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Unmet Needs are Associated with Increased Stress and Poor Physical and Mental Health in Early Adulthood

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Nearly one year since the COVID-19 pandemic began, one in three adults report experiencing material hardship.^{1,2} Material hardship is defined as going without basic needs like food, medical care, housing, and utilities due to a lack of money.^{3,4} Prior research shows that material hardship is linked to poor health outcomes, particularly for mental health.^{5,6,7,8} With rates of depression and suicide in the young adult population significantly on the rise,^{9,10} it is important to understand how material hardships affect health among young adults.

This brief summarizes findings from our recent study published in the [Annals of Epidemiology](#), which examined how different types and severity of material hardship impact young adults' physical and mental health. Material hardship was measured by asking individuals if they experienced difficulty paying for three critical expenses: food, bills, and health care. Specifically, they were asked if they 1) worried about running out of food before they had money to get more, 2) had trouble paying utility, phone, rent/mortgage bills, and 3) lacked health insurance or thought they should get medical care but did not. Participants also reported their stress levels. Using this information, we analyzed how hardship and stress levels impact health outcomes including, self-rated health, depression, sleep problems, and suicidal thoughts.

KEY FINDINGS

- The likelihood of reporting poor health, depression, sleep problems, and suicidal thoughts is higher for young adults (ages 24-32) who struggle to meet their basic needs than for those who do not.
- The link between poor health outcomes among young adults and difficulty meeting basic needs is largely explained by increased stress levels.
- The relationship between unmet needs and health outcomes in young adulthood remains strong after accounting for background, income, education level, employment status, and other factors.

Material Hardships are Negatively Associated with Young Adults' Health by Increasing Their Stress

Approximately 25% of the 13,313 young adults in this study experienced at least one kind of material hardship during the past twelve months. Compared to their peers who did not experience material hardship, those who struggled to meet their needs were significantly more likely to report poorer health, depression, sleep problems, and suicidal thoughts. Each additional type of hardship (e.g., food, bill-paying, health care) increased the chance of reporting health problems.

It is important to understand how exactly material hardship leads to poorer health. One possible way that material hardship worsens health outcomes is through increased stress. Prior research shows that material hardship can cause stress, which contributes to negative health outcomes.^{11,12} Being unable to meet basic needs for oneself or one’s family is a significant stressor that causes the body to respond in ways that are often harmful to health.¹³ This study reached a similar conclusion specific to young adults. Increased stress levels contributed to the negative health outcomes for all types of hardship, especially for bill-paying hardship (Figure 1). For example, all of the relationship between bill-paying hardship and depression was due to perceived stress. Our study also showed that the relationship between material hardship and poor health outcomes remained strong after accounting for differences in background, such as income, age, sex, race/ethnicity, education, and employment status.

