U.S. disparities in health: descriptions, causes, and mechanisms**. *Annu Rev Public Health* 2008, **29**:235-252.
 6. Phelan JC, Link BG, Tehranifar P: **Social conditions as fundamental causes of health inequalities: theory, evidence, and policy implications**. *J Health Soc Behav* 2010, **51**:S28-S40.
 7. Chen E, Miller GE: **“Shift-and-persist” strategies: why low socioeconomic status isn't always bad for health**. *Perspect Psychol Sci* 2012, **7**:135-158.
- This paper provides an overview of the authors' 'shift-and-persist' model of coping with adversity and reviews research showing that such an approach to coping with adversity predicts health specifically among children from lower socioeconomic backgrounds
8. Chen E, Miller GE: **Socioeconomic status and health: mediating and moderating factors**. *Annu Rev Clin Psychol* 2013, **9**:723-749.
 9. Levine CS, Miller GE, Lachman ME, Seeman TE, Chen E: **Early life adversity and adult health**. In *Oxford Handbook of Integrated Health Science*. Edited by Ryff CD, Krueger RF. Oxford University Press; 2017. (in press).
 10. Salovey P, Rothman AJ, Detweiler JB, Steward WT: **Emotional states and physical health**. *Am Psychol* 2000, **55**:110-121.
 11. Taylor SE, Kemeny ME, Reed GM, Bower JE, Gruenewald TL: **Psychological resources, positive illusions, and health**. *Am Psychol* 2000, **55**:99-109.
 12. Dressler WW, Balieiro MC, Ribeiro RP, dos Santos JE: **Culture and the immune system: cultural consonance in social support and C-reactive protein in urban Brazil**. *Med Anthropol Q* 2016, **30**:259-277.
 13. Fuligni AJ, Telzer EH, Bower J, Irwin MR, Kiang L, Cole SW: **Daily family assistance and inflammation among adolescents from Latin American and European backgrounds**. *Brain Behav Immun* 2009, **23**:803-809.
 14. Kitayama S, Karasawa M, Curhan KB, Ryff CD, Markus HR: **Independence and interdependence predict health and wellbeing: divergent patterns in the United States and Japan**. *Front Psychol* 2010, **1**:1-10.
 15. Levine CS, Miyamoto Y, Markus HR, Rigotti A, Boylan JM, Park J, Kitayama S, Karasawa M, Kawakami N, Coe CL, Love GD, Ryff CD: **Culture and healthy eating: the role of independence and interdependence in the United States and Japan**. *Pers Soc Psychol Bull* 2016, **42**:1335-1348.
 16. Miyamoto Y, Boylan JM, Coe CL, Curhan KB, Levine CS, Markus HR, Park J, Kitayama S, Kawakami N, Karasawa M, Love GD, Ryff CD: **Negative emotions predict elevated interleukin-6 in the United States but not in Japan**. *Brain Behav Immun* 2013, **34**:79-85.
 17. Kraus MW, Piff PK, Mendoza-Denton R, Rheinschmidt ML, Keltner D: **Social class, solipsism, and contextualism: how the rich are different from the poor**. *Psychol Rev* 2012, **119**:546-572.
 18. Stephens NM, Hamedani MG, Markus HR, Bergsieker HB, Eloul L: **Why did they “choose” to stay? Perspectives of Hurricane Katrina observers and survivors**. *Psychol Sci* 2009, **20**:878-886.
 19. Stephens NM, Markus HR, Townsend SSM: **Choice as an act of meaning: the case of social class**. *J Pers Soc Psychol* 2007, **93**:814-830.
 20. Markus HR, Conner A: *Clash! How to Thrive in a Multicultural World*. Penguin Books; 2013.

21. Markus HR, Kitayama S: **Cultures and selves: a cycle of mutual constitution.** *Perspect Psychol Sci* 2010, **5**:420-430.
 22. Kohn ML: *Class and Conformity: A Study in Values.* Dorsey; 1969.
 23. Stephens NM, Markus HR, Phillips LT: **Social class culture cycles: how three gateway contexts shape selves and fuel inequality.** *Annu Rev Psychol* 2014, **65**:611-634.
