

# UNTOLD STORIES

**Young Adult & Racial  
Dimensions of COVID-19**

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## Disclaimer

The points of view, analyses, interpretations, and opinions expressed here are solely those of the authors and do not necessarily reflect the position of the project's funders.

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# EXECUTIVE SUMMARY

The COVID-19 pandemic has resulted in devastating health, social, and economic effects across the globe. Its full consequences will be felt for years to come. During the first 12 months of the pandemic, the news media focused on morbidity and mortality that disproportionately affected older adults, especially among Black, Indigenous, or people of color (BIPOC). The current study illuminates previously untold stories of the pandemic among young people. We focus particularly on food and housing insecurity, mental health, and the racial dimensions of those adversities. We do so by analyzing a large, nationally representative dataset available through the U.S. Census Bureau’s Household Pulse Survey (HPS), which has collected data over the course of the pandemic.

Young adults reported alarming levels of food and housing insecurity during the pandemic, with the greatest hardships experienced by Black and Hispanic young people. We estimate that 4.9 million young adults ages 18–25 have had too little to eat at a given time during pandemic, on average. Approximately 3.8 million young adults had little to no confidence in their (or their household’s) ability to pay the next month’s rent; about 1.3 million had no confidence. More than 1 in 4 (26%) Black young adults reported food insecurity—more than twice the rate of their White peers (12%). About 1 in 7 young adults living in single adult renting households, and about 1 in 4 Black young adults in those situations, reported being behind on their rent. Among respondents in single adult renting households, Hispanic young adults were about twice as likely, and Black young adults almost three times as likely, as White young adults to have little or no confidence in their ability to pay next month’s rent.

Young people reported very concerning levels of psychosocial challenge. More than half (54%) of young adults reported symptoms indicative of anxiety or depression disorders during the pandemic. Rates of mental health difficulties among young adults significantly exceeded those of any other adult age group.

In our research, we observed racialized patterns in food and housing insecurity and characteristics associated with differing probabilities that young adults report these adversities. We contextualize these findings and conclude with the following recommendations:



# INTRODUCTION

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## **COVID-19 and Its Untold Stories**

As of June 1<sup>st</sup>, 2021—about 15 months since the United States went into lockdown—there have been over 33 million confirmed cases of COVID-19 nationwide and at least 591,000 COVID related deaths (Centers for Disease Control and Prevention, 2021a). Even as vaccines reach more Americans every day, communities across the country continue to face myriad health, economic, and social effects of this unprecedented crisis.

Ample evidence underscores that the effects of the pandemic, and its subsequent strains on the economy, have exacerbated preexisting health and socioeconomic inequalities. The economic recession, which began in February 2020, created historic unemployment highs. However, for many individuals and households, the recession also put in jeopardy their ability to secure their basic needs and cope with a shock as extensive and prolonged as COVID-19.

Certain alarming trends related to COVID-19 have been publicly elevated by researchers, the media, and policymakers. First, much attention has been paid to the fact that older age groups have experienced by far the highest rates of COVID-related death and significant ailments. As of February 2021, 81% of all COVID-related deaths in the U.S. occurred among people aged 65 and older. On one extreme, seniors ages 85 years and older have had a COVID-related death rate near 2,214 per 100,000. On the other extreme, youth and young adults, aged 15–24, have had a COVID-related death rate of approximately 1.5 per 100,000 (Centers for Disease Control and Prevention, 2021b).

Second, the public narrative on COVID-19 has increasingly acknowledged the extensive racial health disparities in COVID-related death and disease. For example, The COVID Tracking Project has included a COVID Racial Data Tracker to analyze and draw attention to racial disparities in COVID-related cases and deaths across the country (The COVID Tracking Project, 2021). Their analysis reveals disproportionately high death rates per 100,000 among Black (178), American Indian or Alaska Native (172), and Hispanic or Latinx (154) people compared to White people (124) as of March 2021. These disparities did not emerge by chance. Analysis of national health data showed that Black and American Indian people, and those living in low-income households, are significantly more likely to have conditions associated with increased risk of illness from COVID-19 compared to those who identify as White or live in higher-income households (Raifman & Raifman, 2020).

Comparatively little attention has been paid in research and public discourse to the unique experiences, hardships, and inequities among young people amidst the pandemic. This leaves policymakers blind to important data. Early analysis has suggested that, as we look beyond the direct physical health consequences of COVID-19 to the broader social, economic, and mental health implications, young adults face a much more pronounced set of issues requiring urgent policy action (Blustein et al., 2020; Cohen & Bosk, 2020; Power et al., 2020; Tamesberger & Bacher, 2020).

## Rationale for Studying Young Adults and Racial Disparities

According to the National Bureau of Economic Research (NBER, 2021), the COVID-19 recession began in February of 2020. By April of 2020, the unemployment rate for individuals ages 20 to 24 reached a peak of 26%, over three times higher than the rate in January (U.S. Bureau of Labor Statistics, 2021). Young adults ages 18–24 experienced a substantially larger increase in unemployment after the onset of the pandemic than did older adults ages 25–54 (Inanc, 2020). While all racial and ethnic groups of young people faced higher unemployment rates after the pandemic, during the summer of 2020, the unemployment rate among White young adults declined while continuing to grow for Hispanic, Black, and Asian young adults (Inanc, 2020).

These precarious conditions place young people, especially those who are Black, Indigenous, or people of color (BIPOC), at risk for experiencing increased hardship when meeting their basic needs, such as housing and food. Even before the pandemic, repeated surveys have shown a rising trend of young adults living with their parents since the 1980s, due to the housing costs rising while incomes have been stagnant (Fry et al. 2020). Yet, during the first several months of the pandemic, the Pew Research Center found that, for the first time since the Great Depression, the share of 18- to 29-year-olds living with their parents had become a majority (52%; Fry et al., 2020). Between February and July 2020, 2.6 million young adults moved back in with their parents, mostly driven by college campus closures and job losses.

For many young people, however, parents do not or cannot provide a consistent source of safe and stable housing. Examples of youth and young adult populations commonly unable to rely on parent households for housing security in these difficult times include those who have run away or been kicked out, spent time in foster care, identify as LGBTQ+, do not have parents residing in the U.S. (because of immigration or refugee situations), or come from low-income or otherwise housing-insecure households. In the context of a pandemic, certain households may also be less willing or able to have young people live with them because household members, due to older age or preexisting conditions, fear greater health risks associated with contracting COVID-19 (Gale & Halligan, 2020).

The Centers for Disease Control's (CDC) eviction moratorium, currently extended through June 30, 2021, temporarily prevents many people experiencing housing insecurity from becoming homeless. But the moratorium also has limitations. For example, it does not preclude landlords from moving forward with pre-eviction proceedings, it does not prevent landlords from evicting tenants for reasons not formally based on the nonpayment of rent, and it does not prevent the "informal evictions" of young people from households where they do not hold a lease. Young people can face especially high risk for informal evictions from housing situations they rely on, such as parental housing or couch surfing arrangements.

We know from decades of research that youth and young adulthood represent key developmental windows in the lifecycle (Roberts & Davis, 2016; Taber-Thomas & Pérez-Edgar, 2015; Tanner & Arnett, 2011). Today's young adults have experienced an unprecedented developmental disruption in the form of COVID-19. This reality further underscores the importance of understanding young people's needs and experiences so that we, as a nation, can respond quickly and boldly to bolster their resilience. Without adequate support, food and housing insecurity during young adulthood can have deleterious effects on young people's short- and long-term well-being and transitions to positive, healthy

adulthood. Relatedly, racial disparities in food and housing insecurity during young adulthood have serious implications for deepening social and health disparities.

Food insecurity is associated with a range of poor health outcomes across the lifespan (Gundersen & Ziliak, 2015; Lee et al., 2012). Studies of young adults and college students have shown relationships between food insecurity and a range of negative outcomes, including less sleep, poorer mental health, less nutritious diets, and lower academic achievement (Bruening et al., 2018; Martinez et al., 2019; Nagata et al., 2019; Camelo & Elliott, 2019).

Housing insecurity is associated with poorer physical and mental health, worse access to primary and preventative care, stress, increased risk for child maltreatment and neglect (mediated through parental stress), and a range of poor developmental outcomes among children and youth (Martin et al., 2019; Stahre et al., 2015; Warren & Font, 2015). Furthermore, housing insecurity puts people at risk for homelessness, with even more severe implications for young people's short- and long-term outcomes. Homelessness is associated with an increased risk of exposure to violence, victimization, drug use, and trafficking; mental health problems; incarceration; and early death (U.S. Interagency Council on Homelessness, 2018; Metraux, Roman, & Cho, 2007; Perry & Craig, 2015; Morrison, 2009). Research additionally demonstrates that homelessness leads to lower labor productivity, which in turn contributes to "homelessness traps," as income plays a critical role in individuals' housing security (Glomm & John, 2002).

### **Pre-Pandemic Food & Housing Insecurity**

In this study, we examine young adults' experiences with, and racial disparities in, food and housing insecurity during the pandemic. We expected that the circumstances of the pandemic have exacerbated and amplified young people's struggles with meeting basic needs, but pervasive adversities and racial disparities among young adults with meeting basic needs predated the pandemic. During 2016–17, as part of its national Voices of Youth Count research initiative, Chapin Hall conducted the first prevalence study of youth and young adult homelessness in the U.S. The study found that 1 in 30 adolescents ages 13–17, and 1 in 10 young adults ages 18–25, experienced some form of homelessness during a 12-month period (Morton et al., 2018). The results revealed not only alarming rates of homelessness but also that Black, Indigenous, and Latinx young people faced significantly higher rates of homelessness than their White peers (Morton et al., 2019). Youth of color who also identified as LGBTQ+, were pregnant or parenting, or did not complete high school had even higher rates of homelessness, underscoring the importance of intersectionality in understanding young people's risk for homelessness.

Similarly, other research prior to the pandemic found that 1 in 10 U.S. undergraduates experienced homelessness or were at risk for homelessness, and that 45% of college students experience some form of housing insecurity, including problems related to housing unaffordability, instability, or homelessness (Broton, 2020). Another national study, the #RealCollege Survey, had 86,000 student respondents from 2- and 4-year institutions and found that 45% were food insecure in the prior 30 days, 56% were housing insecure in the previous year, and 17% experienced homelessness in the previous year (Goldrick-Rab et al., 2019). Like the Voices of Youth Count study, the #RealCollege Survey showed significantly higher rates of food and housing insecurity and homelessness among Black, Indigenous, and Latinx students compared to White students.

## Examining Simple Metrics of Complex Issues

This study involves analysis of a large, publicly available dataset with a focus on young adults' experiences with housing and food insecurity and mental health amidst the pandemic. Importantly, all three of these concepts—housing insecurity, food insecurity, and mental health—represent multifaceted constructs that are only partially captured through most brief, multitopic survey instruments, including the U.S. Census Bureau's Household Pulse Survey (HPS) that we leveraged for this study.

