



## The Impact of COVID-19 on Houston Households: A Tale From Two Surveys

**HOBBY**  
SCHOOL OF PUBLIC AFFAIRS  
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# Executive Summary

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The COVID-19 pandemic is one of the greatest challenges faced by the United States since World War II. The virus, as well as the stay-at-home mandates, had a powerful negative impact on economic activity. The Hobby School of Public Affairs undertook a series of surveys targeting individuals and businesses in the Lone Star State in the wake of the pandemic.

The present report includes results from the third wave of the Hobby School Hurricane Harvey Panel Survey, which was fielded between May 20 and June 23, 2020 and surveyed residents from Brazoria, Fort Bend, Harris, and Montgomery Counties, aged 18 and above.<sup>1</sup> Of the 1,063 Houston-area respondents, 52% were female, and 47% were male. One-fifth of respondents identified as Hispanic or Latino(a), 47% as white, 24% as Black or African American, and 6% as Asian or Pacific Islander. A full demographic profile of the respondents can be found in Appendix B.

In various modules of the survey, respondents were asked a series of questions about their experience during the COVID-19 pandemic, the extent of their mental and physical health status, and confidence in political leaders. The survey shows that the adverse impact of COVID-19 has been widespread. Almost 30% of respondents expressed that they personally know someone who has contracted the COVID-19 virus. More than 10% of them lost family members or friends to COVID-19.

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<sup>1</sup><https://uh.edu/hobby/harvey/>

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The results from the Hobby School Hurricane Harvey Panel Survey were supplemented by responses to the U.S. Census Household Pulse Survey (HPS) about the impacts of COVID-19 on employment, mental health, children's education, confidence in economic recovery, and financial conditions concerning housing in the Houston area.

Using the information from HPS, our analyses show that COVID-19 significantly affected Houstonians' mental health. We found a staggering increase in the level of worry, anxiety, concern, and loss in interest. While a majority of respondents (78%) reported that they were in good to excellent health throughout the COVID-19 outbreak, almost two-thirds of respondents have been anxious for at least several days a week as a result of the COVID-19 pandemic. Female respondents reported increasing and higher levels of COVID-induced anxiety. Male respondents generally felt less anxious and less worried than female respondents. About 22% reported experiencing either fair (18%) or poor (5%) health status.

As a result of the stay-at-home mandates and social distancing policies, schools closed, and children continued remote instruction for the remainder of the school year. Families with young children reported spending long hours during weekdays and weekends on teaching activities with their children. Almost half of the respondents to the survey (48%) spent more than 8 hours per week on their children's schoolwork, and 4.1% of Black and Asian respondents spent more than 40 hours on schooling.

Further, we analyze how COVID-19 impacted households' rent payments. In May 2020, nine percent of respondents reported not being able to make any of their rent payments, while about 5% of respondents have had to defer rent payments. Moreover, 14% of respondents had no confidence in making rental or mortgage payments or were forced to delay their payments.

Houstonians express low confidence in public officials' handling of the pandemic based on responses collected between May 20 and June 23, 2020. Overall, respondents reported higher levels of confidence in Dr. Anthony Fauci, with older respondents - those aged 65 and older - more confident in his efforts. Fifty-seven percent of respondents reported being moderately or very confident in how Dr. Fauci has handled the ongoing health crisis. Governor Greg Abbott, Vice President

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Mike Pence, and President Donald Trump received much lower ratings: 43%, 37%, and 33%, respectively.<sup>2</sup>

The survey results also revealed a large partisan divide in respondents' assessments of Governor Abbott, Vice President Pence, and President Trump, and to a lesser extent, Dr. Fauci. Two-fifths of Republicans were moderately or very confident in Abbott, Pence, and Trump, compared to 11% or less among Democrats. Assessments of how public officials have managed the pandemic also varied by race and ethnicity, with non-white respondents, on average, reporting lower levels of confidence compared to white respondents. Among Black and African American respondents, 75% had no confidence at all in President Trump's handling of the crisis, while 36% of white respondents expressed confidence in the President.

As the COVID-19 virus spread rapidly at the beginning of the year, President Trump and Governor Abbott declared a National Emergency and State of Disaster in Texas, respectively, on March 13. After Texas imposed the stay-at-home order on March 31, 2020, the unemployment rate in the Houston area reached historically high levels of 14.3% in April and 13.9% in May 2020.<sup>3</sup> The tough labor market situation is reflected in survey responses, where households expressing having suffered sizable job and income losses. Twenty percent of respondents reported that someone in their household experienced a job loss, and over 70% of respondents had been laid off or received salary cuts for more than one month. Due to the current job uncertainty, 15% of respondents in the Household Pulse Survey had no confidence in making rental or mortgage payments or were forced to defer their payments. Over four-fifths of respondents (86%) worried about the economic recovery after the COVID-19 outbreak.

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<sup>2</sup>Note that responses were collected in the late Spring of 2020, and before President Donald Trump was diagnosed with COVID-19. Results may not reflect confidence levels in the President's handling of the pandemic in October 2020.

<sup>3</sup>See [https://www.bls.gov/eag/eag.tx\\_houston\\_msa.htm](https://www.bls.gov/eag/eag.tx_houston_msa.htm).

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# COVID-19 and Houston Households: Impact, Wellbeing and Survival

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While the number of COVID-19 cases are known, the effects of the lock downs, shelter-in-place, and social distancing policies put in place to curtail the spread of the virus remains unclear. Drawing on data from the Hobby School of Public Affairs' Hurricane Harvey Panel Survey and from the United States Census' Household Pulse Survey this report analyzes the impacts of COVID-19 on Houston households, with emphasis on employment, the extent of their mental and physical health status, and their concerns about the impact of the pandemic on their lives. We highlight the distinctive impacts of COVID-19 across gender, race, education, and partisanship.

This report contains four main sections. The first provides a brief overview of a recent panel survey of residents in four Texas counties (Brazoria, Harris, Fort Bend, and Montgomery) conducted by the Hobby School of Public Affairs to assess the impacts of Hurricane Harvey on households. In the third year sequence of this survey, we asked respondents how the COVID-19 outbreak impacted their health and employment. The second section connects the information on COVID-19 impacts on health from the Hurricane Harvey survey to mental and physical health using the United States Census' Household Pulse Survey. In the third section, we show the level of confidence of respondents in how political office holders are handling the COVID-19 pandemic, focusing on variation across race, age, county, and political party ID. In section four, we analyze the spill over effects of the imposed stay-at-home mandates and social distancing policies on parenting and children's education, employment and wages, mortgage market, and, finally, on confidence in economic recovery.

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# Overview of Survey and Respondents

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## 2.1 Demographics

This report includes responses from a recent survey of Houstonians conducted by the Hobby School of Public Affairs. The Hobby School Hurricane Harvey Panel Survey is a multi-year study launched in 2017 to assess how natural disasters like Hurricane Harvey have impacted the Houston area. The third wave of the Hobby School Hurricane Harvey Panel was conducted between May 20 and June 23, 2020. It surveyed 1,065 Texas individuals aged 18 and above, who reside in the following four counties: Brazoria, Harris, Fort Bend, and Montgomery (see Table 2.1).

**Table 2.1:** Respondents by County of Residence

	No.	%
Brazoria	66	6.2
Harris	763	71.8
Fort Bend	126	11.9
Montgomery	108	10.1
<b>Total</b>	1,063	100.0

Of the 1,065 respondents, 53% were female, and 47% were male. Table 2.2 shows the distribution of respondents by race and ethnicity. One-third of respondents identified as Hispanic/Latino(a), 37% as white, 19% as Black or African American, and 10% as Asian or Pacific Islander. Appendix A contains distributions for the remaining demographic variables.

## 2.2. Impact of COVID-19 in the Houston Area

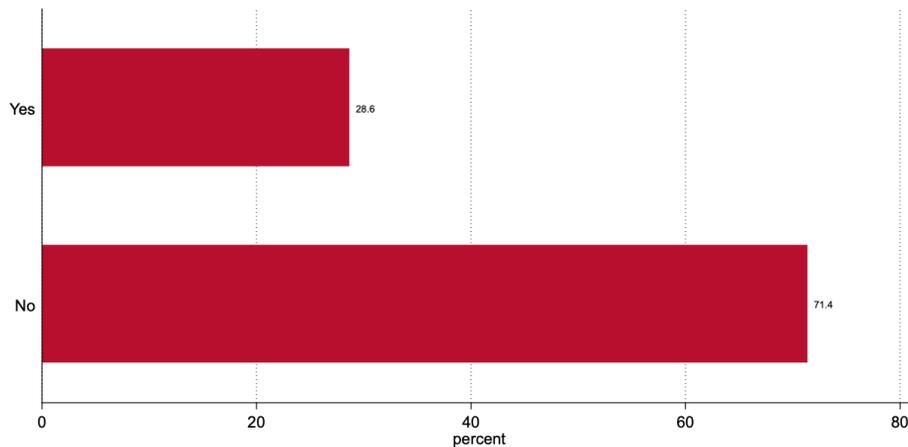
**Table 2.2:** Respondents by Race/Ethnicity

	No.	%
White	496	46.7
Black or African American	253	23.8
Hispanic/Latino(a)	229	21.5
Asian/ Pacific Islander	60	5.7
Other	24	2.3
<b>Total</b>	<b>1,063</b>	<b>100.0</b>

## 2.2 Impact of COVID-19 in the Houston Area

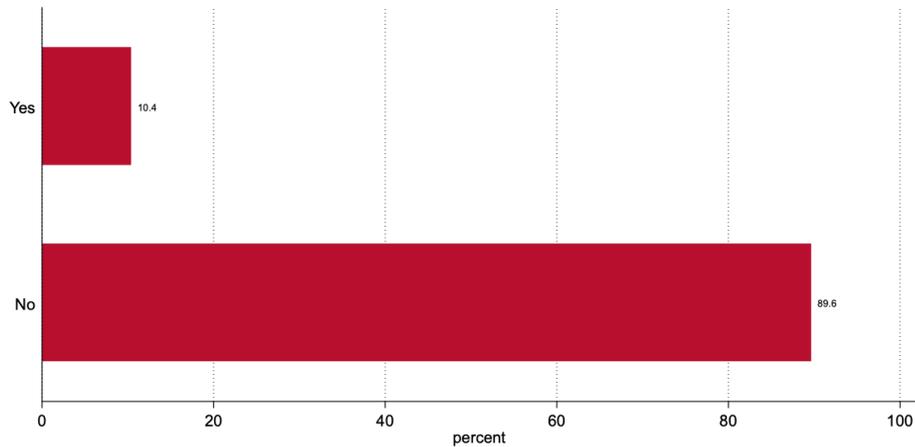
We asked respondents about their COVID-19 experience: 28.6% expressed that they personally contracted the COVID-19 virus or knew someone who did (see Figure 2.1). Moreover, 10% of respondents lost family members or friends due to the COVID-19 outbreak (Figure 2.2).

**Figure 2.1:** Do you personally know anyone who has contracted the COVID-19 virus?

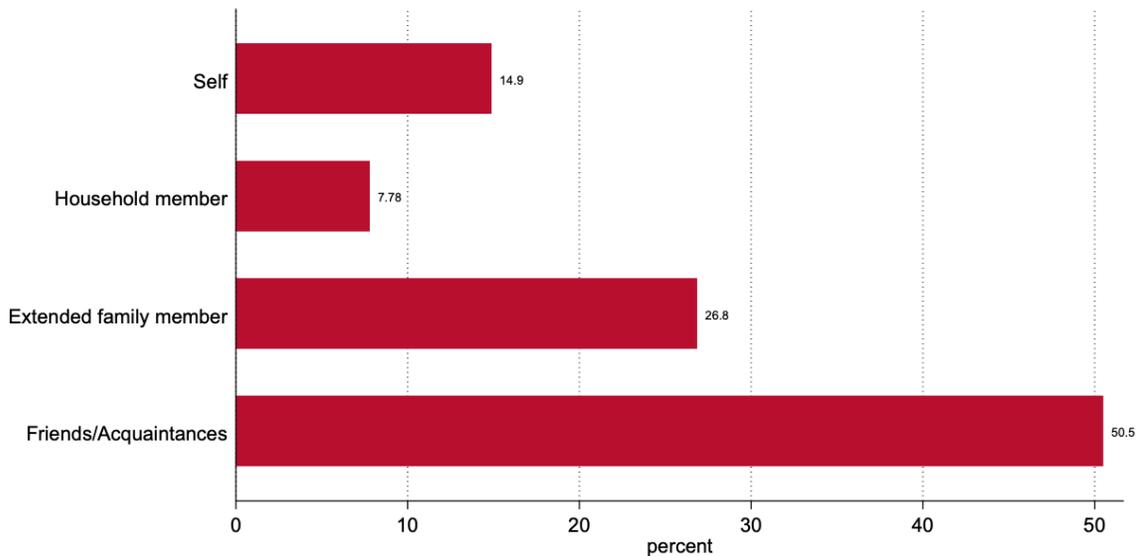


## 2.2. Impact of COVID-19 in the Houston Area

**Figure 2.2:** Did you lose any family members or friends due to the COVID-19 outbreak?



**Figure 2.3:** Is this person who contracted COVID-19 yourself, a household member, an extended family member or friends and acquaintances?

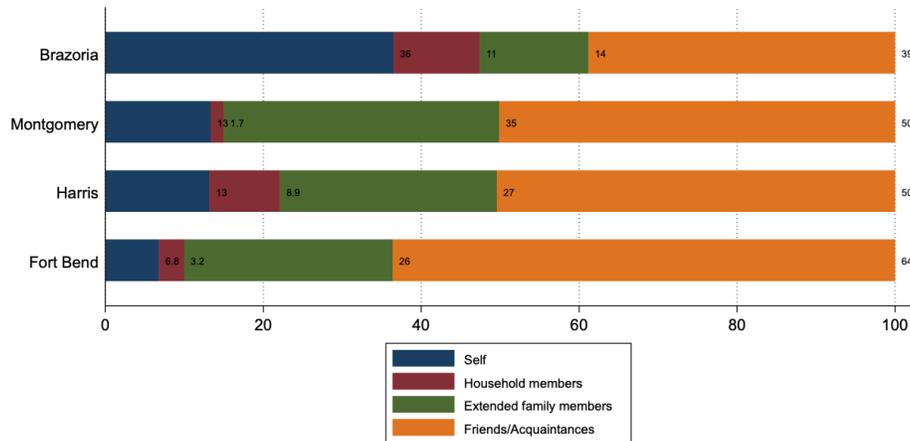


About fifteen percent of respondents reported that they contracted COVID-19 themselves (see Figure 2.3). More than one-third said that either a direct or extended family member contracted the virus. More than 50% know of their friends or acquaintances contracted COVID-19. The county with the highest level of self-reported COVID-19 cases is Brazoria (36%), followed by Montgomery and

## 2.2. Impact of COVID-19 in the Houston Area

Harris (13%, respectively), and Fort Bend (7%) (see Figure 2.4). Although a relatively small proportion of Fort Bend County respondents contracted COVID-19 themselves, a larger percentage of their friends/acquaintances (64%) contracted the virus.

