COMMENTARY



Psychological health and socioeconomic status among non-Hispanic whites

Andrew J. Cherlin^{a,1}

Much attention has been paid of late to drug abuse and mortality among less-educated whites. This group, often referred to as the "white working class," is typically defined as non-Hispanic whites who do not have Bachelor of Arts or Bachelor of Science college degrees (1). Mortality rates have risen for members of the white working class in midlife, mainly due to increases in drug overdoses, suicides, and alcoholrelated liver mortality (2–5). In contrast, mortality rates for African Americans and Hispanics have continued to decline (4). These findings have contributed to a popular narrative of rising malaise among the white working class, leading to a surge in "deaths of despair" (6, 7) and to support for Donald Trump in the 2016 Presidential election (8).

Has Psychological Health Declined?

But has there really been an increase in feelings of despair among the white working class? In PNAS, Goldman et al. (9) examine changes since the mid-1990s in the psychological health of the non-Hispanic white population. The authors use data from the Midlife in the United States (MIDUS) study, an interdisciplinary investigation of psychological wellbeing and physical health among Americans ages 25-74 y (10). It comprises two national surveys conducted in 1995-1996 and 2011-2014. The surveys contained a comprehensive set of questions about positive and negative mental health, which were combined into scales with known psychometric properties. A study that linked the 1995–1996 MIDUS data to National Death Index records found that positive mental health was associated with a lower risk of subsequent mortality (11). Goldman et al. (9) find a decline in psychological health between the earlier and later MIDUS survey samples for white non-Hispanics as a whole. In addition, the authors find that the decline was steeper among individuals with lower socioeconomic status (SES): When Goldman et al. compared low-SES whites in the two surveys, they found significant declines in several indicators of psychological health; yet when they compared highSES whites in the two surveys, they found smaller declines or even increases in psychological health.

Moreover, the declines that Goldman et al. (9) observe were not confined to midlife. Rather, the authors report similar patterns of decline among individuals at ages 30, 50, and 70 y. In other words, those who were of retirement age showed the same declines as did those who were in their prime working years, which suggests that the decline was a broadbased phenomenon. As for racial/ethnic differences, Goldman et al. (9), in their supplementary material, report that African Americans indicated significantly lower symptoms of major depression and significantly higher levels of positive affect, psychological wellbeing, and social well-being than did non-Hispanic whites. Other studies suggest that low-income African Americans are more optimistic about the future than are low-income whites (12). Goldman et al. (9), however, could not assess whether there were differences in trends over time in psychological health among African Americans or Hispanics due to samplesize limitations.

Still, the results do not fully support the idea of growing despair, if we take that to mean a loss of heart that might lead to abuse of alcohol or drugs or even to an attempt at suicide. Among low-SES whites, the greatest declines in psychological health were visible in indicators of "positive affect" (how much of the time in the past 30 d the respondent felt cheerful, in good spirits, extremely happy, calm and peaceful, satisfied, and full of life) (13) and "life satisfaction" (rating one's life on a scale from 0 for "worst possible life overall" to 10 for "best possible life overall") (14). But it is possible to be unhappy and dissatisfied with one's life without the utter loss of hope that despair connotes. A scale of "negative affect" (so sad nothing could cheer you up, nervous, restless or fidgety, hopeless, everything was an effort, worthless) (13), which is closer to despair, had a significant, though smaller, SES effect.

The MIDUS survey, however, included two other indicators that seem to capture the idea of despair better and yet showed weaker SES gradients: A scale

^aDepartment of Sociology, The Johns Hopkins University, Baltimore, MD 21218 Author contributions: A.J.C. wrote the paper.

The author declares no conflict of interest.

Published under the PNAS license.

See companion article on page 7290.

¹Email: cherlin@jhu.edu.

Published online June 20, 2018.

of "psychological well-being" (agreement or disagreement with statements, such as "In many ways I feel disappointed about my achievements in life" and "I gave up trying to make big improvements or changes in my life a long time ago") (15); and a scale of "social well-being" (statements such as "I have nothing important to contribute to society" and "society isn't improving for people like me") (16). SES differences in declines in these two scales were in the predicted direction but did not achieve conventional levels of statistical significance. Perhaps the longer despair-like statements required a sense of self-actualization and a verbal facility that some of the noncollege-graduate respondents did not have, whereas the simpler happiness and satisfaction questions were easier to respond to. Nevertheless, we can be more confident that trends in generic happiness, sadness, and life satisfaction differed by SES than we can about trends in despair-like psychological and social well-being.