Drawing on international literature and policy frameworks, Cox and colleagues (2019) defined housing insecurity to include homelessness and limited or uncertain availability of, and access to, stable, safe, adequate, and affordable housing *and* neighborhoods. This definition implies multiple dimensions of housing insecurity and multifaceted measurement. When applying a multidimensional measure of housing insecurity, Cox and colleagues (2017) found that single adult, poor, Black, and Hispanic households face the most severe forms of housing insecurity.

Moreover, with young people, housing insecurity can manifest in unique ways that escalate into running away or being asked to leave or kicked out of housing, even if the rest of their household has housing security (Thompson et al., 2010; Rice & Winetrobe, 2018; Curry et al., 2017). This type of youth-specific housing insecurity occurs, for example, if youth feel unsafe or unsupported in their housing, are discriminated against based on sexual orientation or gender identity, run away from foster homes, or if they are otherwise no longer welcomed by other members of the household (Samuels et al., 2019). In one study of youth experiencing homelessness surveyed in drop-in centers, youth much more commonly cited interpersonal factors as causes of their homelessness, such as being kicked out of home (42%), leaving home (33%), and conflict with parents (26%). Youth cited more directly material factors, such as being evicted (16%) or financial problems (11%) much less frequently (Rice & Winetrobe, 2018).

In the analysis described in this report, because of the limited nature of the data available, we examine young adult housing insecurity primarily related to affordability—that is, the degree of respondents' confidence in their or their households' ability to pay next month's rent or mortgage. Yet, this only provides insight into one facet of a multidimensional concept, and it provides a particularly narrow window into the types of housing insecurity confronted by youth and young adults. We will revisit this in the report's discussion and recommendations.

Food insecurity has likewise involved different interpretations, which have, in different forms, included food availability, access to food, and nutritional quality of food. These interpretations have focused on both households and individuals (Pinstrop-Andersen, 2009). The brief food insecurity measure included in the HPS gauges access to food—frequency of not having enough to eat, and not having enough of the kinds of food the respondent or their household wanted to eat. As such, we gain a simple snapshot of one dimension of young people's food insecurity. However, we lack detailed information on young people's individual food insecurity (especially for young people who live in households with others), and about the availability and nutritional quality of food they eat.

Finally, we examined mental health experiences of young people during the pandemic. The World Health Organization (WHO) defines mental health as "a state of well-being in which an individual



realizes [their] own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to [their] community.” Definitions set forth by the WHO and others emphasize that mental health involves positive aspects of well-being and functioning, not just the absence of mental illness (Westerhof & Keyes, 2010). The HPS does not capture the full spectrum of mental health from languishing to thriving, as Keyes (2005) has characterized the concept. Rather, it includes two very brief validated scales designed to detect symptoms associated with depression and anxiety. Analyzing data from these measures usefully allows for gauging at a high level the extent to which young people may be suffering from common mental health difficulties and how those difficulties relate to food and housing insecurity. But the data do not provide a full picture of the state of young people’s mental health.

Anxiety and depression are highly associated (Beuke et al., 2003). Anxiety disorders and major depression also tend to emerge between preadolescence and young adulthood, with anxiety disorders typically arising earlier and amplifying the severity of depression and other disorders (Kalin, 2020). This underscores the importance of detecting, preventing, and treating anxiety and depression during youth and young adulthood.

### **Study Objectives**

Through this study, we examine how different populations of young people face different implications of the pandemic’s wide-ranging toll. The study’s research questions included the following:

1. To what extent have young adults faced **food and housing insecurity** during the pandemic, and how have those experiences varied by race and ethnicity?
2. What **factors** are associated with young adult housing insecurity and help explain racial disparities?
3. To what extent have young adults faced **mental health** difficulties during the pandemic, and how have those experiences varied by race and ethnicity?

# METHOD

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## Data

We analyzed data collected by the U.S. Census Bureau's Household Pulse Survey (HPS). The HPS is an approximately 20-minute online survey that recruits participants using a probability-based sample and email and text message invitations. The data are representative at national and state levels and for the 15 largest U.S. metropolitan areas. Multiple federal agencies contributed to the survey's contents. The HPS was designed for quick field deployment to capture information on respondent demographics, employment, food security, health, housing, education, financial well-being, and spending behaviors over the course of the pandemic.

We primarily analyzed data collected during Phases 2 and 3 of the survey, which comprised 775,788 respondents to nine survey rounds conducted every two weeks from October 28, 2020 through December 21, 2020 (when we stopped pulling data for analysis). The Census Bureau made significant questionnaire and sampling changes<sup>1</sup> in the transition from Phase 1 to Phases 2 and 3, so pooling data from the first phase with subsequent phases introduced too many problems for consistency and translation. In rare instances, and for specific reasons (such as examining trends for certain measures over time), we use data spanning all 21 survey weeks<sup>2</sup> and three phases of the HPS from its first administration on April 23, 2020 up to December 21, 2020. These data include a total of 1,864,102 observations.<sup>3</sup> Each phase involved changes to the survey instrument, so we could not aggregate or compare some variables across phases. Complete instruments are publicly available on the U.S. Census Bureau's Household Pulse Survey website.<sup>4</sup>

The HPS involved an online survey with high levels of nonresponse, which varied over the course of data collection. The Census Bureau published a nonresponse bias report for the HPS data collected during 2020, which highlighted potential sources of error, including both coverage and nonresponse (Peterson et al., 2021). In Appendix A, we report HPS sample characteristics compared to the U.S. population, and we find that the unweighted HPS sample underrepresents males, young adults, racial and ethnic minorities, and people with lower levels of educational attainment. Despite its limitations, the HPS is the largest and most comprehensive source of representative data available capturing experiences of U.S. households over the course of the pandemic.

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<sup>1</sup> During the first phase, the HPS was administered weekly and to the same sample for up to 3 weeks. During the second and third phases, the HPS was administered every 2 weeks to an independent cross-sectional sample (the Census Bureau still refers to each survey round as a "week," and we follow that practice).

<sup>2</sup> These are fewer than the number of actual weeks during the data collection period because the HPS collected data during phases 2 and 3 on an approximately biweekly basis but still referred to each data collection round as a survey week.

<sup>3</sup> During Phase 1, the HPS produced weekly estimates where respondents from one week were included in the following week sample for up to 3 weeks. Phases 2 and 3 involved 2-week data collection periods where each sample was independent of the previous week (Peterson et al., 2021). As such, given that Phase 1 included some repeated observations of the same individuals, the term "observations" does not equal the sample size of individuals.

<sup>4</sup> Available at: <https://www.census.gov/programs-surveys/household-pulse-survey/technical-documentation.html>.

The main constructs measured by the HPS and on which we focus our analysis include food insecurity, housing insecurity, and mental health. We provide detailed information on the specific items we used and how we operationalized responses in Appendix A. There is little validity or reliability evidence available through the Census Bureau or extant literature on these brief, self-report food or housing security measures. However, Larrimore and Troland (2020) used data from two survey rounds during the first phase of the HPS (weeks 5 [May 28–June 2] and 6 [June 4–9]) to analyze the extent to which respondents' answers to the question on confidence in ability to pay next month's rent in week 5 predicted having paid rent by week 6. Of renter households who said in week 5 they had "no confidence" that they would be able to pay next month's rent, about 36% reported the following week that they had paid their June rent. Among renters expressing "slight confidence" in week 5, about 70% were able to pay rent.

These findings indicate that using the "no confidence" only response option provides estimates of more immediately precarious housing situations. Most people with "slight confidence" appear to manage to cobble enough resources to get by, at least in the very short term. This might include drawing on tenuous resources, such as loans, financial help from family or friends, or unstable work income. As noted by Schuetz (2020), that might get the respondents through the next month's rent, but eventually those resources run out and debts become due. Thus, these individuals can still face housing insecurity, if on a less immediate basis. As such, we present estimates of housing insecurity that include both "no confidence" and "no or only slight confidence" responses in this report. However, there is insufficient evidence to know precisely what share of young adults reporting either level of housing insecurity based on this measure do in fact end up experiencing homelessness. Additionally, as described in the introduction, this measure does not capture other forms of housing insecurity that may especially apply to youth and young adults (for example, not being welcome or feeling safe to stay in a specific living arrangement with others, even when the household can afford to pay rent/mortgage).

For mental health, we used four items in the HPS comprising validated scales tapping anxiety (Generalized Anxiety Disorder 2-item [GAD-2]) and depression (Patient Health Questionnaire-2 [PHQ-2]). The PHQ-2 and GAD-2 are very brief, validated screening scales for symptoms of depression and anxiety disorders, respectively, and have both shown sensitivity to change (Kroenke et al., 2003; Kroenke et al., 2007; Löwe et al., 2005; Staples et al., 2019).

The Census Bureau deidentifies HPS data and makes them publicly available. However, the publicly released dataset suppresses fields that would be of value to this study. That is, to protect the confidentiality of smaller size individuals and communities, the Census Bureau's Disclosure Review Board does not release some information widely. Information not released includes small population racial identities, such as American Indian or Alaska Native, and small area spatial information (such as zip codes), which we would have liked to use for creating a rural/urban classification variable and for linking HPS data to other spatial data for richer analyses. With additional time and resources for potential future analyses, we may be able to pursue these data fields through the Census Bureau's applications and procedures.

## Analysis

As mentioned above, we primarily analyzed pooled data from HPS Phases 2 and 3 because of greater uniformity in sampling and survey questions across these phases and significant variations from Phase 1. For each table and figure, we note the survey weeks and phases used. The Census Bureau released these data with person- and household-level weights. To allow our results to be nationally representative, we rely on person-level weights in our estimations unless otherwise specified.<sup>5</sup> Below we describe our analytic approaches in response to our three overall research questions.

This study received a non-human subjects research determination from the University of Chicago Social Service Administration and Chapin Hall Institutional Review Board (IRB20-2166).

### ***Research question 1: To what extent have young adults faced food and housing insecurity during the pandemic, and how have those experiences varied by race and ethnicity?***

We produced population-weighted disaggregated estimates for food and housing insecurity by racial/ethnic and age groups. For food insecurity, the HPS asks the respondent about the food eaten in their household in the last 7 days, and a similar question asks about the food situation in the household prior to March 30, 2020. Both include the following as response options: “enough of the kinds of food (I/we) wanted to eat”; “enough, but not always the kinds of food (I/we) wanted to eat”; “sometimes not enough to eat”; and “often not enough to eat.” For the analysis, we operationalized “often not enough to eat” and “sometimes not enough to eat” as food insecure.

For housing insecurity, we analyzed two types of measures. The first involved two questions asking whether the household is “currently caught up on rent/mortgage payments.” The second involved one question asking about the respondent’s level of confidence that they or their household “will be able to pay your next rent or mortgage payment on time.” For the second question, we report housing insecurity estimates in two ways: (1) no confidence in ability to pay next month’s rent/mortgage (i.e., including only the most severe housing insecurity response) and (2) no or only slight confidence in ability to pay next month’s rent/mortgage (i.e., also including reports of lower severity housing insecurity in the form of “slight confidence”).