**Figure 2.4: Self-reported COVID-19 Cases by County**

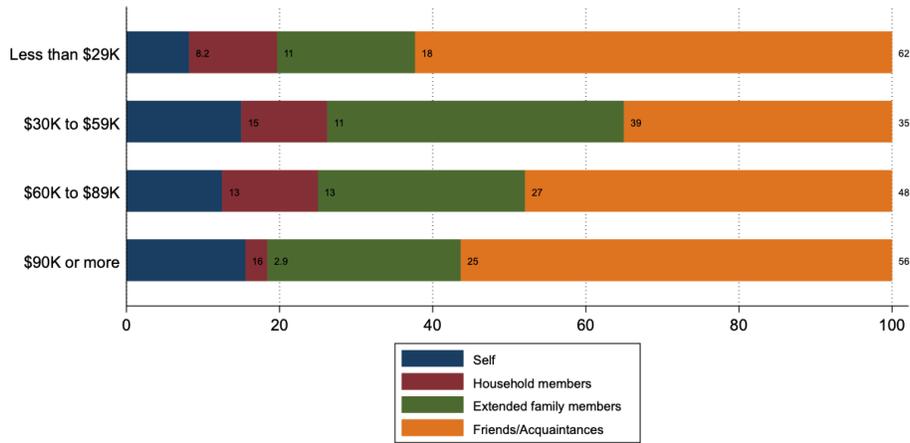


We identified differences in the COVID-19 experience across demographic factors. Figure 2.5 shows that 19% of respondents with household income of \$29,000 or less reported they or household members contracted COVID-19; the incidence of COVID-19 was 26% among households with incomes between \$30,000 and \$89,000, and 19% in households with income above \$90,000. The figure also shows that 39% of respondents in households with an annual income between \$30,000 and \$59,000 stated that their extended family members contracted COVID-19, and 62% of households with a yearly income less than \$29,000 mentioned that their friends or acquaintances got the virus.

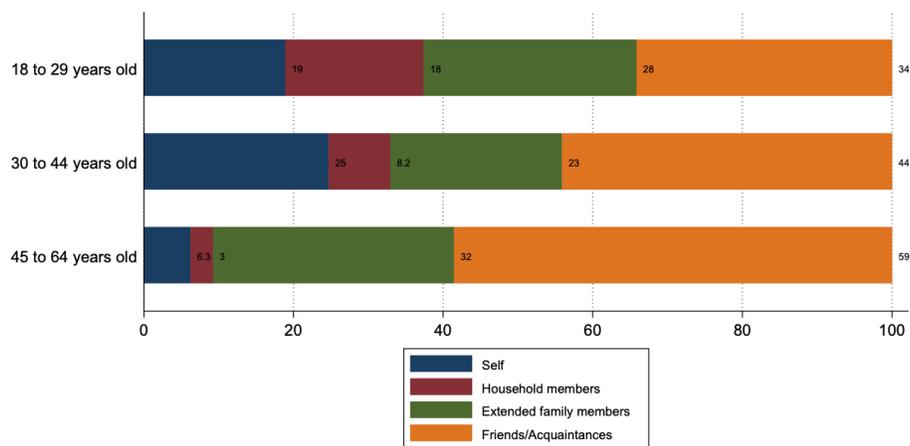
One-fourth of respondents who contracted COVID-19 themselves were aged 30-44 years. Among younger respondents, those aged 18-29, 19% reported they contracted the virus themselves. About 6% of those in the 45-64 age group reported having contracted the COVID-19 virus themselves. Younger respondents in the 18-29 cohort reported that a larger percentage of their household members and extended family members were infected (about 46%). There are close to two-thirds of respondents in the older group of 45-64 years old who had friends or acquaintances with COVID-19 (see Figure 2.6).

## 2.2. Impact of COVID-19 in the Houston Area

**Figure 2.5: Self-reported COVID-19 Cases by Income Group**



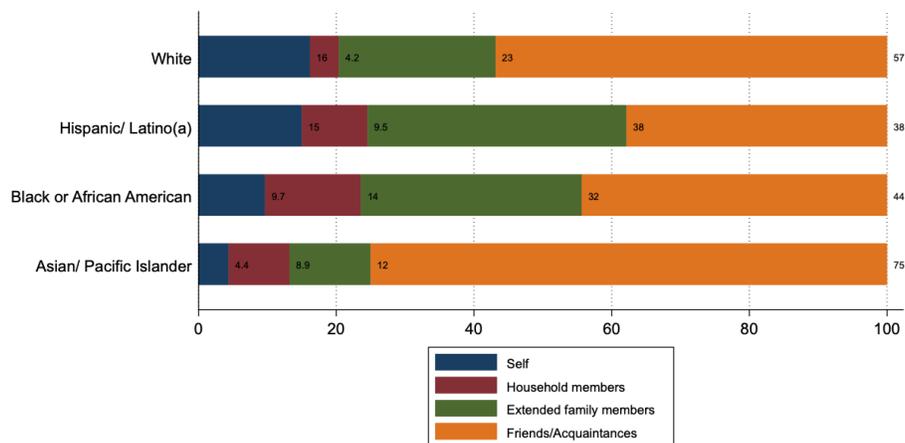
**Figure 2.6: Self-reported COVID-19 Cases by Age Group**



## 2.2. Impact of COVID-19 in the Houston Area

Figure 2.7 presents the breakdown of COVID-19 infections by race and ethnicity: 16% of white respondents reported having contracted the virus themselves; the incidence among Hispanic was 15%, 10% among Black and African American, and 4% among Asian American. Close to half of African Americans reported that their household or extended family members contracted the virus, the largest proportion among the four race groups. On the other hand, more than three-fourths of Asian/Pacific Islanders stated that they knew someone who contracted the virus.

**Figure 2.7:** Self-reported COVID-19 Cases by Race/Ethnicity



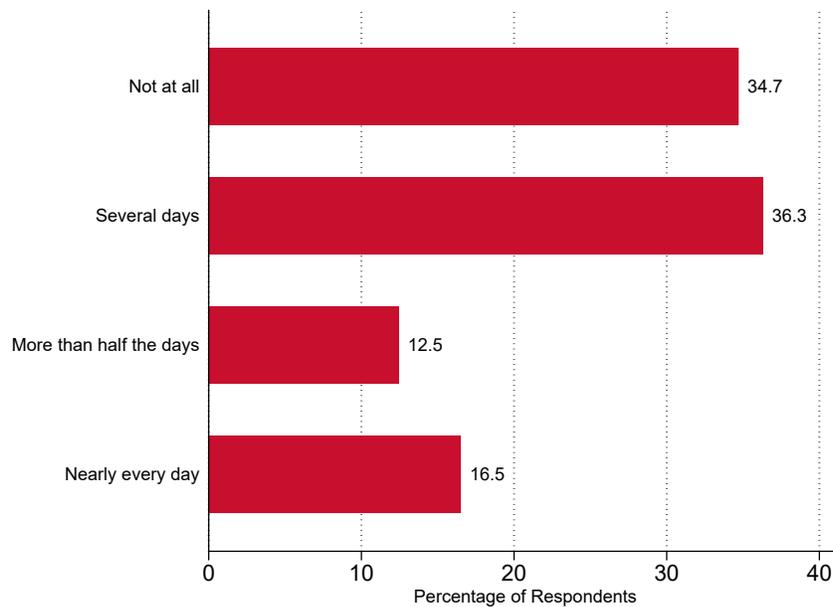
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# Mental and Physical Health

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The U.S. Census Bureau conducts the weekly Household Pulse Survey, a series of surveys to assess the impact of COVID-19 across the U.S. and large Metropolitan Statistical Areas (MSAs). We rely on responses from residents in the Houston, the Woodlands, and Sugar Land areas (MSA) to record the mental and physical health impact of COVID-19 among Houstonians.<sup>1</sup>

**Figure 3.1:** Over the last 7 days, how often have you been feeling anxious, or on edge?



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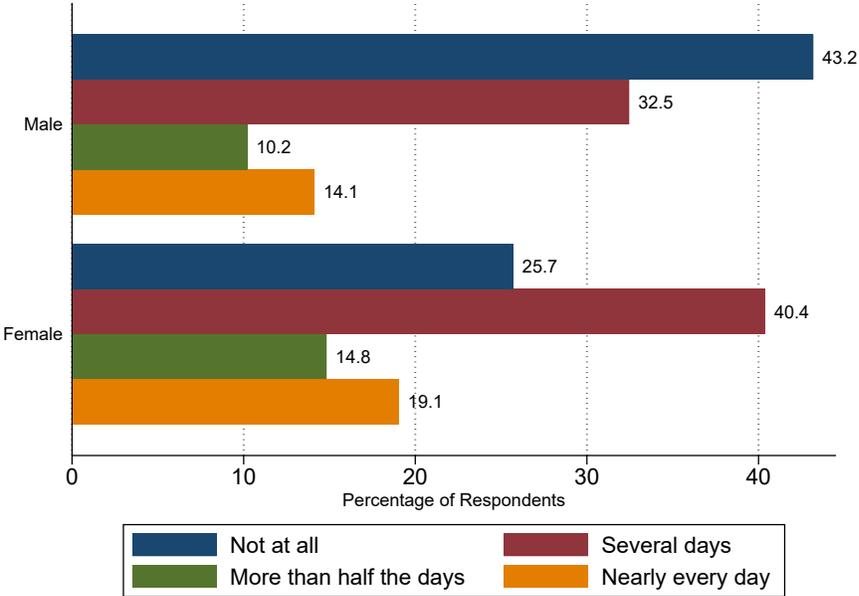
<sup>1</sup>The Household Pulse Surveys covers 12 weeks. We focus on the data covering May 26, 2020 through June 23, 2020, the window when the third wave of the Hobby School Hurricane Harvey Survey was in the field.

Respondents of the Household Pulse Surveys were asked to rate their levels of anxiety, worry, and loss of interest to assess changes in mental well-being.

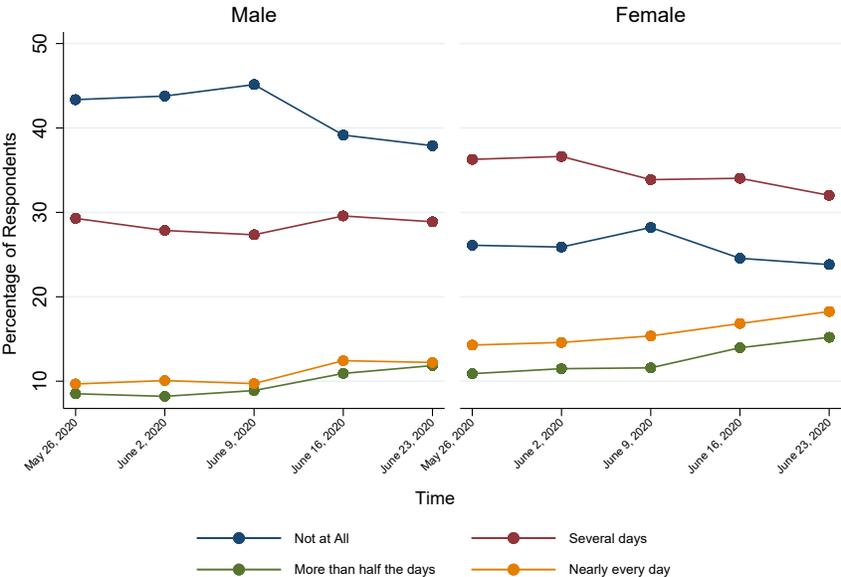
Figure 3.1 presents the level of anxiety experienced by the residents of the Houston MSAs: about 17% have felt anxious nearly every day, and 13% have felt anxious for more than half the days. 36% of respondents have felt anxious for several days, and 35% report that they did not experience anxiety at all.

We further break this data down by gender: among women, 40% report being anxious several days of the week, 15% report being anxious more than half of the days, 19% women report feeling anxious nearly every day, and 26% report not being anxious at all. Among male respondents, 11% expressed that they feel anxious for more than half the days, 11% expressed that they feel anxious for more than half the days, and 43% of males report that they are not at all anxious.

**Figure 3.2: Frequency of Anxiety by Gender**



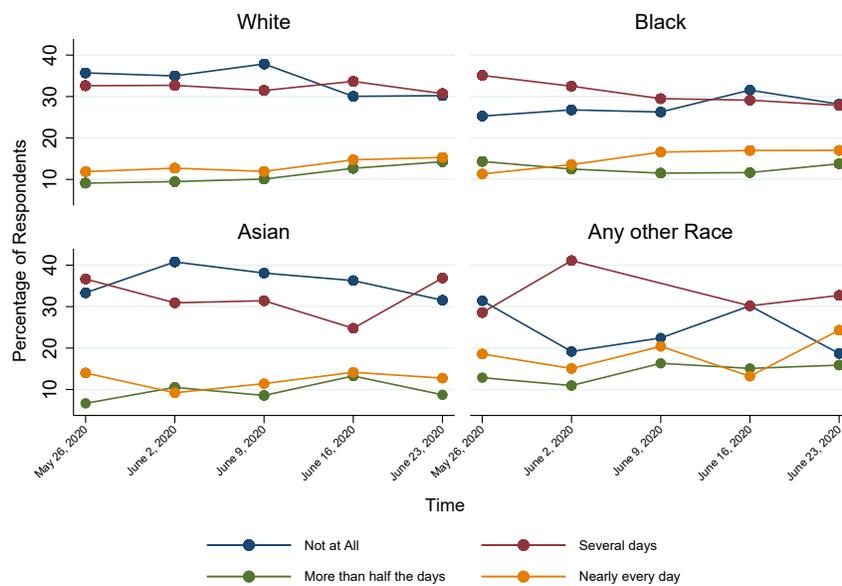
**Figure 3.3: Frequency of Anxiety by Gender Over Time**



In Figure 3.3, we analyze the level of anxiety by gender over time. We find dramatic and heterogeneous declines in well-being. Although the numbers of both male and female respondents reporting feeling anxious nearly every day have increased, the rise in anxiety among female respondents is steeper. Over 40% males and about 26% female report not feeling anxious at all. Clearly, COVID-19 has incited respondents’ anxiety, particularly among women.<sup>2</sup>

<sup>2</sup>There has been a significant increase in the level of anxiety and worry since Week 6 of the Census Pulse Household Survey, which was the week after the State of Texas reopened economic activity and the number of COVID-19 cases surged.