In sum, Goldman et al. (9) present a troubling portrait of declining psychological health among non-Hispanic whites in midand later-life between the mid-1990s and the early 2010s, even if a rising tide of despair may be an overstatement. Equally troubling is the concentration of these declines among individuals with lower SES. Goldman et al. (9) show, for example, that life satisfaction declined for people at the 10th, 25th, and 50th percentiles of SES, remained constant for people at the 75th percentile, and increased for people at the 90th percentile. To the list of widening inequalities in the United States, which center on economic inequality (17, 18), we must now add inequality in psychological health.

Psychological Health and Inequality

To be sure, it is unclear in which direction the causal arrow goes: deteriorating psychological health may be a cause or a consequence of increasing economic inequality. Those who think that the arrow goes from psychological health to economic inequality draw upon evidence of a wider deterioration in social connections and community among lower SES individuals: Between 1989 and 2014, the share of women who had ever married dropped more for women without bachelor's degrees than for women with bachelor's degrees or more education (19). Between 1972 and 2010, religious service attendance among whites declined more sharply for those without bachelor's degrees than for those with them (20). The labor force participation rate for men aged 25–54 y

declined from 97% in 1960 to 89% in early 2018 (21), and here again the drop was larger for men without college educations (22). To some observers, these trends reflect a deleterious cultural shift away from social institutions, such as marriage

In sum, Goldman et al. present a troubling portrait of declining psychological health among non-Hispanic whites in mid- and later-life between the mid-1990s and the early 2010s, even if a rising tide of despair may be an overstatement.

and religion (23), as well as a decline in industriousness and work discipline (22, 24).

But those who believe that a cultural breeze blew less-virtuous values across the nation must confront this question: Why were people without college degrees more susceptible to the cultural shift than were college-educated people? A plausible answer is that the causal arrow also points in the opposite direction: changes in the labor market undermined the economic position of less-educated Americans and, as a result, diminished their psychological health and social connectivity. The outsourcing of production to other countries (25) and computerization of routine work (26) have constrained job opportunities for the noncollegeeducated. Since the 1970s the gap between the earnings of the college-educated and the noncollege-educated has widened (27). Some observers argue that economic inequality increases competition and anxiety over social status, leading to higher chronic stress levels and reduced trust (28). If these pathways are valid, then trends in the economy may be a cause, at least in part, of the growing inequality in psychological health.

Goldman et al. (9) cannot tell us whether the decline in psychological health can be linked to opioids because the MIDUS surveys did not collect information about drug usage. For that, we will need to wait for further research, including observational, onthe-ground studies in areas where the drug problem has surged. But the drop that Goldman et al. demonstrate in the psychological health of lower-SES whites is disturbing, and its relationship to broader cultural changes and to increases in economic inequality make it worthy of our attention and concern.