 24. Kusserow A: *American Individualisms: Child Rearing and Social Class in Three Neighborhoods.* Palgrave Macmillan; 2004.
 25. Lareau A: *Unequal Childhoods: Class, Race, and Family Life.* University of California Press; 2011.
 26. Stephens NM, Fryberg SA, Markus HR, Johnson CS, Covarrubias R: **Unseen disadvantage: how American universities' focus on independence undermines the academic performance of first-generation college students.** *J Pers Soc Psychol* 2012, **102**:1178-1197.
 27. Stephens NM, Fryberg SA, Markus HR: **When choice does not equal freedom: a sociocultural analysis of agency in working-class American contexts.** *Soc Psychol Personal Sci* 2011, **2**:33-41.
 28. Anyon J: **Social class, school knowledge, and the hidden curriculum: retheorizing reproduction.** In *Ideology, Curriculum, and the New Sociology of Education: Revising the Work of Michael Apple.* Edited by Weis L, McCarthy C, Dimitriadis G. Routledge; 2006:37-45.
 29. Kohn ML, Schooler C: **Occupational experience and psychological functioning: an assessment of reciprocal effects.** *Am Sociol Rev* 1973, **38**:97-118.
 30. Lamont M: *The Dignity of Working Men.* Russell Sage; 2000.
 31. Markus HR, Ryff CD, Curhan KB, Palmersheim KA: **In their own words: well-being at midlife, among high school-educated and college-educated adults.** In *A Portrait of Midlife in the United States.* Edited by Brim OG, Ryff CD, Kessler RC. University of Chicago Press; 2004:273-319.
 32. Brady SS, Matthews KA: **The influence of socioeconomic status and ethnicity on adolescents' exposure to stressful life events.** *J Pediatr Psychol* 2002, **27**:575-583.
 33. Buka SL, Stichick TL, Birdthistle I, Earls FJ: **Youth exposure to violence: prevalence, risks, and consequences.** *Am J Orthopsychiatry* 2001, **71**:298-310.
 34. Levine CS, Atkins AH, Waldfogel HB, Chen E: **Views of a good life and allostatic load: physiological correlates of theories of a good life depend on the socioeconomic context.** *Self Identity* 2016, **15**:536-547.
- This paper shows that when people with less than a college education are healthier when they conceptualize a good life as involving supportive relationships, but people with a bachelor's degree or higher are healthier when they emphasize individual factors in how they conceptualize a good life.
35. Chen E: **Protective factors for health among low-socioeconomic-status individuals.** *Curr Dir Psychol Sci* 2012, **21**:189-193.
 36. Chen E, Lee WK, Cavey L, Ho A: **Role models and the psychological characteristics that buffer low-socioeconomic-status youth from cardiovascular risk.** *Child Dev* 2013, **84**:1241-1252.
 37. Chen E, McLean KC, Miller GE: **Shift-and-persist strategies: associations with socioeconomic status and the regulation of inflammation among adolescents and their parents.** *Psychosom Med* 2015, **77**:371-382.
 38. Kallem S, Carroll-Scott A, Rosenthal L, Chen E, Peters SM, McCaslin C, Ickovics JR: **Shift-and-persist: a protective factor for elevated BMI among low-socioeconomic-status children.** *Obesity* 2013, **21**:1759-1763.
 39. Chen E, Strunk RC, Trethewey A, Schreier HMC, Maharaj N, Miller GE: **Resilience in low-socioeconomic-status children with asthma: adaptations to stress.** *J Allergy Clin Immunol* 2011, **128**:970-976.
 40. Stephens NM, Markus HR, Fryberg SA: **Social class disparities in health and education: reducing inequality by applying a sociocultural self model of behavior.** *Psychol Rev* 2012, **119**:723-744.
 41. Stephens NM, Townsend SSM, Markus HR, Phillips LT: **A cultural mismatch: independent cultural norms produce greater increases in cortisol and more negative emotions among first-generation college students.** *J Exp Soc Psychol* 2012, **48**:1389-1393.