**Figure 3.4:** Frequency of Anxiety by Race Over Time

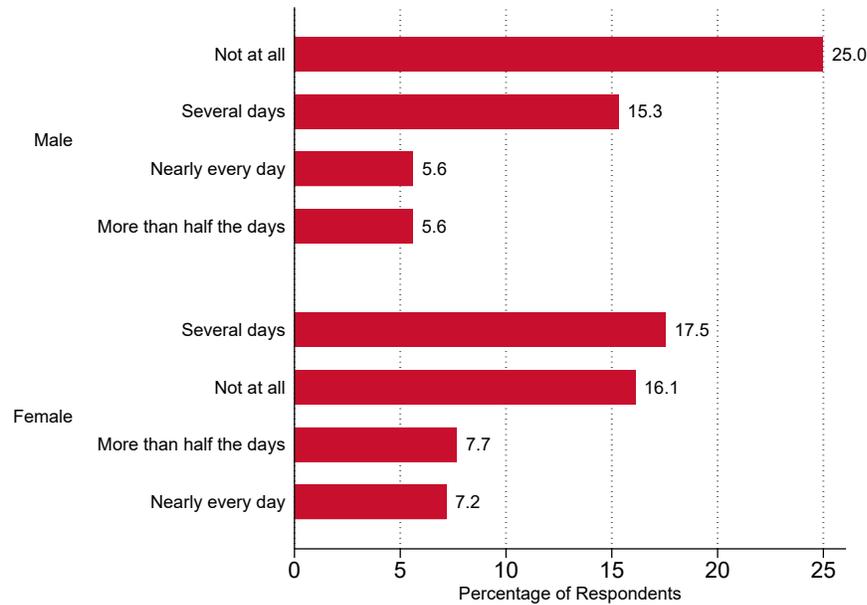


Further, we analyze the level of anxiety by race over time. Figure 3.4 shows an increase in level of anxiety across racial groups with 32% blacks and 34% respondents from other races reporting being anxious several days.

### 3.1 Anxiety over Time

Respondents were also asked about their level of worry over the past seven days. Figure 3.5 shows that more than half of the respondents (58%) felt worried for several days or more. Among them, 13% of males (6%) and females (7%) are worried nearly every day. About 41% respondents are not worried at all.

**Figure 3.5:** Over the last 7 days, how often have you been not being able to stop or control worrying?



Differences can be found between male and female respondents. According to Figure 3.6, 15% of female respondents felt worried nearly every day and more than half the days which is four percentage points higher than male respondents (11%) that feel the same. Male respondents generally felt less worried than female respondents. 49% of male respondents did not feel worried at all, whereas only one-third of female respondents (33%) did not feel worried. Figure 3.7 shows that the levels of worry for both male and female respondents has increased over time.

Figure 3.6: Frequency of Worry by Gender

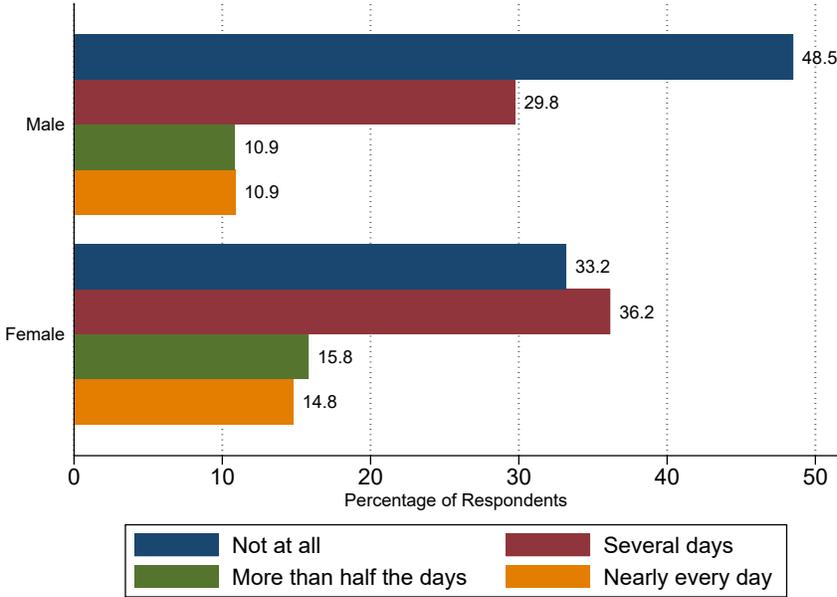
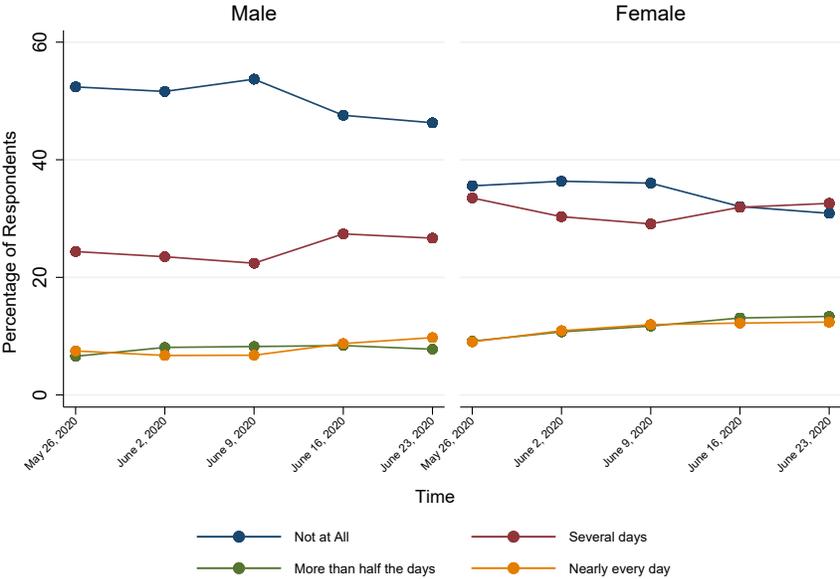


Figure 3.7: Frequency of Worry by Gender Over Time



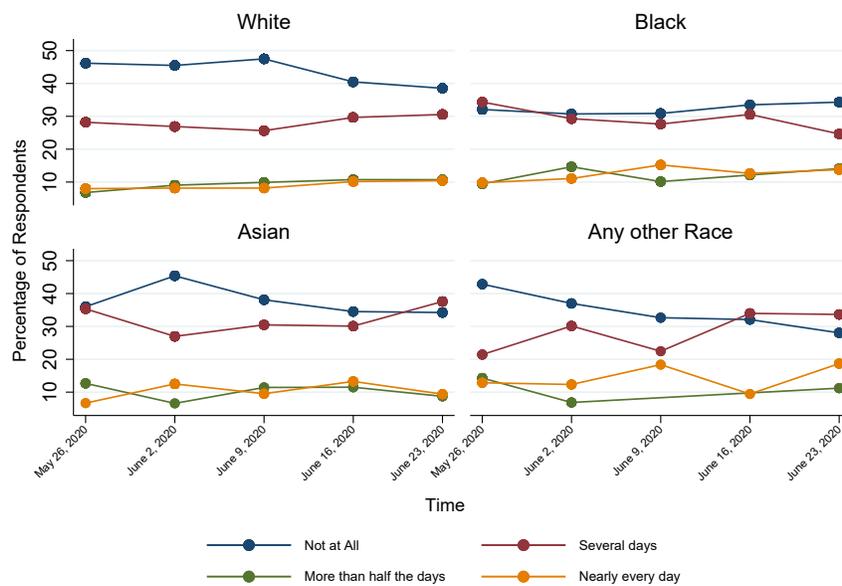
Further, we analyze the level of worry by race over time. From Figure 3.8, there is increase in level of worry across racial groups with blacks (32%) and other races

### 3.1. Anxiety over Time

(34%) reporting being anxious several days of the week. The levels of worry for Asians and other races have been rising over time.

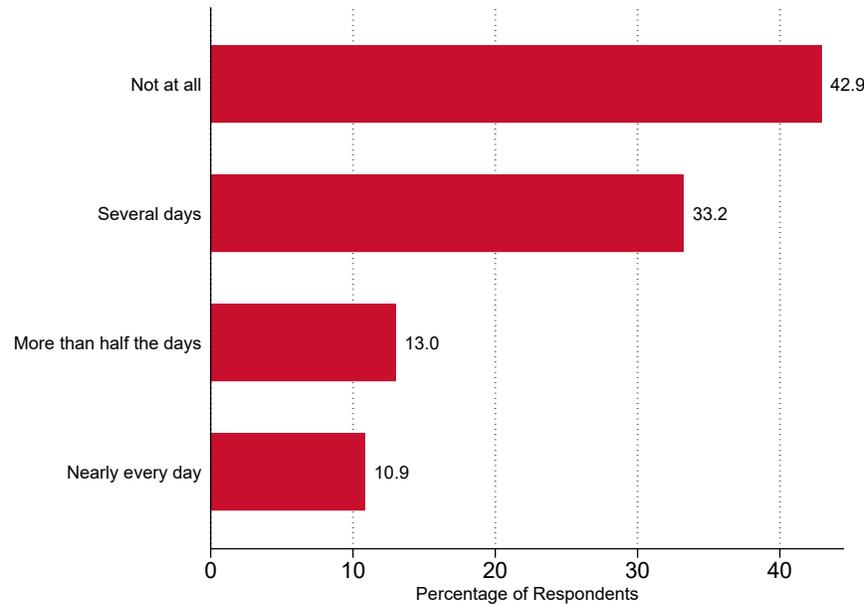
As shown in Figure 3.3, the level of anxiety mirrors the effect recorded on the level of worry. Females reported higher levels of anxiety, and the trend has been on the rise for both males and females.

**Figure 3.8:** Frequency of Worry by Race Over Time



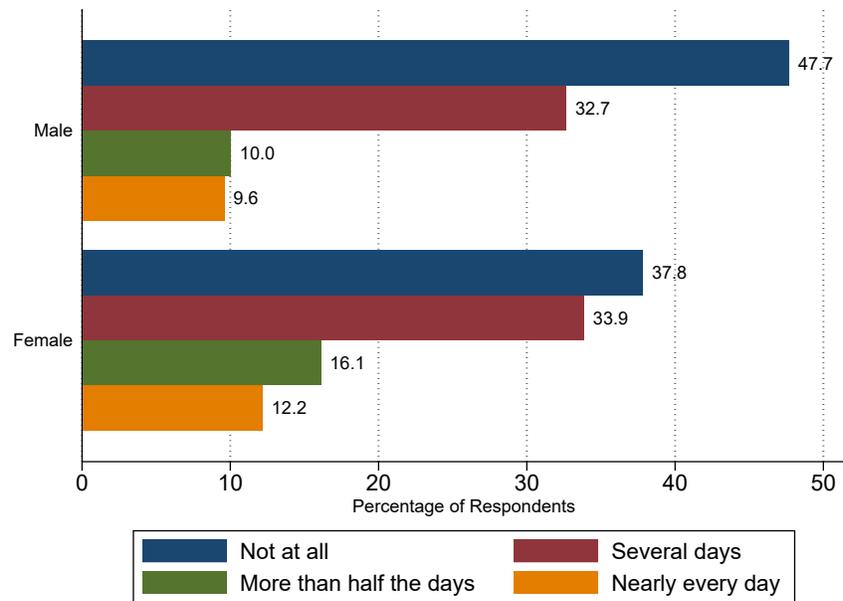
## 3.2 Loss of Interest

**Figure 3.9:** Over the last 7 days, how often have you been having little interest or pleasure in doing things?



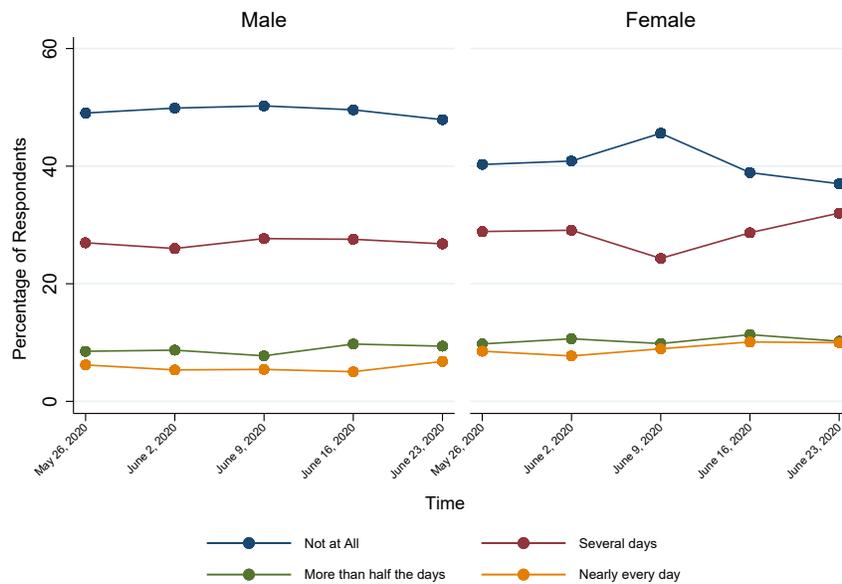
The levels of anxiety and worry would also be reflected by the loss of interest in things. Respondents were asked if they lost their interest in things over the previous seven days. Figure 3.9 depicts that close to 11% of respondents lost their interest in things nearly every day of the week. Another 46% expressed that their loss of interest lasted for several days or more than half of the week. The survey shows that 43% of respondents did not lose interest in things at all.

**Figure 3.10:** Frequency of Having Little Interest in Things by Gender



The gender differences in terms of loss of interest frequency are similar to previous findings regarding anxiety and worry levels. Figure 3.10 shows that the frequency of the interest loss for female respondents is higher than male respondents. The frequencies for both male and female respondents were found to be increasing over time, as shown in Figure 3.11.