We also present summary statistics for a measure added into Phases 2 and 3 of the survey. The measure asked, “How likely is it that your household will have to leave this home or apartment within the next two months because of eviction.” However, given the eviction moratoriums, we determined that it would be difficult to interpret results from this question and so limited our use of it.

### ***Research question 2: What factors are associated with young adult housing insecurity and help explain racial disparities?***

We used ordinary least squares (OLS) regression models, and probit models for robustness, to identify factors associated with an increased probability of young adult housing insecurity (reporting no confidence in ability to pay next rent or mortgage). The full range of demographic characteristics and experiences used as independent variables in the multivariate regression model is provided in Appendix B. We used a  $p$ -value of .05 as a threshold for determining statistically significant correlations. The data

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<sup>5</sup> As advised by the Census Bureau, we divided weights by the number of cycles pooled for each estimate.

do not enable us to determine whether certain factors *cause* housing insecurity. Our analyses are intended to shed light on what characteristics could be used to help identify young people at higher or lower risk and to explore factors that might help explain higher or lower risk and could provide direction for future research. We plan to report regression analyses for food insecurity in a separate forthcoming publication.

***Research question 3: To what extent have young adults faced mental health difficulties during the pandemic, and how have those experiences varied by race and ethnicity?***

We analyzed data from the GAD-2 for anxiety symptoms and PHQ-2 for depression symptoms to estimate the prevalence of mental health difficulties. Each asked questions about how often the respondent had been bothered by certain feelings, thoughts, or experiences over the last 7 days, with response options including 0="not at all," 1="several days," 2="more than half the days," and 3="nearly every day." Scores of 3 or more on either scale have been shown to be associated with diagnoses of generalized anxiety disorder and major depressive disorder for the GAD-2 and PHQ-2, respectively (Centers for Disease Control and Prevention, 2021c). We used these thresholds to estimate prevalence of symptoms indicative of generalized anxiety and major depression disorders. We produced population-weighted disaggregated estimates for food insecurity by racial/ethnic and age groups.

# FINDINGS

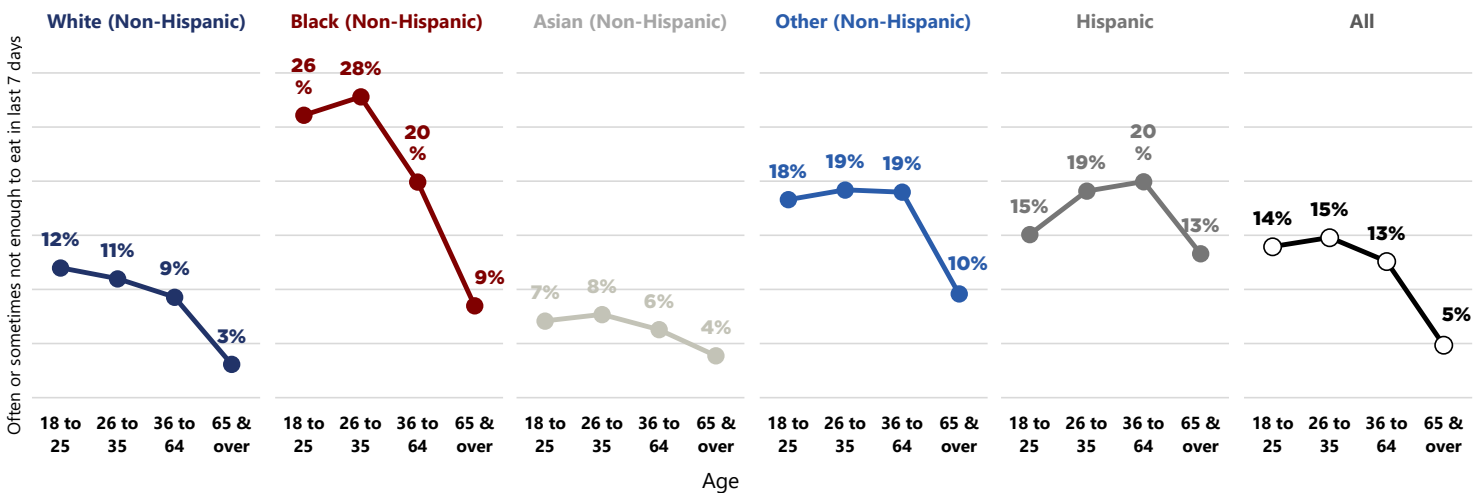
## Food & Housing Insecurity

**Research question 1: To what extent have young adults faced food and housing insecurity during the pandemic, and how have those experiences varied by race and ethnicity?**

Young adults ages 18–25 have faced especially high levels of food insecurity compared to older age groups. Black young adults experienced the most alarming levels of food insecurity, with 26% reporting often or sometimes not having enough to eat in the last 7 days during the pandemic (see Figure 1). That exceeds twice the rate of White young adults, and four times the rate of Asian young adults reporting food insecurity.

The HPS also asked respondents to recall how often they lacked enough to eat prior to the COVID-19 outbreak (before March 2020), which allows for estimating changes in reported food insecurity from before to after the start of the pandemic. Comparing pre- and post-COVID-19 reports of food insecurity, the results show that high levels of young adult food insecurity existed prior to the pandemic, as did racial disparities. In addition, the results show the prevalence of food insecurity increased similarly across observed racial and ethnic groups by approximately 3 to 4 percentage points (see Figure 2). Altogether, we estimate that, on average, approximately 4.9 million young adults have had too little to eat at a given time during the pandemic, 1.3 million more young adults than before the pandemic.<sup>6</sup>

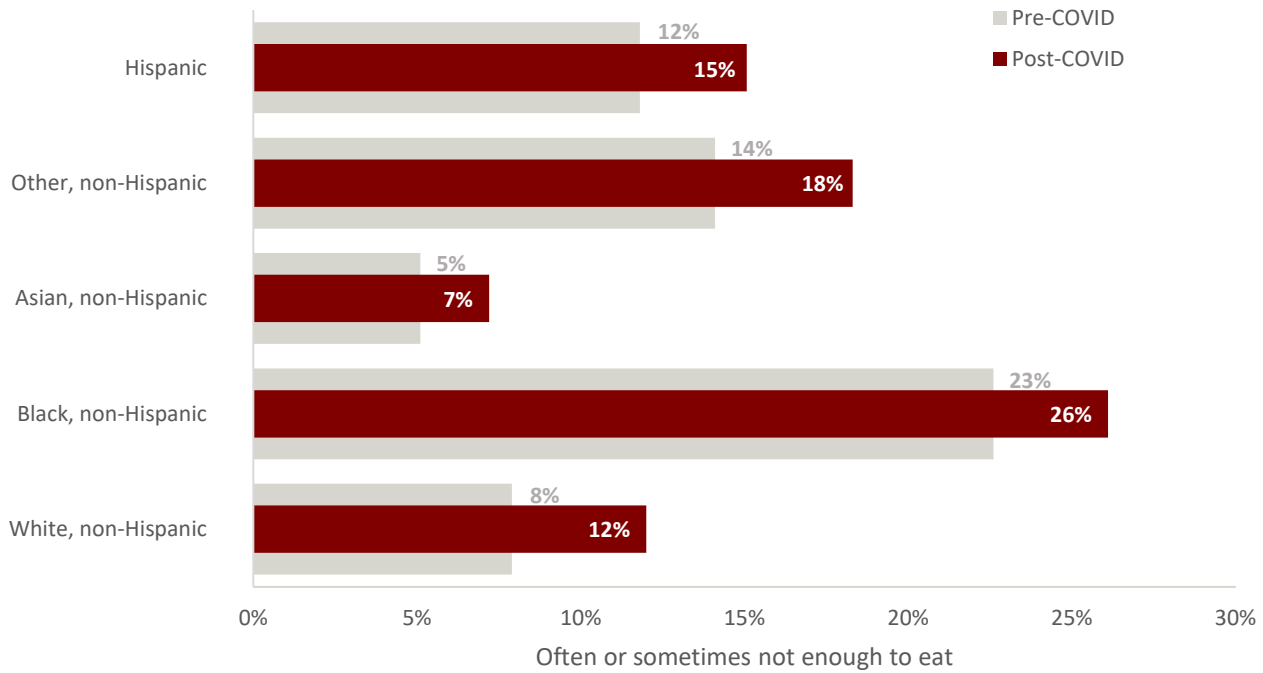
**Figure 1. BIPOC Young Adults Reported High Levels of Food Insecurity**



Note: Summary statistics are weighted using person level weights and Phases 2–3 (Oct. 28, 2020–Dec. 21, 2020).

<sup>6</sup> We calculate population estimates by applying prevalence rates produced from our analysis to the [Census Bureau’s 2019 population estimate](#) for the number of 18- to 25-year-olds in the U.S. population (34,758,265).

**Figure 2. All Populations of Young Adults Reported Increased Food Insecurity after the Pandemic**

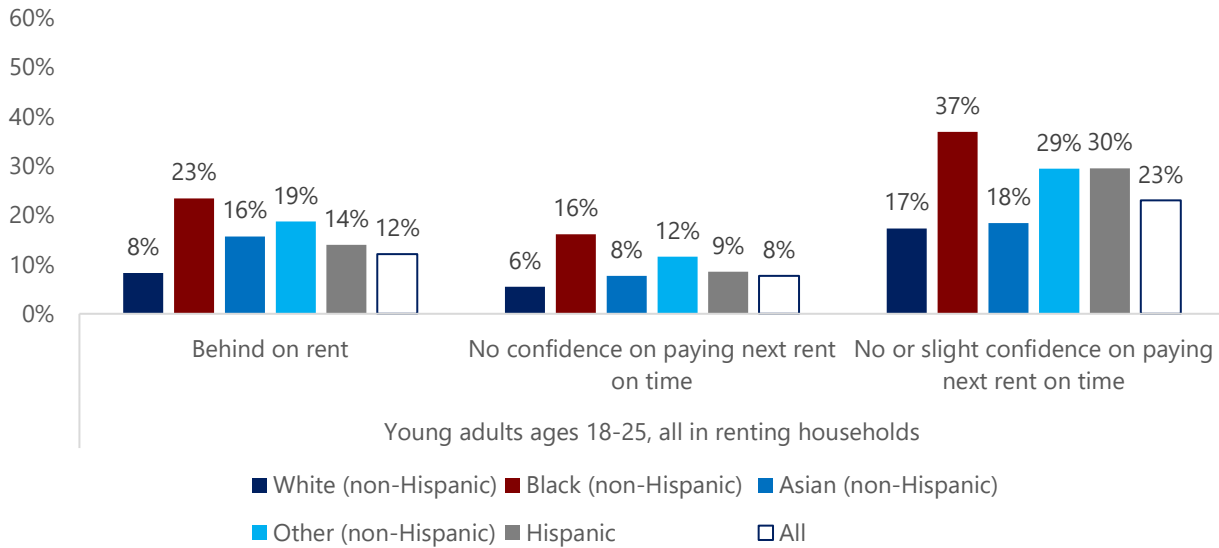


*Note: Summary statistics are weighted using person-level weights and Phases 2-3 (Oct. 28, 2020-Dec. 21, 2020).*

Irrespective of the measure, we find that BIPOC young adults, especially Black young people, faced exceptionally high levels of housing insecurity. Figure 3 presents estimates of housing insecurity for young adults living in renting households. Figure 4 provides estimates specifically for young adults who live on their own (in single adult households) to provide a better understanding of the situation among young people who cannot or do not live with their families. More than a quarter (28%) of young adults overall living in single adult renting households, and more than half (52%) of Black young adults, reported little or no confidence in their ability to pay next month's rent. About 1 in 7 young adults overall living in single adult renting households, and about 1 in 4 Black young adults, reported being behind on their rent.