- 1 Cherlin AJ (2014) Labor's Love Lost: The Rise and Fall of the Working-Class Family in America (Russell Sage Foundation, New York).
- 2 Case A, Deaton A (2015) Rising morbidity and mortality in midlife among white non-Hispanic Americans in the 21st century. Proc Natl Acad Sci USA 112:15078–15083.
- 3 Case A, Deaton A (2017) Mortality and morbidity in the 21st century. *Brookings Pap Econ Act* 2017:397–476.
- 4 Shiels MS, et al. (2017) Trends in premature mortality in the USA by sex, race, and ethnicity from 1999 to 2014: an analysis of death certificate data. *Lancet* 389:1043–1054.
- 5 Rossen LM, Bastion B, Warner M, Khan D, Chong Y (2017) Drug Poisoning Mortality: United States, 1999–2016. Available at https://www.cdc.gov/nchs/data-visualization/drug-poisoning-mortality/index.htm. Accessed, May 30, 2018.
- **6** Khazan O (2015) Middle-Aged White Americans Are Dying of Despair. Available at https://www.theatlantic.com/health/archive/2015/11/boomers-deaths-pnas/413971/, Accessed May 29, 2018.
- 7 Monnat SM (2016) Drugs, death, and despair in New England. Communities and Banking 27:22–25.
- 8 Morgan SL, Lee J (2018) Trump voters and the white working class. Sociol Sci 5:234–245.
- 9 Goldman N, Glei DA, Weinstein M (2018) Declining mental health among disadvantaged Americans. Proc Natn Acad Sci USA 115:7290–7295.
- 10 Brim OG, Ryff CD, Kessler RC, eds (2004) How Healthy Are We? A National Study of Well-Being at Midlife (Univ of Chicago Press, Chicago).
- 11 Keyes CL, Simoes EJ (2012) To flourish or not: Positive mental health and all-cause mortality. Am J Public Health 102:2164–2172.
- 12 Graham C, Pinto S (March 28, 2018) Unequal hopes and lives in the USA: Optimism, race, place, and premature mortality. J Popul Econ, 10.1007/s00148-018-0687-y.
- 13 Mrozek DK (2004) Positive and negative affect at midlife. How Healthy Are We? A National Study of Well-Being at Midlife, eds Brim OG, Ryff CD, Kessler RC (Univ of Chicago Press, Chicago), pp 205–226.
- 14 Fleeson W (2004) The quality of American life at the end of the century. How Healthy Are We? A National Study of Well-Being at Midlife, eds Brim OG, Ryff CD, Kessler RC (Univ of Chicago Press, Chicago), pp 252–272.



d at Palestinian Territory, occupied on December 31, 2

- 15 Carr D (2004) Psychological well-being qcross three cohorts: A response to shifting work-family opportunities and expectations? How Healthy Are We? A National Study of Well-Being at Midlife, eds Brim OG, Ryff CD, Kessler RC (Univ of Chicago Press, Chicago), pp 452–484.
- **16** Keyes CLM, Shapiro AD (2004) Social well-being in the United States: A descriptive epidemiology. How Healthy Are We? A National Study of Well-Being at Midlife, eds Brim OG, Ryff CD, Kessler RC (Univ of Chicago Press, Chicago), pp 350–372.
- 17 Piketty T, Saez E (2003) Income inequality in the United States, 1913–1998. Q J Econ 118:1–41.
- 18 Atkinson AB, Piketty T, Saez E (2011) Top incomes in the long run of history. J Econ Lit 49:3–71.
- 19 Lamidi EO (2015) Marriage in the U.S.: Twenty-Five Years of Change, 1989-2014. Family Profiles, FP-15-07 (National Center for Family and Marriage Research, Bowling Green State Univ, Bowling Green, OH).
- 20 Wilcox WB, Cherlin AJ, Uecker JE, Messel M (2012) No money, no honey, no church: The deinstitutionalization of religious life among the white working class. Res Sociol Work 23:227–250.
- 21 U.S. Bureau of Labor Statistics (2018) Labor Force Statistics from the Current Population Survey, Series LNS11300061. Available at https://data.bls.gov/timeseries/LNS11300061. Accessed May 21, 2018.
- 22 Eberstadt N (2016) Men Without Work: America's Invisible Crisis (Templeton, Conshohocken, PA).
- 23 Wilcox WB, Wolfinger NH, Stokes CE (2015) One nation, divided: Culture, civic institutions, and the marriage divide. Future Child 25:111-127.
- 24 Murray C (2012) Coming Apart: The State of White America, 1960-2010 (Crown Forum, New York).
- 25 Autor DH, Dorn D, Hanson GH (2013) The China syndrome: Local labor market effects of import competition in the United States. Am Econ Rev 103:2121–2168.
- 26 Kristal T (2013) The capitalist machine: Computerization, workers' power, and the decline in labor's share within US industries. Am Sociol Rev 78:361–389.
- 27 Autor DH (2014) Skills, education, and the rise of earnings inequality among the "other 99 percent". Science 344:843-851.
- 28 Pickett K, Wilkinson R (2009) The Spirit Level: Why Greater Equality Makes Societies Stronger (Allen Lane, London).