**Figure 3.11:** Frequency of Having Little Interest in Things by Gender Over Time

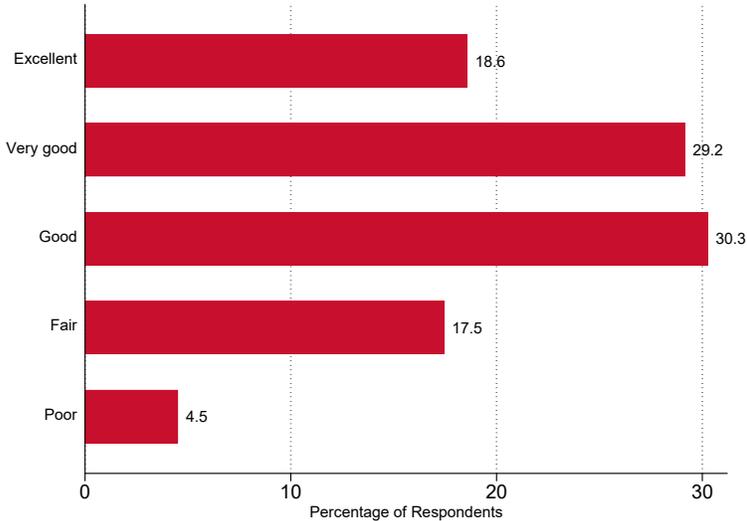


### 3.3 Physical Health Status

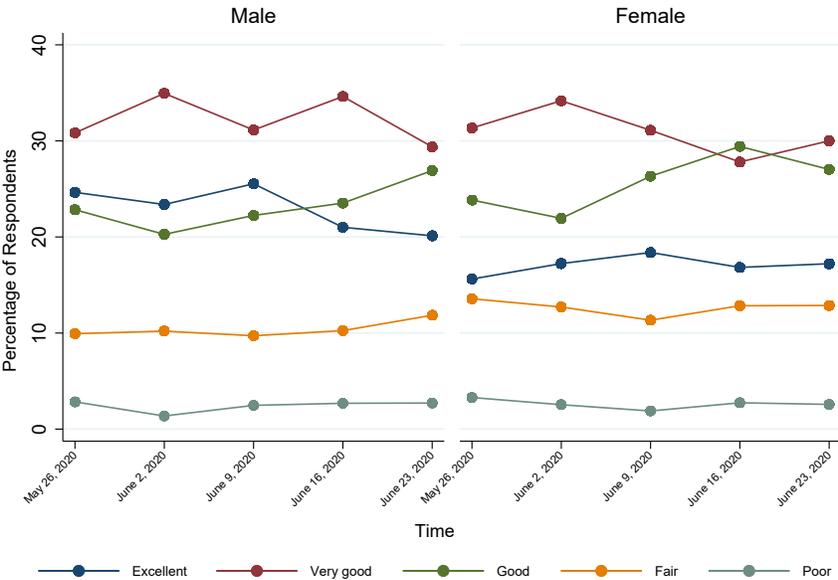
Respondents were also asked about their health status during the COVID-19 outbreak. Figure 3.12 describes that majority of respondents (78%) reported that they were in either good (30%), very good (29%), or excellent (19%) health. About 22% of them were in either fair (18%) or poor (5%) health. Figure 3.13 shows that the health status between male and female respondents were not substantially different from each other and remained fairly stable over time.

### 3.3. Physical Health Status

**Figure 3.12: Overall Physical Health Status**



**Figure 3.13: Health Status by Gender**



**Figure 3.14:** Health Status by Race/Ethnicity

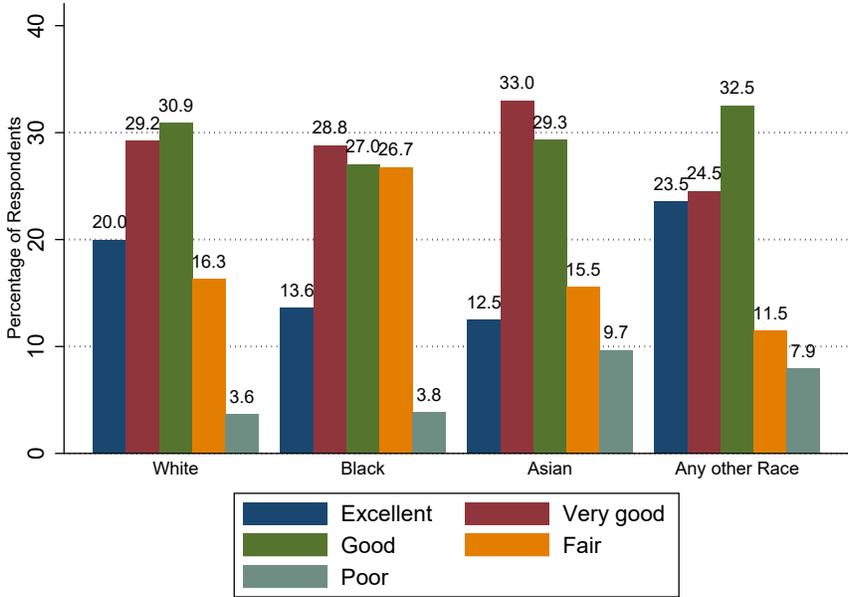


Figure 3.14 shows the health status across race/ethnicity: (1) White, (2) Black/African American, (3) Asian and Pacific Islanders, and (4) any other race. Among the four groups, 85% of Asian and Pacific Islander respondents reported that they were in good/very good/excellent health, followed by white respondents (80%), and other races (81%). Slightly more than two-third of Black/African American respondents expressed that they were in good to excellent health.

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# Confidence in Political Leaders

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We asked Houstonians to rate their level of confidence in how various political leaders are handling the COVID-19 outbreak. This section presents their assessments of Governor Greg Abbott, Dr. Anthony Fauci, Vice President Mike Pence, and President Donald Trump, broken down by key demographic characteristics. Specifically, the survey question reads: "On a scale from 1-5, where 1 means 'Not confident at all' and 5 means 'Very confident', rate your level of confidence about how these people/organizations are handling the COVID-19 outbreak?"

Results from this section are based on responses collected between May 20 and June 23, 2020, and reflect respondents' confidence in public officials' handling of the pandemic at that time.<sup>1</sup> Overall, respondents were more confident in Dr. Anthony Fauci's handling of the COVID-19 outbreak: 57% reported being 'Moderately' or 'Very confident' in how Dr. Fauci is handling the ongoing health crisis (see Figures C1-C4 in Appendix B). By contrast, only 33% and 37% of respondents reported being moderately or very confident in how President Donald Trump and Vice President Mike Pence, respectively, are handling the pandemic. Confidence in Governor Greg Abbott was more evenly distributed across the five possible responses with just over two-fifths (43%) of respondents reporting their level of confidence in Governor Abbott as either 'Moderately' or 'Very confident'.

## 4.1 Confidence in Governor Greg Abbott

First, we look at confidence in Governor Greg Abbott's handling of the COVID-19 outbreak by race and ethnicity, age, county of residence, and party ID. According

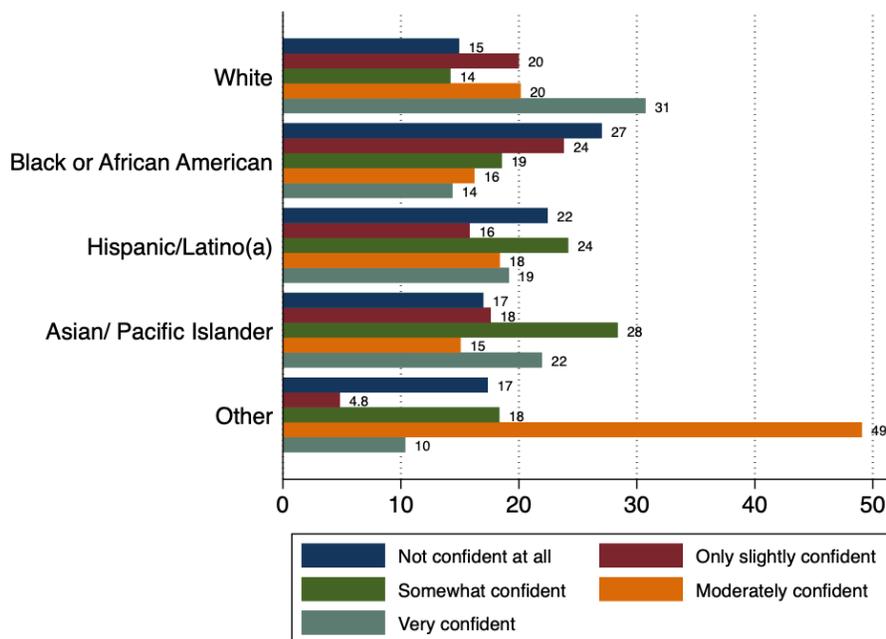
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<sup>1</sup>The survey was fielded between May 20 and June 23, several months before President Trump contracted COVID-19, which may have affected respondents' confidence in the President and other government officials.

## 4.1. Confidence in Governor Greg Abbott

to Figure 4.1, 41% of white respondents reported being 'Moderately' or 'Very confident' in Governor Abbott's handling, while the reverse is true for Black and African American respondents: 51% reported being 'Not at all' or 'Only slightly confident.' Over 50% of respondents identifying as other reported being 'Moderately' or 'Very confident', while 37% of Asian and Pacific Islander respondents did so. Hispanic and Latino(a) respondents were evenly split: 37% of respondents reported being 'Moderately' or 'Very confident' and 37% reported no or only slight confidence in the Governor's handling of the COVID-19 health crisis.

**Figure 4.1:** Level of Confidence in Governor Greg Abbott by Race/Ethnicity

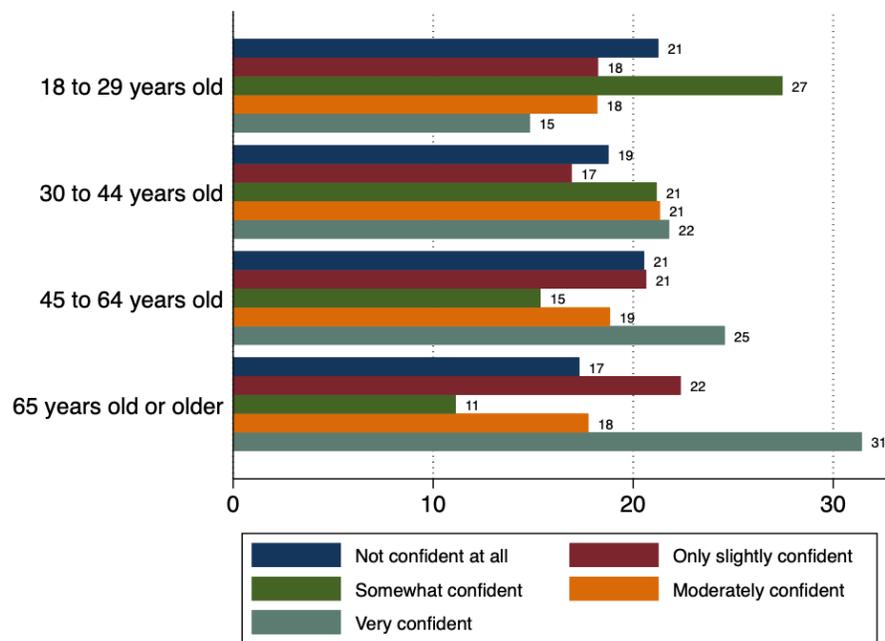


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Confidence by age group (Figure 4.2) reveals that among younger age groups (under 44), the modal response was 'Somewhat confident.' Respondents 45 years of age and older, by contrast, were more likely to report higher levels of confidence in the Governor, with those 65 years of age and older reporting higher levels of confidence in the Governor's handling of the outbreak.

## 4.1. Confidence in Governor Greg Abbott

**Figure 4.2:** Level of Confidence in Governor Greg Abbott by Age Group

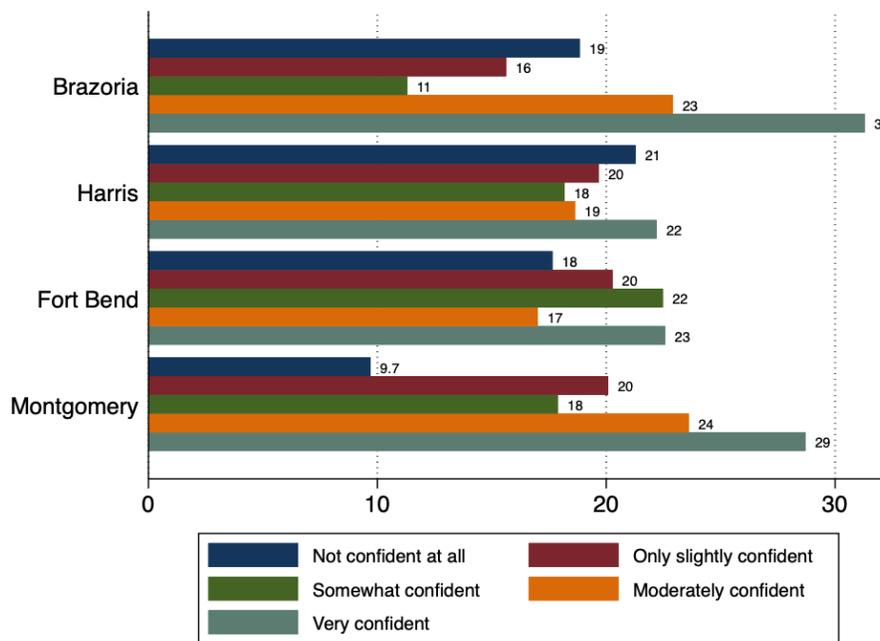


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

In terms of confidence by county of residence, respondents residing in Brazoria and Montgomery counties reported higher levels of confidence, with 54% and 53% reporting 'Moderately' or 'Very confident', respectively (Figure 4.3).

## 4.1. Confidence in Governor Greg Abbott

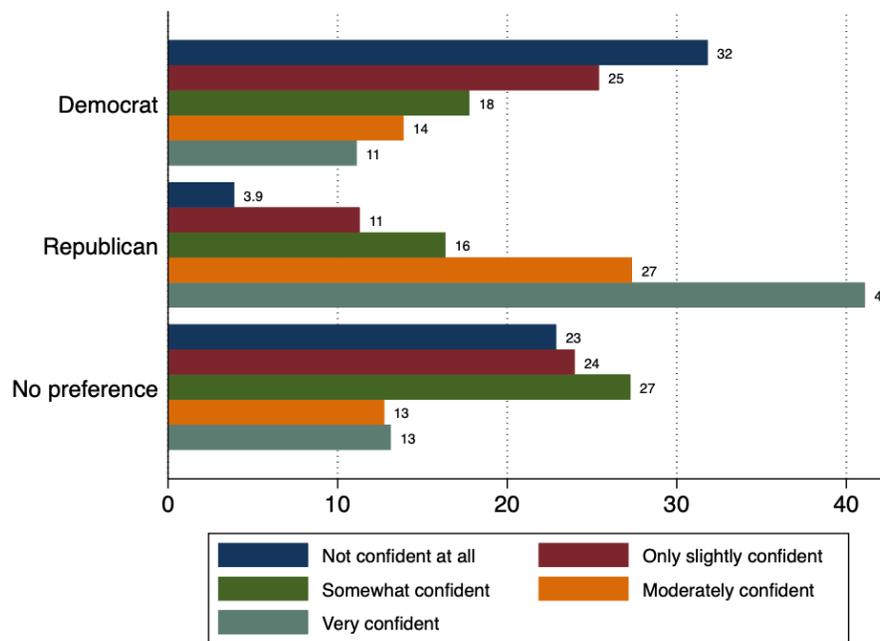
**Figure 4.3:** Level of Confidence in Governor Greg Abbott by County of Residence



*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Figure 4.4 presents respondents' confidence in how Governor Abbott is handling the COVID-19 outbreak by party ID. Unsurprisingly, Republican respondents reported higher levels of confidence, with 68% being either 'Moderately' or 'Very confident.' By contrast, 57% of Democrats reported being 'Not confident at all' or 'Only slightly confident.'