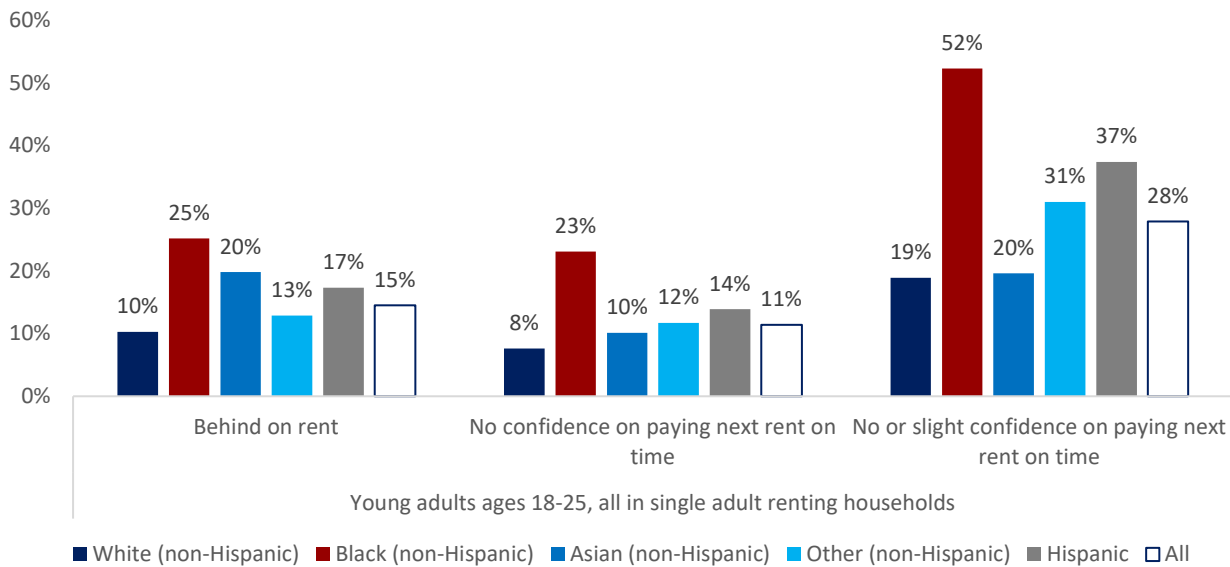
Altogether, we estimate that approximately 3.8 million young adults had only slight to no confidence in their (or their household's) ability to pay next month's rent at a given time from late-October through late-December 2020, on average; about 1.3 million of those had no confidence. Considering only young adults living in renting households, 3.8 million had only slight to no confidence in ability to pay next month's rent; 1.3 million had no confidence. Of all young adults surveyed during this period, 0.8% believed that facing an eviction or foreclosure within the next 2 months was very likely, translating to approximately 279,000 young adults.

**Figure 3. BIPOC Young Adults in Renting Households Face High Rates of Housing Insecurity**



Note: Summary statistics are weighted using person-level weights and Phases 2–3 (Oct. 28, 2020-Dec. 21, 2020).

**Figure 4. Black Young Adult Housing Insecurity is Most Severe among Single Adult Households**

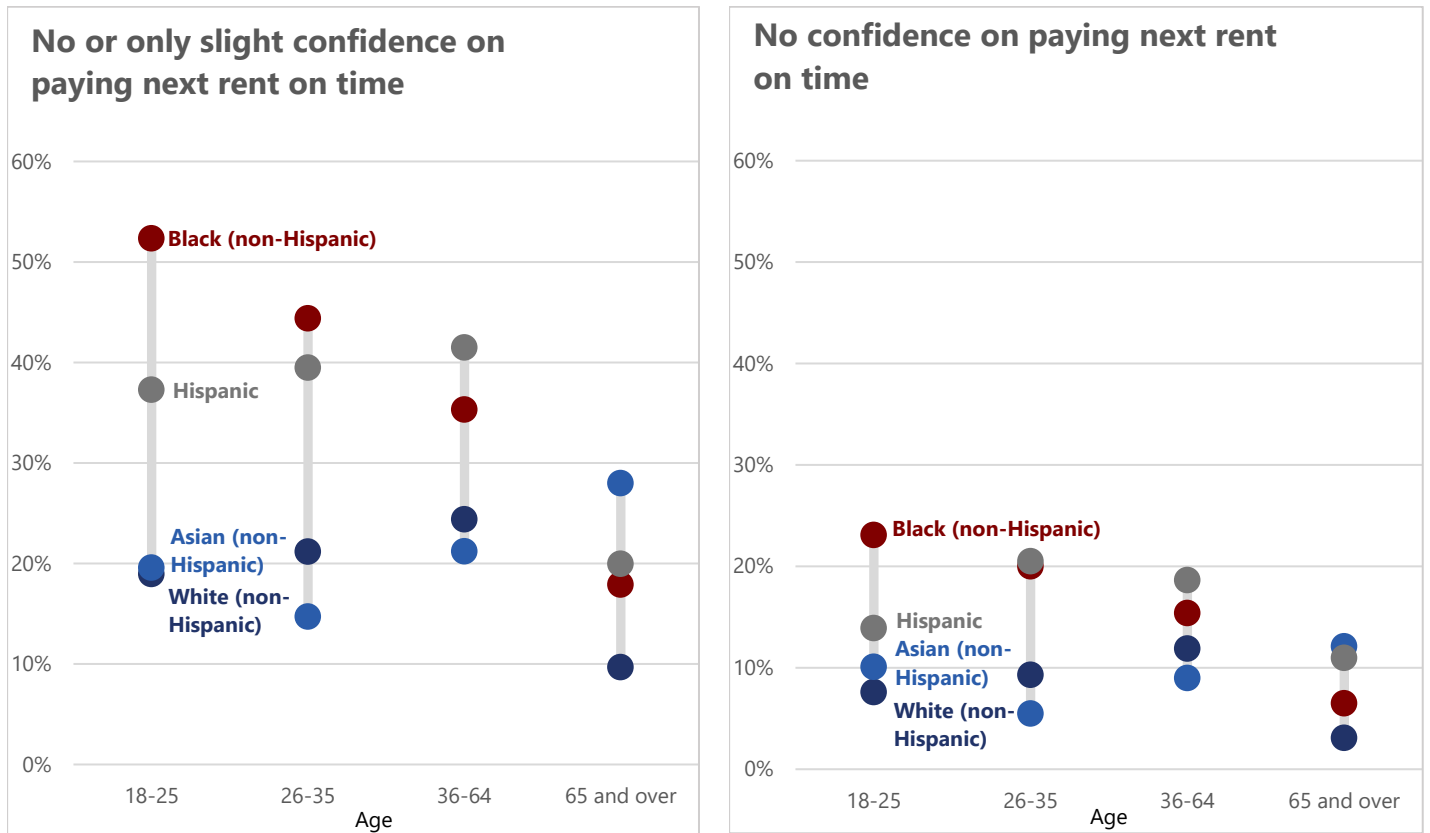


Note: Summary statistics are weighted using person level weights and Phases 2-3 (Oct. 28, 2020-Dec. 21, 2020).

In Figure 5, we compare housing insecurity across age groups and by race and ethnicity. In these graphs, we focus on single adult renting households to avoid comparing young adults who may be living with their families to older adults less likely to have that option. Black and Hispanic respondents reported significantly higher rates of having little or no confidence in their ability to pay the next rent or mortgage in comparison to White non-Hispanic respondents.



**Figure 5. Compared to Other Racial and Age Groups, Black Young Adults in Single Adult Households Reported the Least Confidence in Ability to Pay Next Month's Rent**

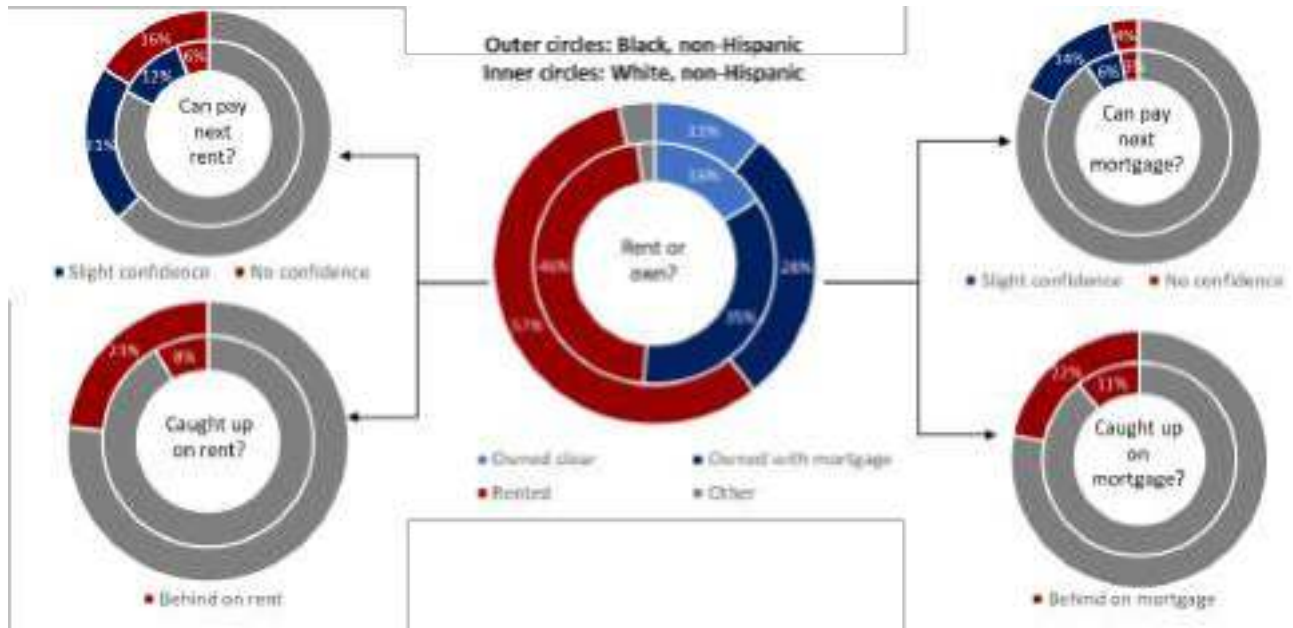


*Note: Summary statistics are weighted using person level weights and Phases 2-3 (Oct. 28, 2020–Dec. 21, 2020). These graphs include respondents in single adult renting households only.*

Black young adults experienced especially high levels of housing insecurity compared to other age groups and races. While the oldest age group (65 and over) consistently reported the lowest rates of housing insecurity, older adults (ages 36–64) faced similar or higher levels of housing insecurity compared to younger adults among Hispanic and White non-Hispanic respondents. Fifty-two percent of Black young adults living in renting single adult households reported little or no confidence in ability to pay next month's rent.