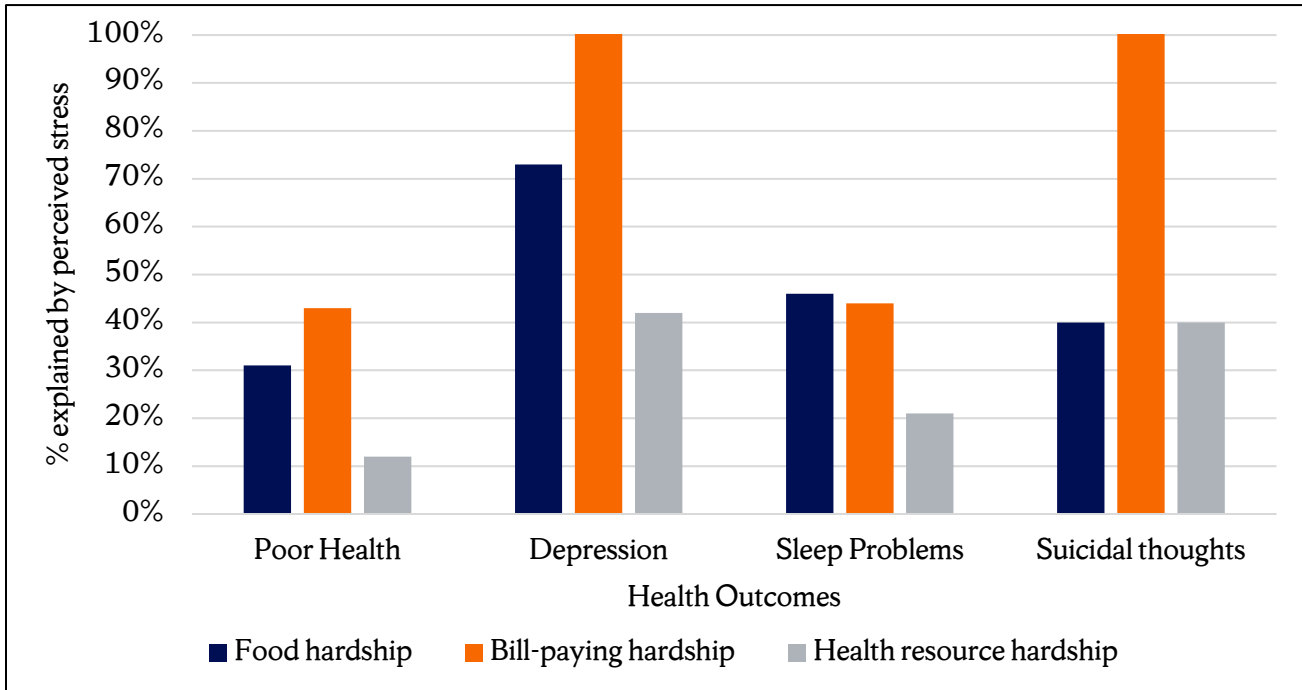


Figure 1. Percentage of Total Effect of Material Hardships on Health Outcomes due to Perceived Stress

Data Source: National Longitudinal Survey of Adolescent to Adult Health (Add Health) Wave IV (2007-2008) N=13,313 U.S. adults ages 24-32

To Improve Health, Policymakers Should Make Sure Young Adults Can Meet Their Basic Needs

Policymakers can improve the health of young adults by strengthening social programs that provide access to affordable and quality health care, food, and housing. Providing short-term emergency assistance and expanding affordable housing could be highly effective methods of reducing stress and improving the health of young adults. These policies are critical right now as the COVID-19 pandemic has left millions of Americans out of work and struggling to meet their basic needs.

Data and Methods

This study analyzed Add Health data from a nationally representative sample of 13,313 individuals. The data studied adolescents in grades 7-12 between 1994-1995 who were followed into adulthood until the respondents were between 24-32 years old between 2007-2008. Young adults reported their perceived stress levels and whether they experienced food hardship, bill-paying hardship, or health-resource hardship. A regression model was used to analyze the relationship between levels of stress and hardship and the respondent's health outcomes. For additional information on the methodology, please see the published study, [Material hardship, perceived stress, and health in early adulthood](#).

References

1. Bauer, L. (2020, May 12). *The COVID-19 crisis has already left too many children hungry in America*. <https://www.brookings.edu/blog/up-front/2020/05/06/the-covid-19-crisis-has-already-left-too-many-children-hungry-in-america/>
2. Karpman, M., Zuckerman, S., Gonzalez, D., & Kenney, G. (2020, April 28). *The COVID-19 pandemic is straining families' abilities to afford basic needs*. <https://www.urban.org/research/publication/covid-19-pandemic-straining-families-abilities-afford-basic-needs>
3. Heflin, C., Sandberg, J., & Rafail, P. (2009). The structure of material hardship in US households: An examination of the coherence behind common measures of well-being. *Social Problems*, 56(4), 746-764.
4. Iceland, J., & Bauman, K.J. (2007). Income poverty and material hardship: How strong is the association? *The Journal of Socio-Economics*, 36(3), 376-396.
5. Yoshikawa, H., Aber, J. L., & Beardslee, W. R. (2012). The effects of poverty on the mental, emotional, and behavioral health of children and youth: Implications for prevention. *American Psychologist*, 67(4), 272-284.
6. McCarthy, B., Carter, A., Jansson, M., Benoit, C., & Finnigan, R. (2018). Poverty, material hardship, and mental health among workers in three front-line service occupations. *Journal of Poverty*, 22(4), 334-354.
7. Burgard, S. A., Ailshire, J. A., & Kalousova, L. (2013). The Great Recession and health: People, populations, and disparities. *The ANNALS of the American Academy of Political and Social Science*, 650(1), 194-213.
8. Schenck-Fontaine, A., & Panico, L. (2019). Many kinds of poverty: Three dimensions of economic hardship, their combinations, and children's behavior problems. *Demography*, 56(6), 2279-2035.
9. Spiller, H., Ackerman, J., Spiller, N., & Casavant, M. (2019). Sex- and age-specific increases in suicide attempts by self-poisoning in the United States among young and young adults from 2000 to 2018. *The Journal of Pediatrics*, 210, 201-208.
10. Ribeiro, J., Pease, J., Gutierrez, P., Silva, C., Bernert, R., Rudd, MD., & Joiner, T. (2012). Sleep problems outperform depression and hopelessness as cross-sectional and longitudinal predictors of suicidal ideation and behavior in young adults in the military. *Journal of Affective Disorders*, 136(3), 743-750.
11. Hernandez, D. (2016). Understanding 'energy insecurity' and why it matters to health. *Social Science & Medicine*, 167, 1-10.
12. Sun, W., Li, D., Zhang, W., Bao, Z., & Wang, Y. (2015). Family material hardship and Chinese adolescents' problem behaviors: A moderated mediation analysis. *PLoS One*, 10(5).
13. Baum, A., Garofalo, J., & Yali, A.M. (2006). Socioeconomic status and chronic stress: Does stress account for SES effects on health? *Annals of the New York Academy of Sciences*, 896(1), 131-144.

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