**Figure 4.4:** Level of Confidence in Governor Greg Abbott by Party ID



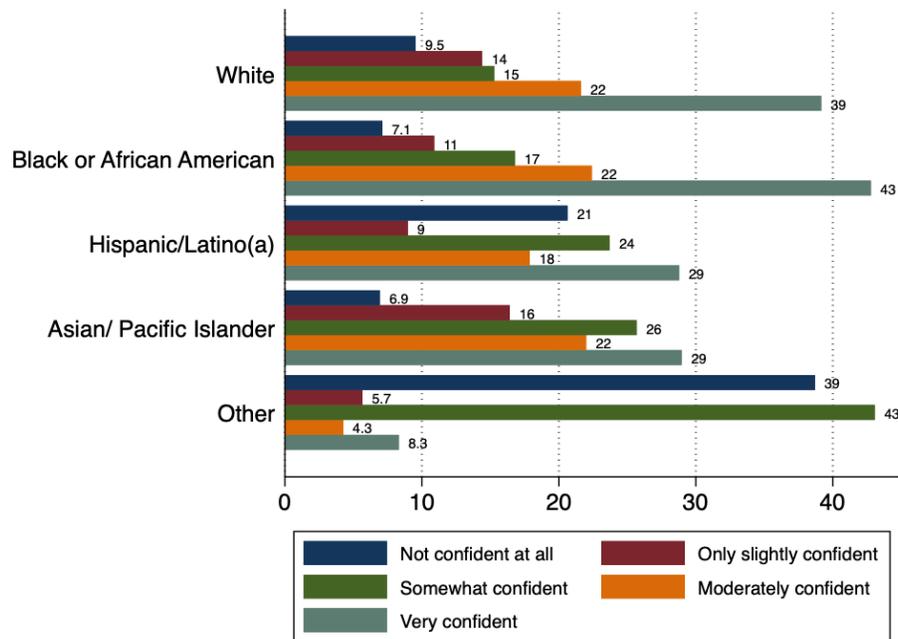
*Note: The result is based on responses collected between May 20 and June 23, 2020.*

## 4.2 Confidence in Dr. Anthony Fauci

Respondents were also asked about their level of confidence in how Dr. Anthony Fauci, the director of the National Institute of Allergy and Infectious Diseases, is handling the COVID-19 outbreak. As can be seen in Figure 4.5, both white and Black and African American respondents reported high levels of confidence in Dr. Fauci, with 39% and 43%, respectively, reporting ‘Very confident’ in his handling of the crisis. Twenty-nine percent of Hispanics and Latino(a)s, 29% of Asians and Pacific Islanders, and only 8% of those identifying as other reported being ‘Very confident.’

## 4.2. Confidence in Dr. Anthony Fauci

**Figure 4.5:** Level of Confidence in Dr. Anthony Fauci by Race/Ethnicity

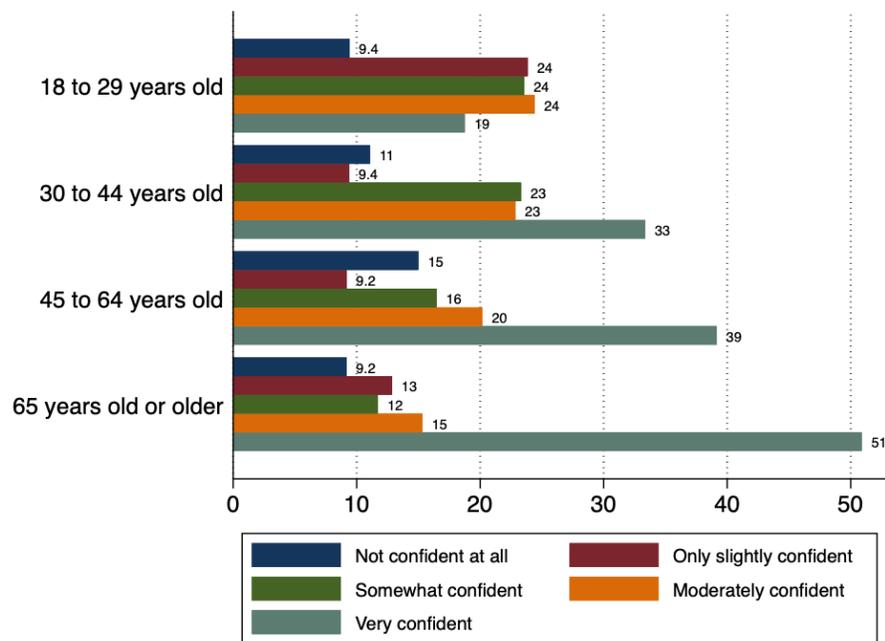


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Examining confidence in Dr. Fauci by age group (see Figure 4.6), we see that the majority of respondents aged 30 years and older are either 'Moderately confident' or 'Very confident' in Dr. Fauci's handling the crisis. Respondents aged 18 to 29 years old were, as a group, less confident than older age groups, but still, 43% reported being either 'Moderately confident' or 'Very confident.'

## 4.2. Confidence in Dr. Anthony Fauci

**Figure 4.6:** Level of Confidence in Dr. Anthony Fauci by Age Group

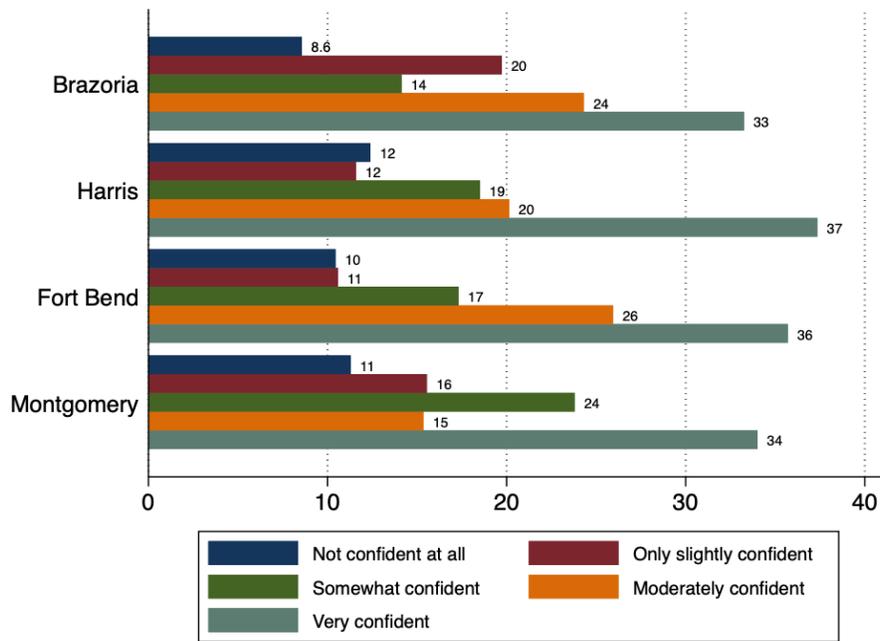


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Similarly, Dr. Fauci's handling of the COVID-19 outbreak received high levels of confidence across the four counties surveyed with 33%, 37%, and 36%, and 34% in Brazoria, Harris, Fort Bend, and Montgomery, respectively, reporting to be 'Very confident' in how he is handling the ongoing health crisis.

## 4.2. Confidence in Dr. Anthony Fauci

**Figure 4.7:** Level of Confidence in Dr. Anthony Fauci by County of Residence

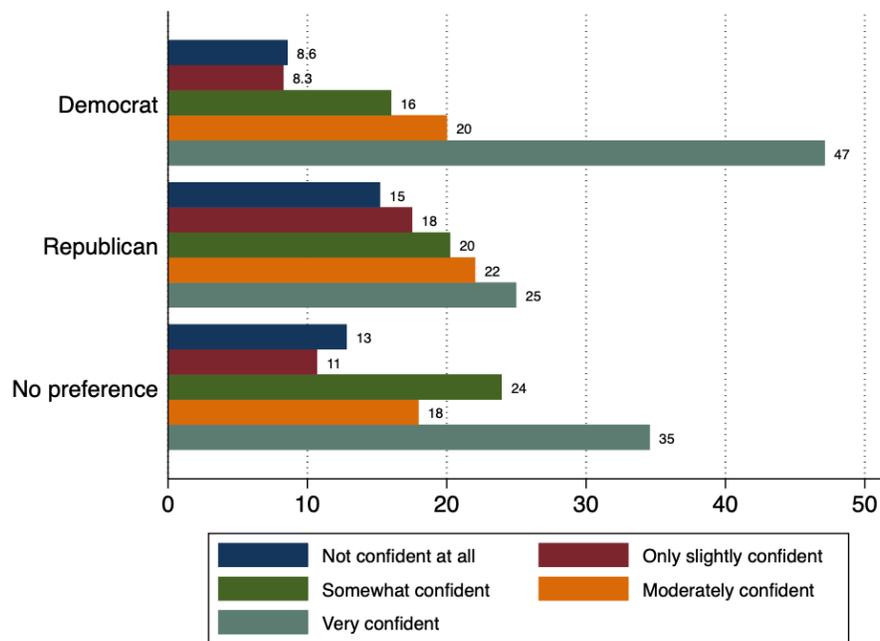


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Finally, 67% of Democrats reported being ‘Moderately confident’ or ‘Very confident’ in Dr. Fauci’s handling of the ongoing health crisis, compared to 47% of Republicans and 53% for those with no preferred party ID.

### 4.3. Confidence in Vice President Mike Pence

**Figure 4.8:** Level of Confidence in Dr. Anthony Fauci by Party ID



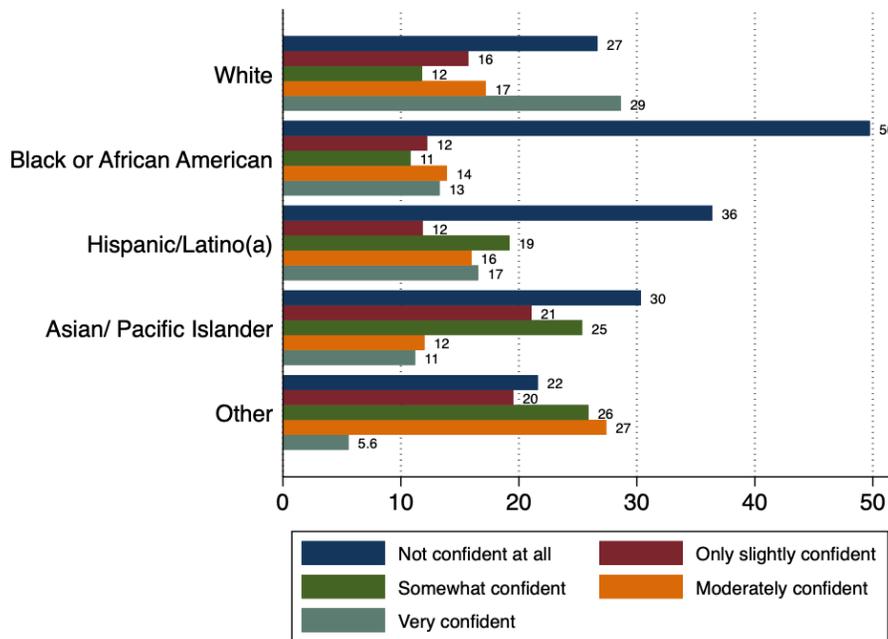
*Note: The result is based on responses collected between May 20 and June 23, 2020.*

## 4.3 Confidence in Vice President Mike Pence

Overall, Figures 4.9-4.11 reveal low confidence among respondents in how Vice President Mike Pence is handling the COVID-19 pandemic. According to Figure 4.9, confidence in Vice President Pence’s handling of the crisis is particularly low among non-white respondents. Fifty percent of Black and African American respondents, 36% of Hispanic and Latino(a) respondents, and 30% of Asian and Pacific Islander respondents reported having no confidence in how Mike Pence has handled the crisis so far. In addition, the confidence level across age groups is also low, though those aged 65 years and older were somewhat evenly split at the extremes, with 33% reporting no confidence and 30% reporting to be very confident (see Figure 4.10).