Figure 6 illustrates how Black young adults face disadvantages in every aspect of housing. Compared to White non-Hispanic young adults, Black young adults or their households were more likely to rent than own (35% of Black young adults versus 28% of White young adults reside in renting households), less likely to be caught up on their rent or mortgage, and less likely to have at least modest confidence in their (or their household's) ability to pay next month's rent or mortgage.

**Figure 6. In Every Aspect of Housing, Black Young Adults Face Disadvantages**



Note: This figure depicts summary statistics for young adults ages 18-25 based on HPS data from Phases 2-3 (Oct. 28, 2020-Dec. 21, 2020). Estimates are weighted using person level weights.

## Correlates of Housing Insecurity

**Research question 2: What factors are associated with young adult housing insecurity and help explain racial disparities?**

We analyzed the relationship between individual and household characteristics and young adults' experiences of housing insecurity. Figure 7 presents forest plots of characteristics associated with a higher or lower probability of housing insecurity. These results are based on multivariate linear probability models (LPM), and the point estimates (represented by the diamonds) reflect increased or decreased probabilities associated with a given characteristic *having controlled for* other variables in the model. We only present results for the characteristics with statistically significant point estimates.

Figure 7 and the statistics cited in this section present results from regression analyses of housing insecurity, operationalized as a young adult having no or only slight confidence in their (or their household's) ability to pay the next month's rent or mortgage. In Appendix B, we also report results using the more severe housing insecurity measure (no confidence only) as a dependent variable in a parallel regression for checking robustness. With only a few exceptions, the regression analyses resulted in a similar set of statistically significant covariates for both operationalizations of housing insecurity as the dependent variable.

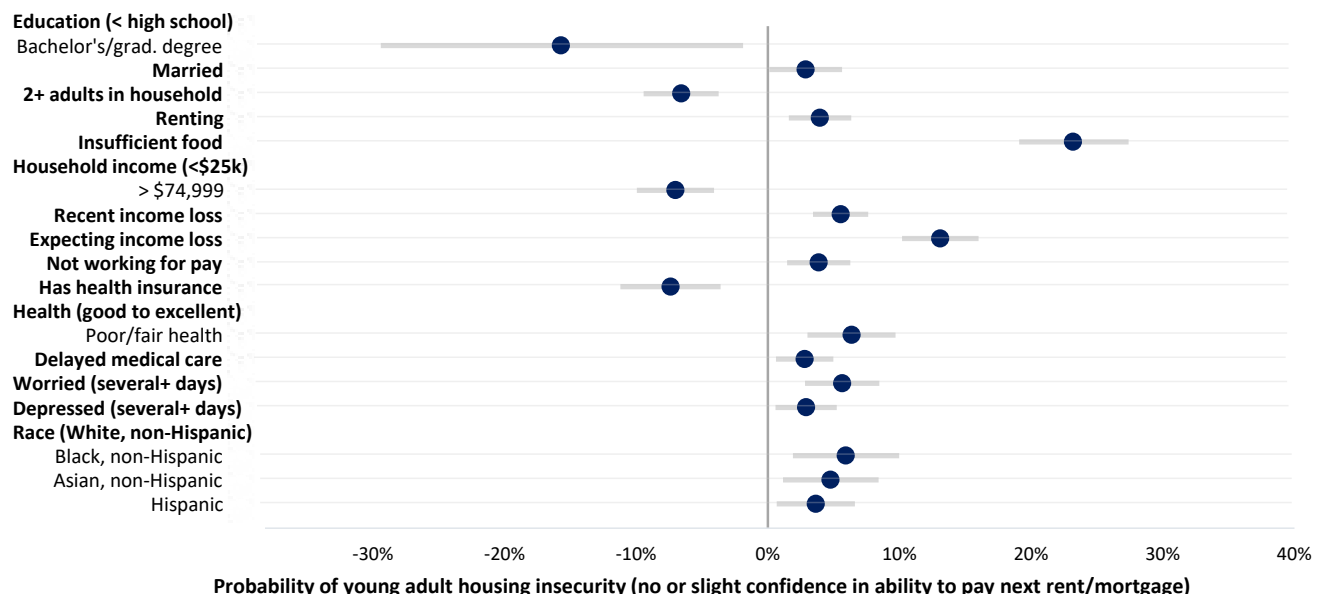
Having postsecondary levels of education, and especially graduate levels of education, was associated with significantly lower probability of housing insecurity. Young adults with a bachelor's or graduate degree had a 16% lower probability of reporting housing insecurity compared to peers who had not completed a high school education. At the same time, 95% confidence intervals around these estimates were large, implying that postsecondary education was more protective for some than others. Because we focus on young adults, it is also possible that the economic benefits of postsecondary education had

yet to materialize enough to consistently protect young people from pandemic-related shocks. As expected, economic vulnerabilities such as employment income loss (since March 13, 2020), expecting an employment income loss (in the next 4 weeks), being out of work, and lower income were all associated with higher probability of housing insecurity. Conversely, higher household income was associated with a much lower probability of housing insecurity.

Young adult tenants in renting households faced 3% higher probability of housing insecurity compared to peers living in households that owned the house or apartment in which they lived. The analyses further demonstrate a clear relationship between food and housing insecurity. In fact, reporting often or sometimes not having enough to eat was the single strongest correlate with housing insecurity (23% increased probability). Indeed, in descriptive analyses, we found significant overlap between food and housing insecurity. Approximately 40% of young adults reporting no or slight confidence in ability to pay next rent/mortgage, and about 59% of those reporting no confidence, indicated often or sometimes not having enough to eat in the past week.

The results also show relationships between higher frequency of worrying and depression symptoms and housing insecurity, underscoring the mental health toll associated with struggling to meet one’s basic needs. Reporting poor or only fair physical health was associated with higher probability of housing insecurity, while having health insurance was protective.

**Figure 7. Several Factors Correlate with Lower or Higher Risk for Young Adult Housing Insecurity**



*Note: This figure shows the results of multivariate linear probability models (LPM) estimating the relationship between individual and household characteristics and reporting housing insecurity. The diamonds represent the point estimates, and the dark lines represent the 95 percent confidence interval around those estimates. **Point estimates to the left of 0 represent lower probability of reporting food/housing insecurity, and those to the right of 0 represent higher probability.** The reference group for each estimate is in parentheses. For example, regarding education, we estimate the reduced probability of reporting housing insecurity associated with having a higher level of education relative to having completed less than a high school education (the reference group). These figures only present results for factors that had statistically significant results. The models present LPM point estimates having controlled for all other variables in the model. We provide a full list of variables included in Appendix B.*

Young adults who resided in a household with two or more adults were less likely to report housing insecurity. This likely underscores that young adults who can and do remain living with their parents or other adults through their young adult years face lower risk of housing insecurity than do peers who cannot or choose not to live with their parents or other adults. Unfortunately, the HPS did not clearly define “household” for the respondent, nor did it collect additional information on other adult members of the household. Thus, we do not know the relationship of the other adult household members to the young person.

The results indicate that, controlling for other factors, being married is associated with a higher probability of facing housing insecurity. This association suggests that other adult relationships comprise either family members or others that young adult respondents considered to be part of their household (for example, roommates or boyfriends/girlfriends). Given that over half of young adults lived with their parents during the pandemic (Fry et al., 2020), we expect that parental housing arrangements drive much of the correlation between multiple adults in the household and lower housing insecurity. Cost-saving apartment share arrangements with other adults could also lessen housing insecurity for many young adults.

Black or African American race was associated with higher probability of food and housing insecurity. This suggests that, while other factors in the model helped to explain some of the reasons that Black young people face greater risk, they also do not capture the full set of structurally racist circumstances that place Black young people at greater risk for food and housing insecurity. The same is true for Hispanic young people with respect to housing insecurity. Despite Asian young adults reporting relatively low rates of housing insecurity overall compared to White peers, when we control for other factors like education and income, Asian young adults face a higher risk for housing insecurity.

**Table 1. Considering Risk and Protective Factors for Housing Insecurity, BIPOC Young Adults Face Multiple Disadvantages**

	White (non- Hispanic)	Black (non- Hispanic)	Asian (non- Hispanic)	Other (non- Hispanic)	Hispanic
<b>Bachelor’s or graduate degree</b>	18%	10%	27%	12%	9%
<b>Household income &gt;\$74,999</b>	34%	17%	41%	32%	20%
<b>Loss of employment income (since March 13, 2020)</b>	52%	60%	55%	57%	62%
<b>Expected loss of employment income (next 4 weeks)</b>	21%	34%	28%	31%	36%
<b>Owns housing (with/without mortgage)</b>	51%	39%	65%	47%	49%
<b>Rents housing</b>	47%	63%	38%	52%	53%
<b>2+ adults in household</b>	95%	90%	95%	95%	96%
<b>Has health insurance</b>	90%	76%	89%	84%	77%

*Note: Summary statistics are weighted using person level weights and survey weeks 13 through 21.*

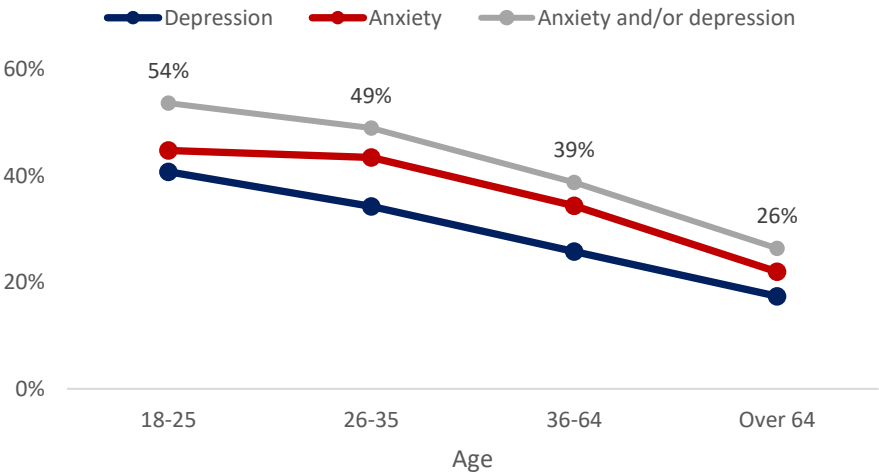
These statistics and figures, alongside the OLS and probit estimates available in Appendix B, can help explain the structural factors associated with BIPOC young people being at greater risk for housing insecurity. In Table 1, we present summary statistics for characteristics associated with a higher or lower probability of young adult food and housing insecurity by racial/ethnic groups available through HPS data. The results underscore the extent to which BIPOC young adults, especially those who identify as Black or Hispanic, face multifaceted structural disparities that expose them to higher risk for food and housing insecurity. Compared to White and Asian peers, Black and Hispanic young adults are much more likely to be in rented housing and to have had or expect a job loss. Conversely, Black and Hispanic young adults are much less likely to have a bachelor’s or graduate degree, have household income of at least \$75,000, live in owned housing, and have health insurance.