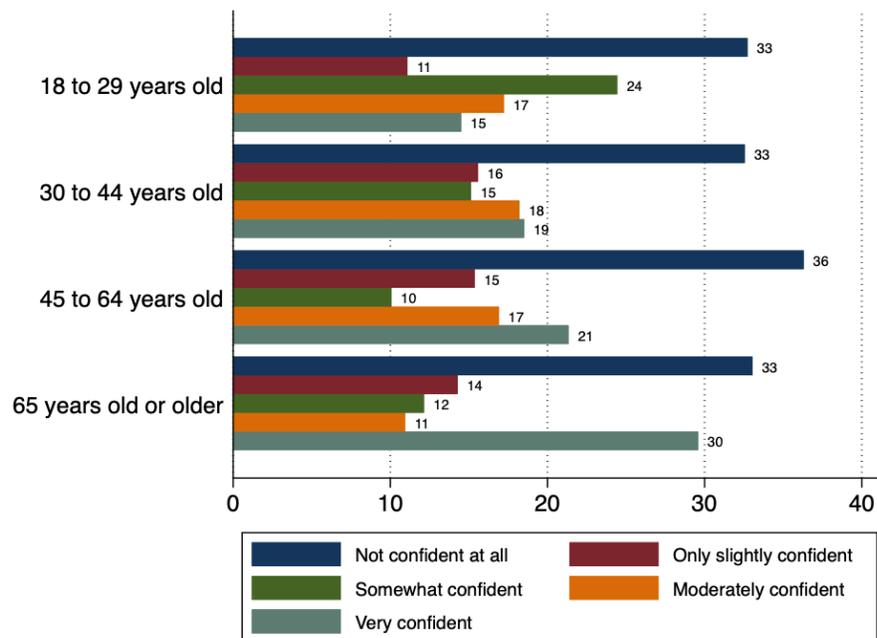
### 4.3. Confidence in Vice President Mike Pence

**Figure 4.9:** Level of Confidence in Vice President Mike Pence by Race/Ethnicity



*Note: The result is based on responses collected between May 20 and June 23, 2020.*

**Figure 4.10:** Level of Confidence in Vice President Mike Pence by Age Group

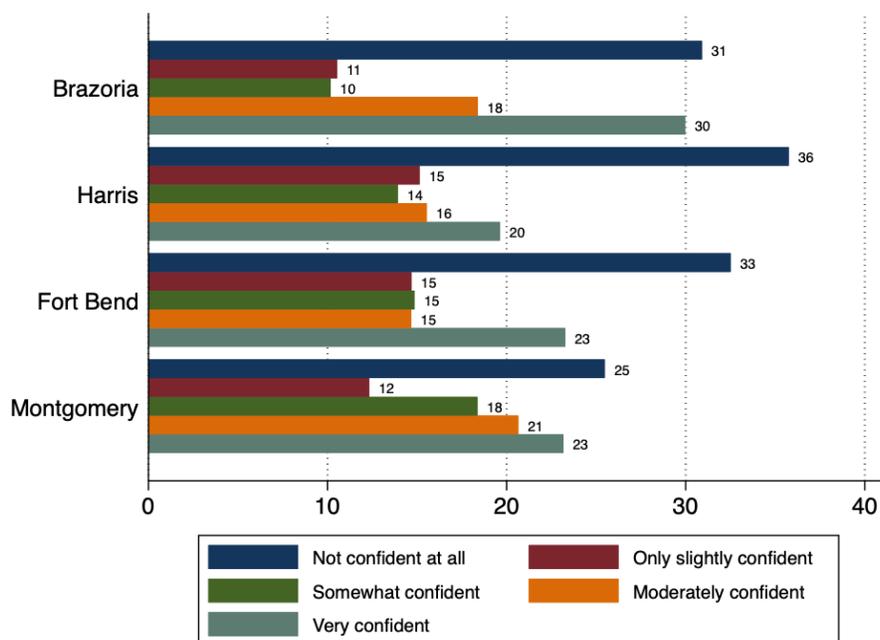


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

### 4.3. Confidence in Vice President Mike Pence

Across the four counties included in the survey, the modal response was ‘Not confident at all’ in Vice President Pence’s handling of the ongoing health crisis. In Brazoria, as with those aged 65 years and older, responses were somewhat evenly split at the extremes, with 31% reporting ‘Not confident at all’ and 30% reporting ‘Very confident.’

**Figure 4.11:** Level of Confidence in Vice President Mike Pence by County of Residence

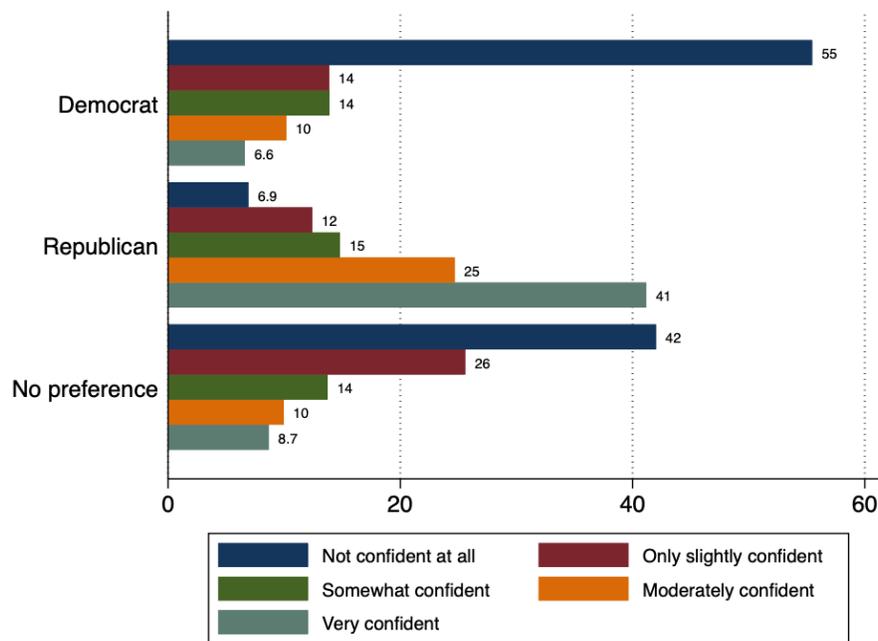


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Lastly, Figure 4.12 shows that confidence in Vice President Pence varies by political party identification. Fifty-five percent of Democrats reported being ‘Not at all confident’ compared to only 7% of Republicans. By contrast, 41% of Republicans were very confident, while just 7% of Democrats reported being very confident. Forty-two percent of those with no preferred party ID reported having no confidence at all in the Vice President’s handling of the health crisis.

## 4.4. Confidence in President Donald Trump

**Figure 4.12:** Level of Confidence in Vice President Mike Pence by Party ID



*Note: The result is based on responses collected between May 20 and June 23, 2020.*

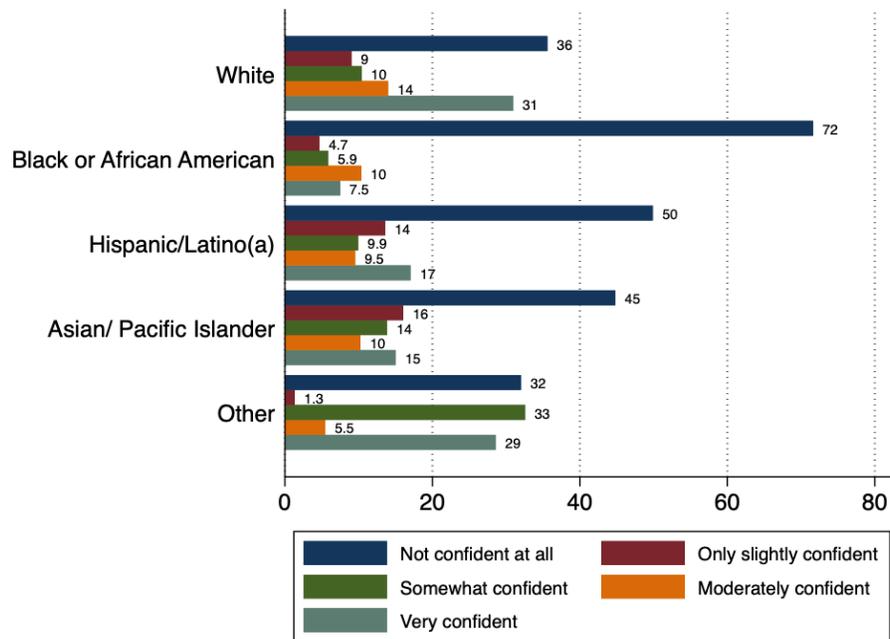
## 4.4 Confidence in President Donald Trump

Similar to patterns observed with Vice President Mike Pence, Figures 4.13-4.16 highlight low levels of confidence in President Trump's handling of the COVID-19 pandemic.<sup>2</sup> Overall, 48% of respondents reported no confidence in all in how President Trump has handled the pandemic. Figure 4.13 reveals striking differences between white and non-white respondents. Although the modal response for white respondents was 'Not confident at all,' the highest proportion of those reporting 'Very confident' (30%) was reported by white respondents. Almost three-quarters of Black and African American respondents, 50% of Hispanic and Latino(a) respondents, and 45% of Asian and Pacific Islander respondents had no confidence in how the President has thus far handled the crisis.

<sup>2</sup>Note that responses collected in the late Spring may not reflect attitudes in the Fall, especially after the news on October 2 that President Trump contracted COVID-19.

## 4.4. Confidence in President Donald Trump

**Figure 4.13:** Level of Confidence in President Donald Trump by Race/Ethnicity

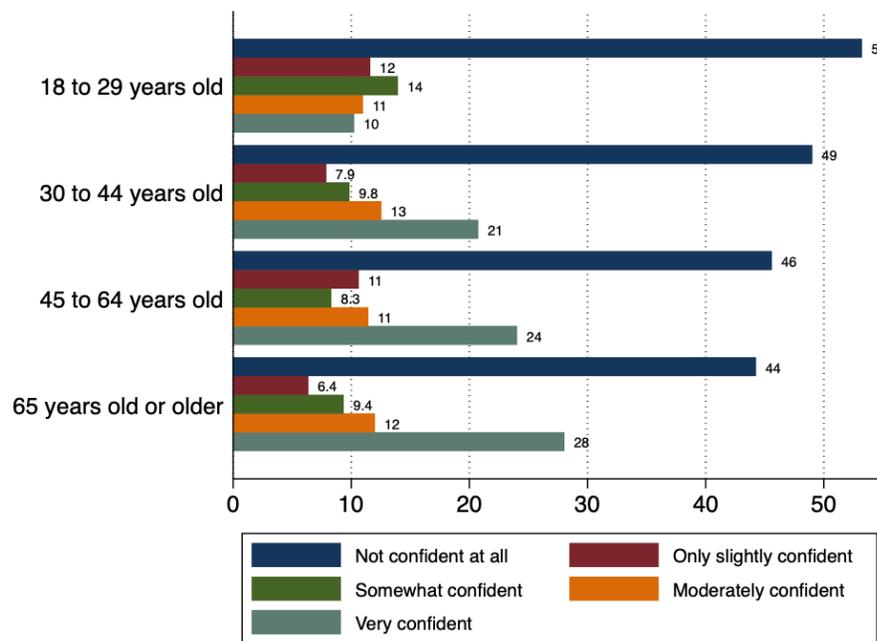


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Across all age groups, the plurality of respondents, by far, reported not being confident in how President Trump is handling the COVID-19 outbreak (Figure 4.14). Confidence, however, does appear to slightly increase with age: 28% of respondents aged 65 years and older reported being 'Very confident' in President Trump's handling of the pandemic, compared to only 10% of those aged 18 to 29 years old.

## 4.4. Confidence in President Donald Trump

**Figure 4.14:** Level of Confidence in President Donald Trump by Age Group

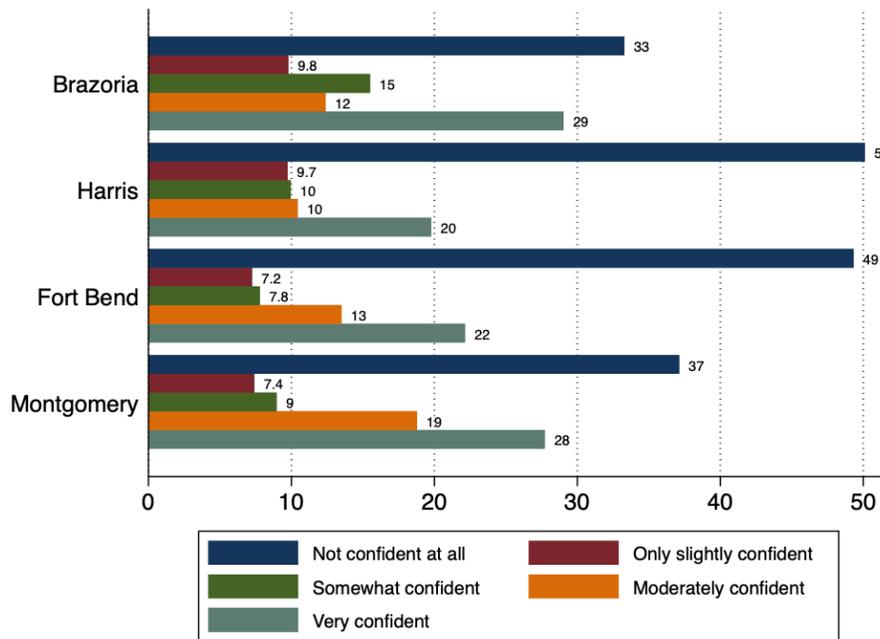


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Similarly, low confidence in President Trump’s handling of the ongoing health crisis are found across all four counties. Brazoria and Montgomery counties - both of which lean Republican - had the highest proportion of respondents reporting ‘Very confident’ in how President Trump is handling the crisis: 29% in Brazoria and 28% in Montgomery.

## 4.4. Confidence in President Donald Trump

**Figure 4.15:** Level of Confidence in President Donald Trump by County of Residence

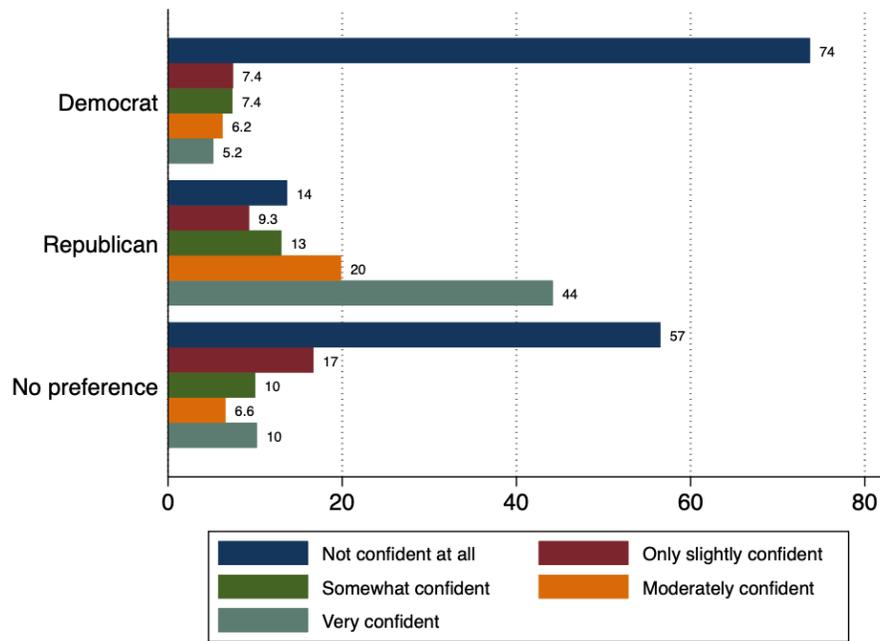


*Note: The result is based on responses collected between May 20 and June 23, 2020.*

Finally, confidence in President Trump’s handling of the COVID-19 pandemic varied dramatically by political party ID. Three-quarters of Democrats and 57% of those with no preferred party reported having no confidence at all in President Trump’s handling of the pandemic, compared to only 14% of Republicans. Forty-four percent of Republican respondents reported being ‘Very confident’ compared to 5% of Democrats and 10% of those with no preferred party ID.

## 4.4. Confidence in President Donald Trump

**Figure 4.16:** Level of Confidence in President Donald Trump by Party ID



*Note: The result is based on responses collected between May 20 and June 23, 2020.*

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# Impact of COVID-19 on Houston Households

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The U.S. Census Bureau’s experimental Household Pulse Survey (HPS) collected information about the impact of COVID-19 on household activities including schooling, employment and economic well being. Low-income families with young children spent a large number of hours per week assisting their children with schooling activities. Many respondents expressed concern about being able to make or mortgage payments, and are worried about economic recovery.

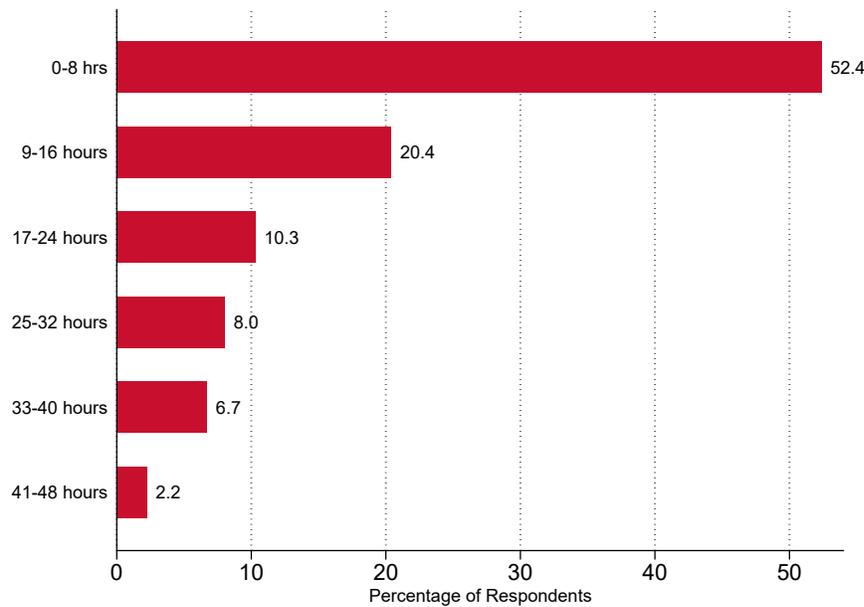
## 5.1 Parenting and Children Education

In this section, we report the responses of respondents from the Houston MSA in the Household Pulse Survey. Figure 5.1 shows that 51% spent 0-8 hours on teaching activities for their children, 22% spent about 9 to 16 hours, and 19% spent between 17-24 hours (12%) and 25-32 hours (8%). About 3% spent between 33 to 48 hours on children’s educational activities.

Figure 5.2 reports the number of hours parents spent on teaching activities with their children by race in Houston MSAs. The share of parents spending 0-8 hours on children’s educational activities is not significantly different across race, still, about 13% Blacks and African Americans in the Houston area spends between 33 and 48 hours with their children weekly, follow by white parents spending 9% of their time with their children while 5% of respondents in any other group reported spending 33 hours and above with their children. Two-thirds (67%) of respondents in any other race spent 0-8 hours with their children; Asians and Pacific Islanders spent the same amount of time, and about 50% of Blacks and African Americans

## 5.1. Parenting and Children Education

**Figure 5.1:** Hours Spent on All Teaching Activities with Children in Last 7 Days

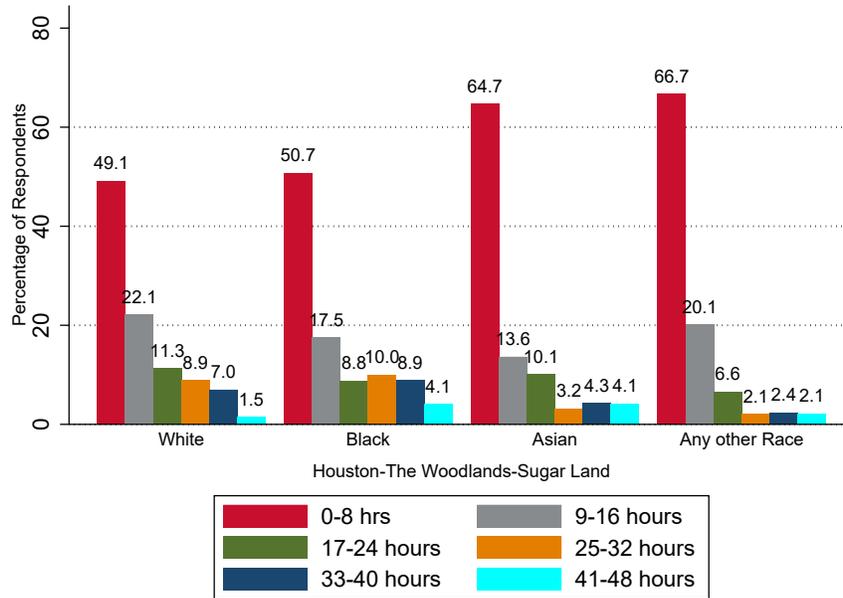


spent 0-8 hours on their children's education.

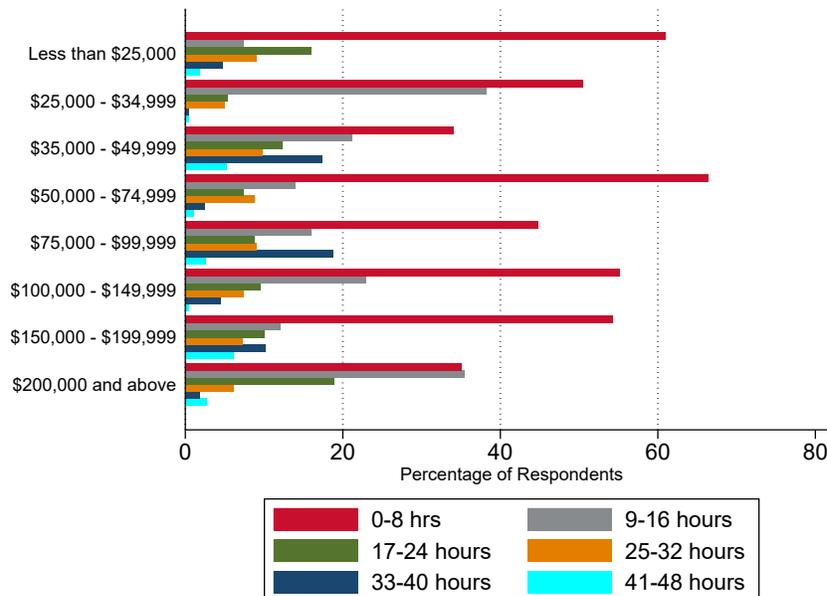
Figure 5.3 reports the number of hours parents spent on their children's' education by household income for Houston MSAs. On average, 60% of respondents from households earning less than \$25,000 spent 0-8 hours, about 64% of household earning between \$50,000 and \$74,499 spent 0-8 hours on children educational activities; approximately 55% of respondents household from different income groups spent 0-8 hours on children educational activity. On average, household earning between \$150,000 and \$199,000 (6%) and respondents earning between \$35,000 and \$49,999 (5%) households spend 41-48 hours on children's educational activities.

## 5.1. Parenting and Children Education

**Figure 5.2: Hours Spent on Children Education by Race/Ethnicity**



**Figure 5.3: Hours Spent on Children Education by Income Group**



## 5.2 Employment and Wages

### Employment in the Houston Area

The labor market has been heavily impacted since the COVID-19 outbreak. In the Hobby School Hurricane Harvey Survey, respondents were asked if they experienced a job loss due to the pandemic. Figure 5.4 shows that 79% of respondents report no job loss, and 21% reported losing jobs due to the COVID19 outbreak. We further break the job loss down by gender (see Figure 5.5) and race (see Figure 5.6). Both figures indicate 26% of males experienced job loss and the share of job loss among Blacks and African Americans is 26%, followed by Hispanics and Latino(a)s in which 24% claimed they experienced job loss.

**Figure 5.4:** Did you experience a job loss due to the COVID-19 outbreak?

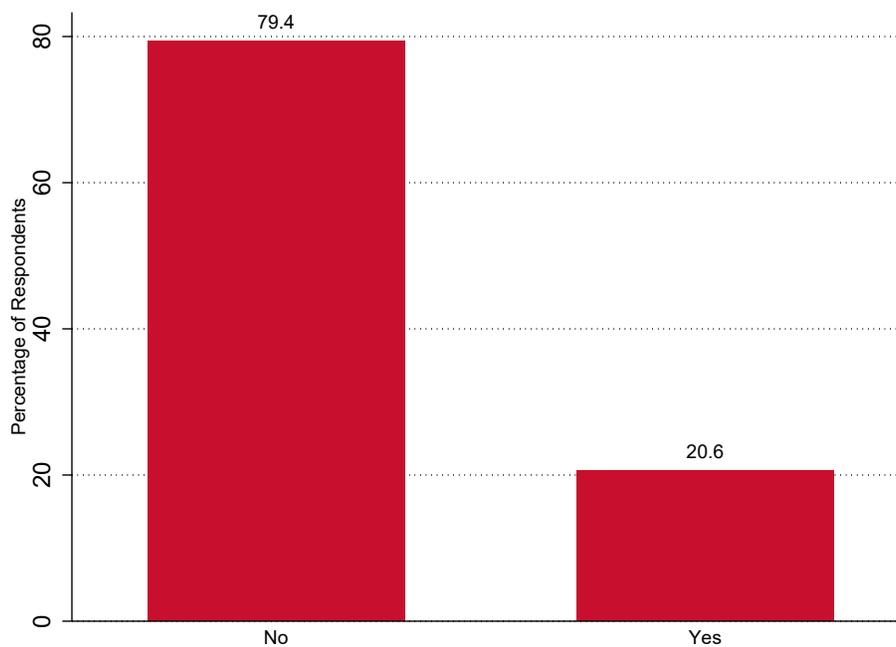


Figure 5.5: Job Loss by Gender

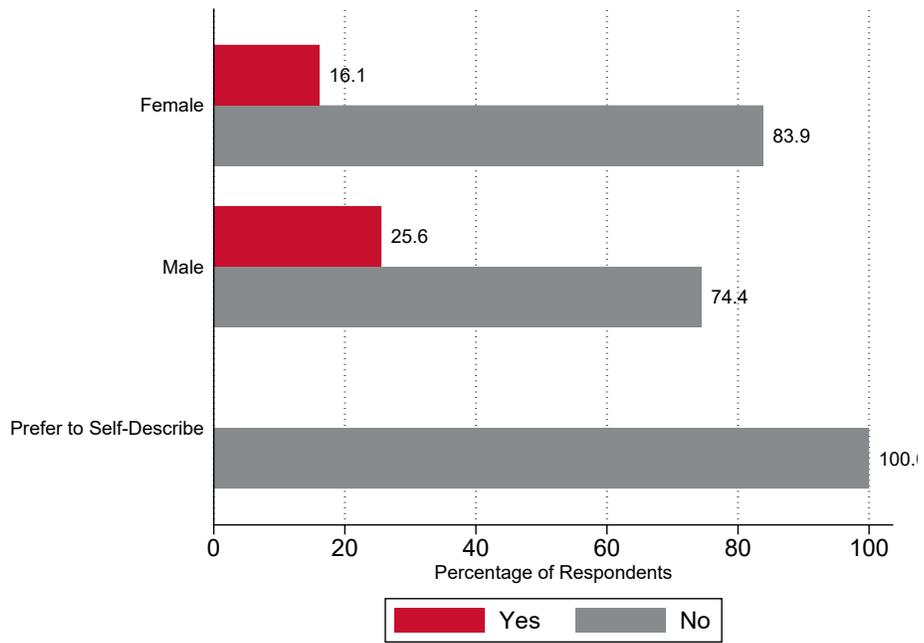
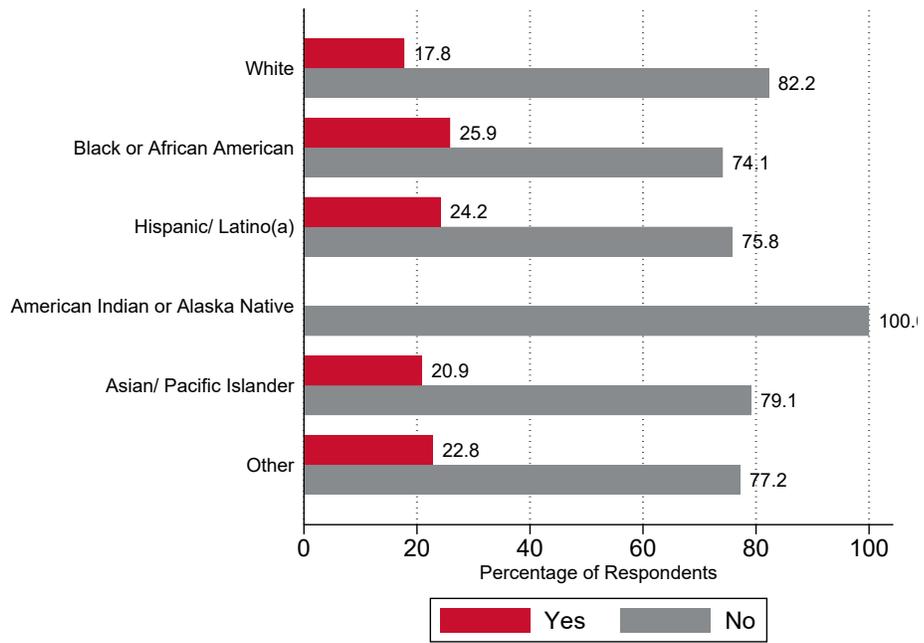


Figure 5.6: Job Loss by Race/Ethnicity



**Figure 5.7: Job Loss by County of Residence**

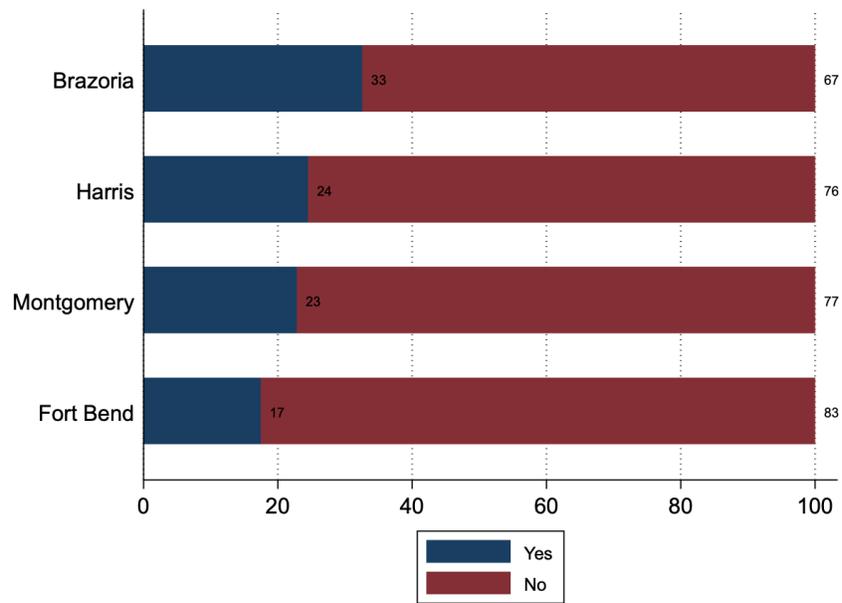


Figure 5.7 illustrates that a larger proportion of respondents in Brazoria county (33%) experienced job losses, followed by Harris County (24%), Montgomery County (23%), and Fort Bend County (17%).