**Mental Health**

**Research question 3: To what extent have young adults faced mental health difficulties during the pandemic, and how have those difficulties varied by race and ethnicity?**

Our analysis surfaces a stark reality regarding mental health difficulties: most young people are struggling. More than half (54%) of young adults, ages 18-25, have reported symptoms indicative of anxiety or depression disorders during the pandemic. As shown in Figure 8, using GAD-2 and PHQ-2 scoring recommendations for estimating anxiety and depression, respectively (Centers for Disease Control and Prevention, 2021b), young adults reported higher rates of anxiety and depression than did older age groups. These rates suggest that the circumstances of the pandemic combined with other pressures of young adulthood are taking a particularly devastating toll on young people’s social-emotional well-being. Rates of mental health difficulties decline with age. During the pandemic, young adults, ages 18–25, have had more than twice the rates of symptoms of anxiety and depression disorders indicated by older adults ages 65 and over.

**Figure 8. Young Adults Reported Highest Rates of Mental Health Difficulties**

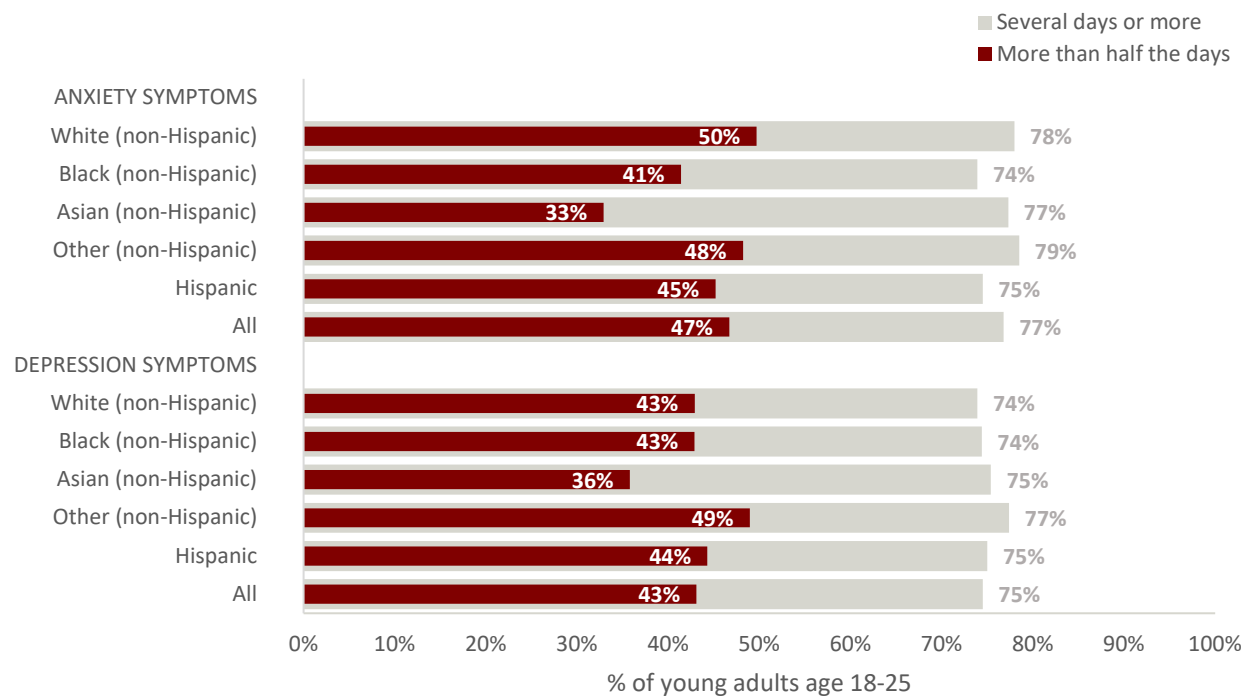


Note: Summary statistics are weighted using person-level weights and Phases 2–3 (Oct. 28, 2020–Dec. 21, 2020). This graph includes prevalence estimates of individuals recommended for clinical evaluation for anxiety or depression based on GAD-2 or PHQ-2 scores, respectively.

When analyzing the frequency of young adults reporting symptoms of anxiety and depression, we found that even larger shares of young people struggle through some degree of mental health difficulties (see Figure 9). Overall, 76% of young adults reported symptoms of anxiety, and 75% reported symptoms of depression, during several days or more of the last week. Nearly half (45%) of young adults had feelings of anxiety for more than half the week, and 42% had symptoms of depression at that frequency.

We did not observe the same patterns of racial disparities for mental health difficulties that we observed for food and housing insecurity. White and other (non-Black, -Asian, or -Hispanic) young adults had higher reported rates of anxiety and depression for half of the days or more during the last week than did Black, Asian, or Hispanic peers. (Rates of mental health difficulties were, nonetheless, very high across all racial/ethnic subgroups. However, across racial/ethnic groups, young women reported higher levels of mental health difficulties than did young men (see Figure 10).

**Figure 9. Reports of Mental Health Difficulties did not Follow the Same Racialized Patterns**



*Note: Summary statistics are weighted using person-level weights and Phases 2-3 (Oct. 28, 2020–Dec. 21, 2020). For this graph, we included respondents who reported experiencing symptoms of anxiety/depression for at least several/half the days in the last week in response to at least one of the two questions in each anxiety/depression scale.*

**Figure 10. Across Racial/ethnic Groups, Young Adult Women Reported More Mental Health Difficulties**

*Note: Summary statistics are weighted using person level weights and Phases 2-3 (Oct. 28, 2020–Dec. 21, 2020). This graph includes prevalence estimates of individuals recommended for clinical evaluation for anxiety or depression based on GAD-2 or PHQ-2 scores, respectively.*

# DISCUSSION

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## Overview

This study contributes to the policy dialogue related to bolstering resilience and racial equity during and after the pandemic by leveraging a large and unique and timely national dataset. We specifically examined the young adult and racial dimensions of material and mental health hardships amidst COVID-19. When we look beyond the death and disease implications of COVID-19 that disproportionately affect older age groups and tend to capture much of the public attention, we find social, economic, and psychological adversities faced by young people—particularly BIPOC young people—during a key developmental stage of their lives.

The statistics should prompt pause and lead to policy action. Our analyses based on HPS data indicate that 4.9 million young adults ages 18–25 have had too little to eat at a given time during pandemic, on average. Approximately 3.8 million had little to no confidence in their (or their household's) ability to pay the next month's rent; about 1.3 million had no confidence. More than 1 in 4 (26%) of Black young adults reported food insecurity—more than twice the rate of their White peers (12%). About 1 in 7 young adults living in single-adult renting households, and about 1 in 4 Black young adults in those situations, reported being behind on their rent. Among respondents in single-adult renting households, Hispanic young adults were about twice as likely, and Black young adults almost three times as likely, as White young adults to have little or no confidence in their ability to pay next month's rent.

High levels of food and housing insecurity among young adults, particularly among BIPOC young people, were clearly exacerbated by COVID-19. Yet, as both HPS data and previous research have shown, these hardships and deep disparities existed well before COVID-19; they stem from entrenched legacies of racist policies and practices.

The regression analyses made clear that hardships such as food insecurity, housing insecurity, and mental health difficulties are deeply intertwined. This finding underscores the need for a multidimensional policy approach to the intersecting challenges many young people face. We also found that economic factors, such as recent job loss and lower income, were strongly associated with housing insecurity. Race remained a statistically significant predictor of housing insecurity, even when controlling for other variables. This points to broader effects of structural racism than could be explained by the measured variables alone. We also showed marked racial disparities underlying each characteristic associated with lower or higher probability of food and housing insecurity, from educational attainment to household income, to job loss and access to health insurance, among others.

Young people during the pandemic reported concerning levels of mental health difficulties. More than half (54%) of young adults, ages 18–25, reported symptoms indicative of anxiety or depression disorders during the pandemic. Rates of mental health difficulties among young adults significantly exceeded those of any other adult age group. This is consistent with an emerging literature underscoring that the psychosocial effects of COVID-19 disproportionately affect young people (Nearchou, et al., 2020; Magson et al., 2021; Power et al., 2020). Researchers attribute this to the unique ways in which young people are affected by social isolation, changes to the delivery of therapeutic services, and a nearly complete dismantling of social institutions and routines that young people typically depend on—such as school, work, and training (Power et al., 2020).

Our finding that BIPOC young adults reported lower rates of mental health difficulties than White young adults diverges from findings from previous studies. Those studies, based on national data collected in the late-1990s, showed Black and Hispanic young adults reported higher rates of mental health difficulties than White peers (Mossakowski, 2008). Mental health difficulties are modestly associated with higher probability of food and housing insecurity (as shown in our regression analysis). Relative to other racial/ethnic groups, it appears that BIPOC young adults have higher levels of mental health resilience despite the significant material hardships they face. This is especially true given their somewhat lower—albeit still very high—rates of reported anxiety and depression. However, it is also possible that, at least with the measures used, BIPOC young people are more likely to underreport mental health difficulties. The extant literature provides support for both possibilities, indicating that ethnic identity appears to protect against anxiety in African Americans while stigma may decrease their willingness to report symptoms (Hopkins & Shook, 2017).

Although the HPS data did not capture detailed information about the young people, we know from the emerging literature on the implications of COVID-19 for youth that certain subpopulations face particularly acute risks for material and mental health hardships during these unprecedented times. They include, for example, LGBTQ+ youth (Cohen & Bosk, 2020; Fish et al., 2020), current and former foster youth (Ruff & Linville, 2021), and youth experiencing homelessness (Auerswald et al., 2020). We know that youth in foster care or experiencing homelessness (or both) are disproportionately BIPOC and that LGBTQ+ BIPOC youth face significantly greater adversities and material hardships due to compound discrimination and bias related to their intersectional characteristics and identities (Morton et al., 2018).

## Limitations

This study had several limitations, mainly related to gaps in the HPS survey contents and the public use data available. The HPS questionnaires did not collect information on several characteristics associated with higher levels of vulnerability among youth and young adults related, for example, to sexual orientation, gender identity, family circumstances, and systems involvement. The public use data also did not include variables that would allow for disaggregation by small population racial/ethnic groups, such as American Indian or Alaska Native populations, or by rural/urban location.

Although a small set of HPS questions allowed for high-level analysis of housing insecurity, the surveys lacked key information for estimating young people's access to safe and stable housing or experiences of homelessness amidst the pandemic. The HPS data enable limited analysis of some aspects of young people's housing security, but the data do not lend to analysis of young people's experiences of homelessness or housing instability. Relatedly, the questionnaires ask about respondents' levels of confidence in their or their household's ability to pay the next rent or mortgage, but they do not ask the respondent about their degree of confidence in their ability to remain in their housing irrespective of whether the household will be able to pay its next rent or mortgage. Given that large numbers of young people's housing arrangements rely on staying with parents, as well as couch surfing and doubled-up arrangements, this measurement gap represents an important omission for understanding the full extent of young people's housing insecurity (Fry et al., 2020; Morton et al., 2017). As such, the estimates of housing insecurity reported by this study likely represent significant underestimates because they do not capture common forms of housing insecurity young people face.



Furthermore, the HPS did not clearly define the meaning of “household” for respondents. This meaning can have particularly important implications for young adults who commonly live with their families or who live independently, but in apartments, houses, or other residential situations with other nonrelative adults (for example, with roommates, in apartment shares, or in college dormitories). This measurement obscurity makes it impossible for us to provide a nuanced understanding of the nature of young people’s housing arrangements when they report living in households with other adults. Given that more than 9 out of 10 young adults reported living in households with other adult household members, this information gap poses important challenges for interpretation. Additionally, because the Census Bureau administered the HPS through an online survey, the data could reflect biases related to access to technology and propensity to respond to an online survey. Indeed, the Census Bureau published a nonresponse bias report for the HPS data collected during 2020, which highlighted potential sources of error, including both coverage and nonresponse (Peterson et al., 2021).

Despite these limitations, the study provides timely and policy relevant insights into the unique experiences of young adults amidst COVID-19 based on a large-scale, nationally representative, repeated cross-sections survey.

## Implications & Recommendations

Our analyses reveal alarming levels of food and housing insecurity among young adults, especially BIPOC young people. These adversities have important implications for young people’s healthy development and positive transitions to adulthood. Food and housing insecurity place significant survival-related stressors and uncertainties on young people at a time when they should be able to focus on forming and pursuing aspirations, education and skills development, career pathways, family and friendships, and broader well-being. Without adequate investments in prevention, high rates of young adult housing insecurity also have the potential to lead to growing levels of young adult homelessness. Moreover, stark racial disparities in food and housing insecurity among young adults expose the potential for widening social and health disparities. These disparities could have generational consequences unless we take significant racial equity-focused policy actions.

Below, we summarize our findings. Given the urgent need to provide material and psychosocial support to young people during and beyond the pandemic, we recommend the following policy actions and research investments:

***FINDING 1:*** *Communities of color remain disadvantaged across multiple social, educational, and economic domains in our society. One effect of these legacies of systemic and structural racism is that BIPOC young people are unjustly penalized and experience alarming levels of food and housing insecurity.*

**RECOMMENDATION: Partner with and support BIPOC young people and BIPOC-led groups.**

Engage BIPOC young people with lived experience of housing and food insecurity and BIPOC-led groups to devise new policies. These should include both short-term policies that best meet BIPOC young people’s needs in these unprecedented times and long-term strategies to dismantle the deeply rooted racist structures and systems that produce such disparate outcomes (Efuribe et al., 2020). This can include the additional requirement of and investment in diverse youth advisory/action boards, with funding from federal projects focused on youth and young adult housing, food security, mental health, and well-being. The federal government could increase equity in power and resources by requiring that BIPOC young people with lived expertise and BIPOC community leaders have roles and influence in

selecting grantees of federal funding. Federal funding announcements could also serve as opportunities to require or (through scoring) incentivize applicants to collaborate meaningfully with BIPOC young people and BIPOC-led community organizations that would otherwise have difficulty competing for federal funding.

**FINDING 2.** *Approximately 3.8 million young adults had slight to no confidence in their (or their household's) ability to pay next month's rent at a given time during the pandemic; 1.3 million had no confidence. About 279,000 feared facing eviction or foreclosure in the next 2 months.*

**RECOMMENDATION: Prioritize youth and young adult homelessness prevention.** Young adults report alarming rates of housing insecurity. We need a robust national plan, with immediate and long-term policy actions, to prevent this insecurity from devolving into higher numbers of homeless young adults. Youth and young adults would benefit from a national agenda that prioritizes homelessness prevention across systems. The country should invest in demonstrations and evaluations to strengthen evidence and innovation on upstream prevention models that respond to their needs. We need policies and investments to improve identification of young people at risk for homelessness across multiple public systems (e.g., child welfare, behavioral health, education, juvenile and criminal justice). We need to offer resources and services to young people and their families to disrupt their pathways into homelessness as early as possible.

**FINDING 3:** *Millions of young adults—disproportionately BIPOC—face housing and food insecurity and need urgent support to meet their basic needs.*

**RECOMMENDATION: Expand and evaluate direct financial assistance and low-barrier housing resources for youth.** Significantly expand and evaluate substantial, ongoing (multiyear) *financial assistance* (for example, direct cash transfers/basic income) and *low-barrier housing resources* (such as housing vouchers, rental assistance, and supportive housing) combined with *youth-centered supportive services*, especially to populations of young people with the greatest levels of need and racial disparities (Morton et al., 2020; Morton & Bishop, 2020). These include youth and young adults experiencing homelessness, who have been in foster care, and young people who are disconnected from education and employment. Especially with new stimulus and rescue plan dollars, states and local jurisdictions have considerable opportunity and discretion to deploy federal, state, and local dollars in more flexible, youth-focused ways to improve outcomes and equity with and for young people.

Making current extensions of the Earned Income Tax Credit (EITC) to young adults under the American Rescue Plan Act permanent could further help ensure more young people have access to financial assistance to help meet their basic needs. The federal government could ensure that increases in housing vouchers and other housing resources provided through stimulus, recovery, and infrastructure policies include significant shares of resources for BIPOC youth and young adults. All youth and young adults experiencing housing insecurity should have access to housing vouchers and direct financial assistance. In collaboration with BIPOC young people with lived experience of food and housing insecurity and BIPOC-led groups, federal, state, and local governments should carefully examine the extent to which vouchers and other forms of assistance are equitably distributed and deployed in the population.

**FINDING 4:** *Young adults with a bachelor's or graduate degree had a 16% lower probability of reporting housing insecurity compared to peers who had not completed a high school education.*

**RECOMMENDATION: Ensure support for basic needs to and through postsecondary education.**

Many young people—particularly those disconnected from their families and with histories of homelessness, foster care, or incarceration—face significant barriers to financial aid and the support needed to access and complete postsecondary education. The U.S. Department of Education should implement recent changes to the Free Application for Federal Student Aid (FAFSA), with an intentional focus on BIPOC young people, including in required stakeholder focus groups and pilot testing. Congress should increase access to and support in higher education through policies such as designating higher education liaisons to help students navigate services, providing or arranging housing during breaks and throughout the academic year, and expanding students' eligibility for Supplemental Nutrition Assistance Program (SNAP).

***FINDING 5:** More than half (54%) of young adults reported symptoms indicative of depression or anxiety disorders.*

**RECOMMENDATION: Expand and evaluate virtual, culturally responsive mental health service delivery models.** Develop, deliver, and evaluate culturally appropriate telehealth and digital mental health services and opportunities for strengthening positive social supports tailored to youth and young adults. Services should leverage approaches and technologies they prefer, to foster young people's resilience and social-emotional well-being (Power et al., 2020). To ensure truly culturally appropriate service delivery models for BIPOC young people, we need greater investment in BIPOC-designed and BIPOC-led service delivery models.

***FINDING 6:** While providing critical insights, the HPS data and national data in general leave major knowledge gaps for fully understanding youth and young adult homelessness, housing insecurity, and basic needs.*

**RECOMMENDATION: Address critical young adult-related measurement issues in future administrations of the HPS and invest in replicable national data on youth and young adult homelessness and basic needs.** For future administrations of the HPS, improve measurement of the relationships of the respondents to their household members (family, partner, roommates, etc.). For more developmentally appropriate insights on young adult housing insecurity, add or nuance existing items to capture information on dimensions of housing insecurity at the individual level, not just household level. Also, capture information beyond ability to pay for housing. For example, ask whether an individual believes they will be able to remain in their current housing situation. The HPS should better capture information on the respondent's current and recent housing situation to allow for estimating homelessness and housing instability. It should collect information about respondents' receipt of stimulus or recovery payments, unemployment benefits, other cash assistance, and public housing assistance to examine the extent to which receiving these resources might have reduced food or housing insecurity. Finally, the survey should collect information on sexual orientation and gender identity. This would be helpful given the well-documented heightened risk for food and housing insecurity and mental health difficulties among LGBTQ people, especially when also identifying as BIPOC.

Beyond HPS adjustments, adapt, refine, and replicate nationally representative survey methodologies, such as those used by Chapin Hall's Voices of Youth Count (VoYC) initiative (Morton et al., 2017). These methodologies could help provide continuous national estimates and tracking of youth and young

adult housing and homelessness, food security, and well-being. Their use could also provide key information to track progress and disparities by subpopulations related to race, ethnicity, sexual orientation, gender identity, and parenting status, among other characteristics. We need a more youth- and young adult-focused representative survey replicated over time to better inform youth policy. Periodic national estimates of youth and young adult homelessness and experiences would fulfill a statutory requirement of the Runaway and Homeless Youth Act (RHYA) and support national capacity to monitor progress and inform public action and investments around advancing equity and positive youth outcomes.

## **Conclusion**

Youth and young adulthood represent key development periods of the life cycle. Every day that young people experience food and housing insecurity and psychosocial distress represents a missed opportunity to fully support their pathways into positive, nourishing, and productive adulthood. Not only do we find that large numbers of young people face these adversities amidst the pandemic, but we also shed light on substantial racial disparities stemming from deep-seeded legacies of racist policies and practices. These disparities have been exacerbated by circumstances related to the pandemic. Without concerted and immediate policy action, the disproportionate disruptions and trauma faced by BIPOC youth and young adults could lead to greater social and economic inequalities. We cannot afford a missed opportunity at this critical juncture to act with bold, anti-racist, youth-centered policy solutions.

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# APPENDICES

## Appendix A. Additional Household Pulse Survey information

Table A-1 summarizes how the HPS sample compares to the U.S. population. Unweighted estimates reveal that the sample undercovers males, young adults, racial and ethnic minorities, and people with lower levels of educational attainment. The weights help to produce estimates that are more like the U.S. population, but biases related to sample under-coverage of certain populations and unobserved characteristics that are not accounted for by sample weights could still bias estimates reported in this study and any other study based on HPS data.

**Table A-1. HPS Sample Characteristics Compared to the U.S. Population**

	HPS sample, unweighted*	HPS weighted estimate*	US population**
<b>Female</b>	59%	52%	51%
<b>Male</b>	41%	48%	49%
<b>Age: percent of adult population</b>			
<b>Age 18–24</b>	4%	9%	12%
<b>Age 25–64</b>	72%	69%	67%
<b>Age 65 and over</b>	24%	21%	21%
<b>Race &amp; Hispanic Origin</b>			
<b>Asian alone</b>	5%	5%	6%
<b>Black or African American alone</b>	7%	11%	12%
<b>White alone</b>	75%	63%	63%
<b>Hispanic or Latino</b>	9%	17%	16%
<b>Education, percent of persons age 25 years+</b>			
<b>High school graduate or higher</b>	98%	92%	88%
<b>Bachelor’s degree or higher</b>	55%	32%	32%

\*Unweighted and weighted estimates are based on pooled data from HPS survey weeks 13–21 (phases 2–3), and weights are adjusted by dividing by the number of survey weeks as advised by the Census Bureau. Cumulative totals for groups might not equal 100% because of rounding.

\*\*Age group and race or Hispanic origin statistics come from the Annie E. Casey Foundation’s Kids Count Data Center, which provides 2019 population estimates from the U.S. Census Bureau. Gender and education come from the U.S. Census Bureau’s Quick Facts population estimates for 2019.

Table A-2 provides information on the food insecurity, housing insecurity, and mental health measures from HPS used for this study’s analysis.

**Table A-2. Information on Primary HPS Measures Used in this Study**

	<b>Items</b>	<b>Response options</b>	<b>Analytic approach</b>
<b>Food insecurity</b>			
Prepandemic	Getting enough food can also be a problem for some people. Which of these statements best describes the food eaten in your household before March 13, 2020? <i>Select only one answer.</i>	1=Enough of the kinds of food (I/we) wanted to eat; 2=Enough, but not always the kinds of food (I/we) wanted to eat; 3=Sometimes not enough to eat; 4=Often not enough to eat	>2 = food insecure
Recent	In the last 7 days, which of these statements best describes the food eaten in your household? <i>Select only one answer.</i>	Same as above.	>2 = food insecure
<b>Housing insecurity</b>			
Caught up on rent/mortgage	Is this household currently caught up on [rent/mortgage] payments? <i>Select only one answer.</i>	1=Yes; 2=No	2 = housing insecure
Confidence	How confident are you that your household will be able to pay your next rent or mortgage payment on time? <i>Select only one answer.</i>	1=Not all confident; 2=Slightly confident; 3=Moderately confident; 4=Highly confident; 5=payment is/will be deferred	We present estimates for both more severe (response=1) and less severe (1 or 2) housing insecurity
Eviction	How likely is it that your household will have to leave this home or apartment within the next two months because of eviction? <i>Select only one answer.</i>	1=Very likely; 2=Somewhat likely; 3=Not very likely; 4=Not likely at all	<3 = housing insecure
<b>Mental health</b>			
Anxiety symptoms (GAD-2)	Over the last 7 days, how often have you been bothered by the following problems... i) ... Feeling nervous, anxious, or on edge? ii) ... Not being able to stop or control worrying? <i>Select only one answer.</i>	0=Not at all; 1=Several days; 2=More than half the days; 3=Nearly every day?	Combined score >2 = symptoms indicative of generalized anxiety disorder
Depression symptoms (PHQ-2)	Over the last 7 days, how often have you been bothered by...	Same as above.	Combined score >2 = symptoms indicative of major depressive disorder

Items	Response options	Analytic approach
i) ... Having little interest or pleasure in doing things? ii) ... Feeling down, depressed, or hopeless? <i>Select only one answer.</i>		

Table A-3 summarizes the number of observations and unweighted response rates (RR) for the primary measures used for this study for the pooled data from survey weeks 13-21, both overall and for racial/ethnic subpopulations. The table shows that young adults and racial and ethnic minorities had lower response rates to these survey items than did the HPS sample overall.

**Table A-3. HPS Response and Response Rates to Primary Measures Used by this Study**

	<b>Overall</b>	<b>RR</b>	<b>Age 18-25</b>	<b>RR</b>	<b>Asian non-Hispanic</b>	<b>RR</b>	<b>Black non-Hispanic</b>	<b>RR</b>	<b>White non-Hispanic</b>	<b>RR</b>	<b>Hispanic</b>	<b>RR</b>
<b>N</b>	775,788		34,800		36,018		56,679		584,334		69,745	
<b>Food insecurity (confidence)</b>	706,877	91%	27,822	80%	31,984	89%	48,988	86%	539,112	92%	60,591	87%
<b>Tenure (housing type)</b>	640,747	83%	23,015	66%	28,831	80%	42,130	74%	492,912	84%	53,304	76%
<b>Housing insecurity (confidence)*</b>	469,616	73%	19,502	85%	21,377	74%	34,903	83%	351,824	71%	43,005	81%
<b>Depression symptoms (PHQ-2)</b>	659,119	85%	24,462	70%	29,812	83%	44,289	78%	505,130	86%	55,562	80%
<b>Anxiety symptoms (GAD-2)</b>	659,636	85%	24,502	70%	29,852	83%	44,300	78%	505,511	87%	55,634	80%

*Note: The response rate (RR) reflects the number of observations (i.e., without missing data) for the given measure as a share of the number of observations overall for the given category. The statistics reflect unweighted calculations based on pooled data from HPS survey weeks 13-21 (phases 2-3)*

*\*For the housing insecurity RR, we divide the responses by the number of respondents who reported being in a household with a rent or mortgage in response to the tenure question, because the housing insecurity question was only asked of respondents in these housing arrangements.*

## **Appendix B. Detailed regression results**

In Table B-1, we provide the full list of covariates used and the full results from the housing insecurity regression analysis of HPS data for young adults ages 18–25. We focus primarily on housing insecurity, operationalized as a young adult having no or only slight confidence in their (or their household's) ability to pay the next month's rent or mortgage. But we also include the more severe housing insecurity measure (no confidence only) as a dependent variable in a parallel regression for checking robustness. With only a few exceptions, the regression analyses resulted in a similar set of statistically significant covariates for both operationalizations of housing insecurity as the dependent variable.

**Table B-1. Multivariate Regression Results for Two Housing Insecurity Dependent Variables**

	Confidence in ability to pay next rent or mortgage			
	No or Slight Confidence		No Confidence	
	LPM (OLS)	Probit	LPM (OLS)	Probit
Female	0.01 (0.01)	0.06 (0.05)	0.00 (0.01)	0.03 (0.07)
Age	0.01*** (0.00)	0.05*** (0.01)	0.01*** (0.00)	0.07*** (0.02)
Married	0.03** (0.01)	0.11* (0.06)	0.01 (0.01)	0.09 (0.08)
2+ adults in household	-0.07*** (0.01)	-0.28*** (0.06)	-0.03*** (0.01)	-0.28*** (0.08)
Number of people under 18 in household	0.01* (0.01)	0.05 (0.03)	0.00 (0.00)	0.01 (0.03)
Educational attainment (Base: <HS)				
Some HS	-0.03 (0.08)	-0.02 (0.28)	-0.09 (0.08)	-0.25 (0.32)
HS graduate	-0.06 (0.07)	-0.18 (0.25)	-0.10 (0.07)	-0.35 (0.29)
Some college	-0.09 (0.07)	-0.31 (0.25)	-0.12 (0.07)	-0.55* (0.29)
Associate's degree	-0.11 (0.07)	-0.40 (0.26)	-0.12 (0.08)	-0.55* (0.31)
Bachelor's or Graduate degree	-0.16** (0.07)	-0.74*** (0.25)	-0.13* (0.08)	-0.86** (0.30)
Renter	0.03** (0.01)	0.13** (0.06)	0.01 (0.01)	0.13 (0.09)
Often/sometimes not enough to eat (past 7 days)	0.23*** (0.02)	0.66*** (0.06)	0.15*** (0.02)	0.76*** (0.07)
Income (Base: less than \$25,000)				
\$25,000–\$34,999	-0.02 (0.02)	-0.07 (0.08)	0.01 (0.01)	0.09 (0.08)
\$35,000–\$49,999	-0.03 (0.02)	-0.12* (0.07)	-0.01 (0.01)	-0.05 (0.10)
\$50,000–\$74,999	-0.03* (0.02)	-0.13* (0.08)	-0.01 (0.01)	-0.14 (0.11)
\$75,000 and above	-0.07*** (0.02)	-0.48*** (0.08)	-0.00 (0.01)	-0.16 (0.12)
No recent household job loss	-0.06*** (0.01)	-0.35*** (0.06)	-0.01 (0.01)	-0.27*** (0.09)
No expected household job loss	-0.13*** (0.01)	-0.48*** (0.05)	-0.07*** (0.01)	-0.56 (0.07)
No work for pay (last 7 days)	0.04*** (0.01)	0.16*** (0.05)	0.03*** (0.01)	0.27*** (0.06)
Has health insurance	-0.07*** (0.02)	-0.25*** (0.07)	-0.05*** (0.01)	-0.30*** (0.08)
No delayed medical care due to pandemic (past 4 wks)	-0.03** (0.01)	-0.15*** (0.05)	-0.01 (0.01)	-0.15** (0.07)
Poor or fair health	0.06*** (0.02)	0.21*** (0.06)	0.04*** (0.01)	0.25*** (0.07)
Anxious several days or more (past 7 days)	-0.02 (0.02)	-0.12 (0.10)	-0.01 (0.01)	-0.19 (0.13)
Worried several days or more (past 7 days)	0.06*** (0.01)	0.32*** (0.08)	0.02*** (0.01)	0.35*** (0.12)
Depressed several days or more (past 7 days)	0.03** (0.01)	0.24*** (0.07)	0.00 (0.01)	0.15 (0.11)
Race (Base: White non-Hispanic)				
Black non-Hispanic	0.06*** (0.02)	0.27*** (0.08)	0.02 (0.01)	0.13 (0.10)
Asian non-Hispanic	0.05*** (0.02)	0.28*** (0.09)	0.02 (0.01)	0.28** (0.13)
Other non-Hispanic	0.03 (0.02)	0.16* (0.09)	0.01 (0.01)	0.12 (0.12)
Hispanic	0.04** (0.02)	0.20*** (0.06)	-0.01 (0.01)	-0.08 (0.09)
Constant	0.12 (0.10)	-1.63*** (0.42)	0.14* (0.08)	-2.13*** (0.50)
Observations	17,639	17,639	17,639	17,639
R-squared	0.25		0.17	
Pseudo R-squared:		0.264		0.309

Note: Estimates are survey weighted using person level weights for survey weeks 13 to 21.

Robust standard errors in parentheses. State and survey week were included as additional covariates.

\*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$