**Figure 5.8:** Were you furloughed or have your hours reduced due to COVID-19 outbreak?

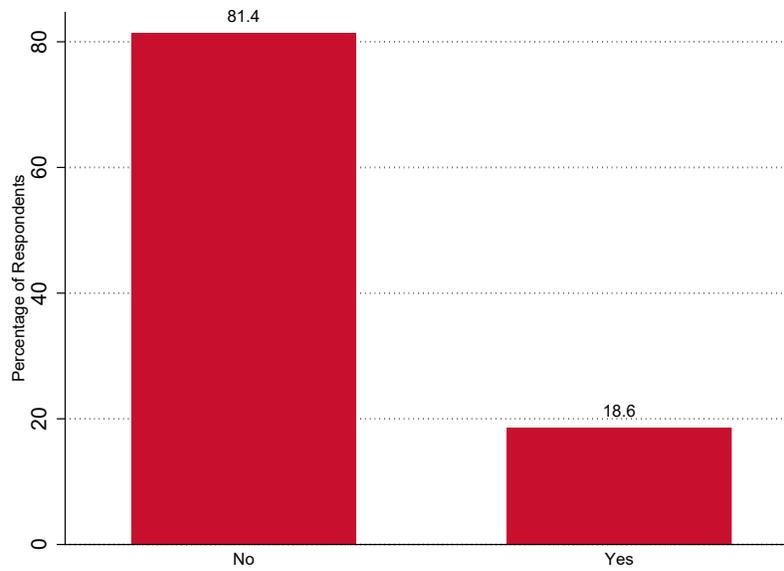
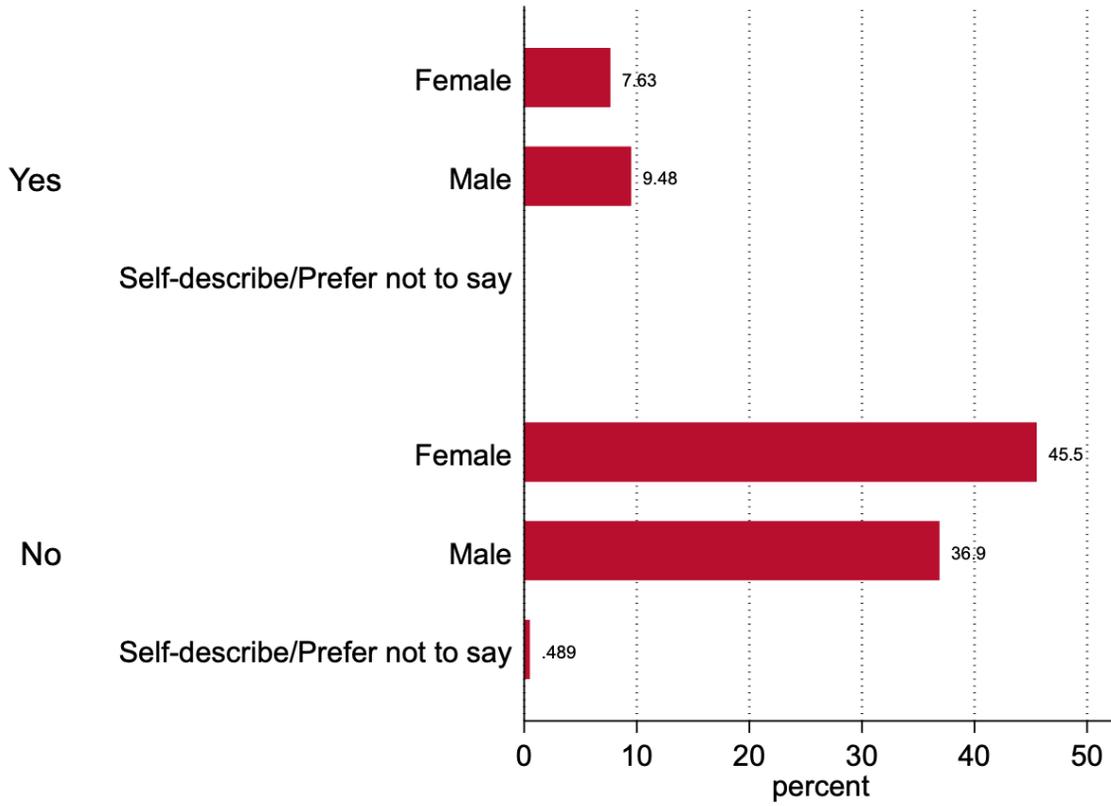


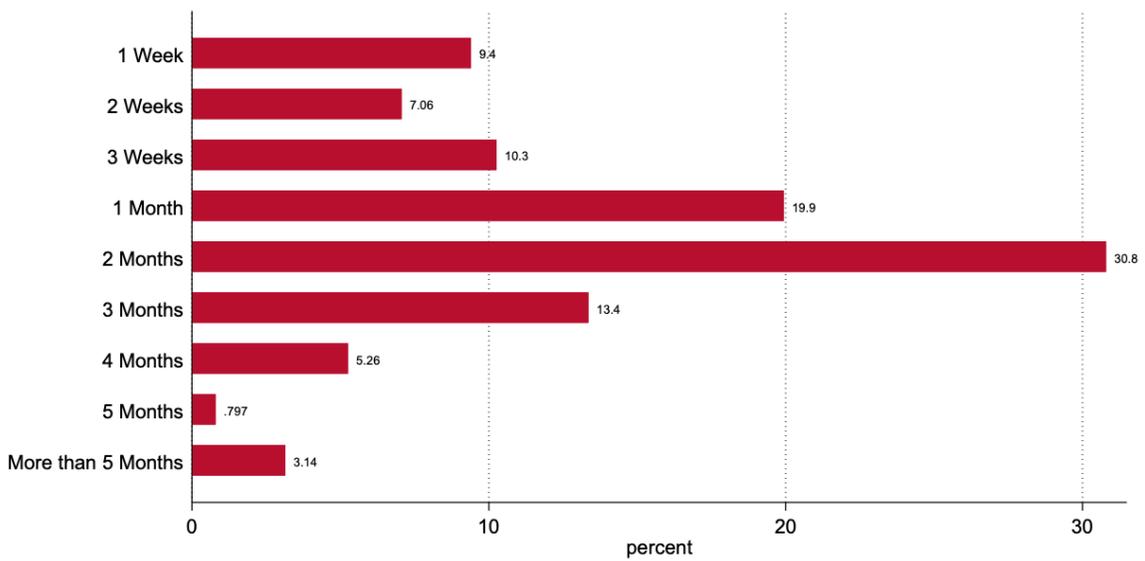
Figure 5.8 shows that close to one-fifth of respondents were either granted a temporary leave of absence (furlough) or had their work hours cut back due to the outbreak. Among those respondents or 8%, were female workers and 9% were male workers (see Figure 5.9).

Figure 5.10 illustrates the duration of unemployment and/or salary reduction. More than one-quarter (27%) reported that they had been laid-off and received salary-cuts for less than a month. Approximately 64% replied that their situation lasted between one and three months, whereas 9% said they had lost their jobs or received a salary reduction for more than three months.

**Figure 5.9: Furloughed or Hour Reduction by Gender**



**Figure 5.10: Length of Furlough or Hour Reduction**



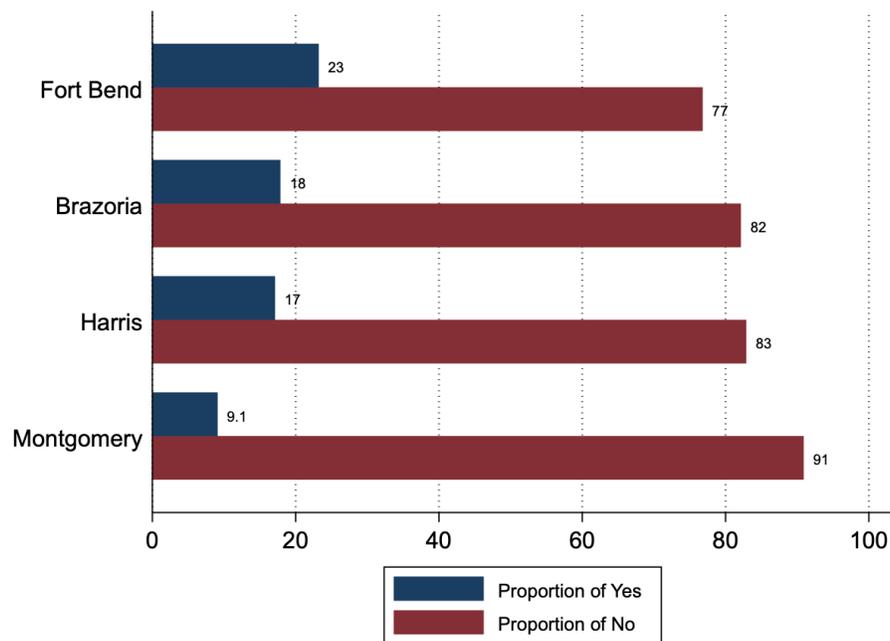
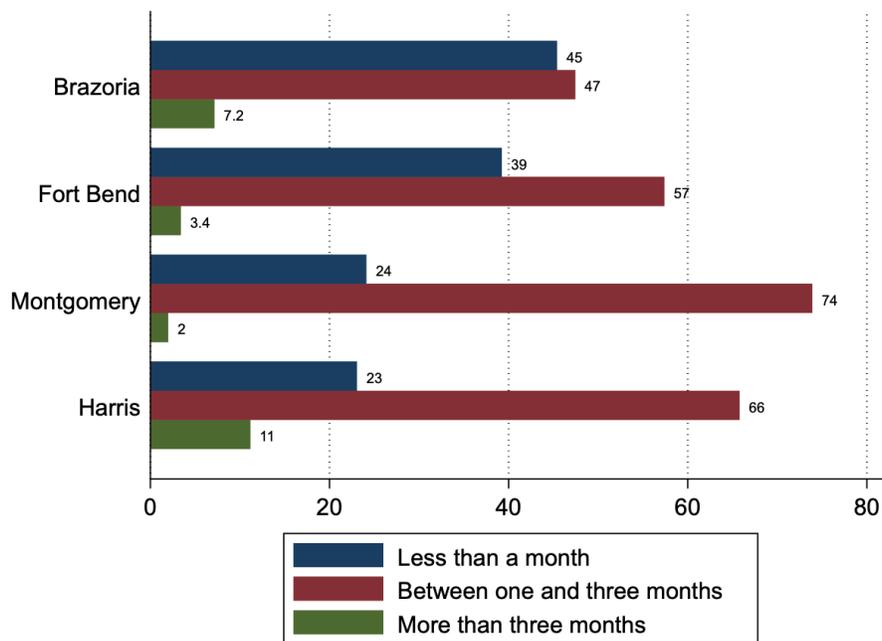
**Figure 5.11: Furloughed or Hour Reduction by County**

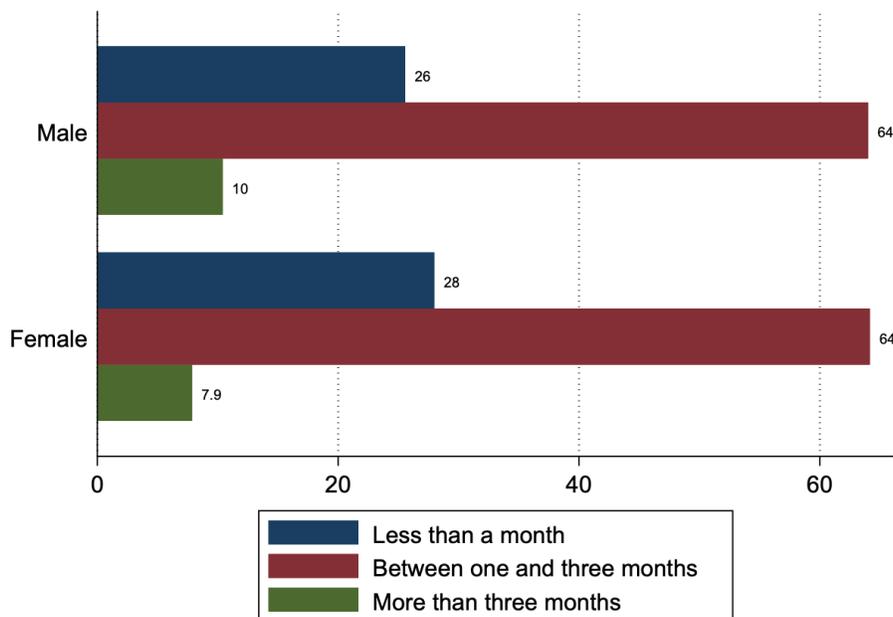
Figure 5.11 reports that almost one-quarter of workers (23%) were furloughed or had work hours reduced in Fort Bend County, followed by Harris County and Brazoria County with 18% and 17%, respectively. About 9% of respondents were either granted a leave of absence and fewer work hours in Montgomery County.

To further investigate the unemployment situation in different locations, Figure 5.12 shows that the most substantial proportion of respondents who have been laid-off or received salary-cuts for less than a month reside in Brazoria County (45%), followed by Fort Bend County (39%), and Montgomery County and Harris County (24% and 23%). Approximately 74% of respondents in Montgomery County had experienced lay-offs or pay reductions between one and three months, followed by Harris County with 66%, and Brazoria County and Fort Bend County with 47% and 57%, respectively. About 11% in Harris County said their unemployment/salary cut situation was longer than three months. This proportion is the largest, compared to Brazoria County (7%), Fort Bend County (3%), and Montgomery County (2%).

**Figure 5.12:** Length of Unemployment and/or Salary-cuts by County of Residence



The unemployment/salary reduction situation is most similar between male and female workers. According to Figure 5.13, over one-quarter of male (26%) and female (28%) workers had been laid-off or received salary cuts for less than a month (between one to three weeks). About three-fifths of workers (both male and female) had the same unemployment/pay-cut situation for about one to three months. Slightly more male workers (10%) than female workers (8%) said that their unemployment/salary reduction spell was longer than three months.

**Figure 5.13:** Length of Unemployment and/or Salary-cuts by Gender

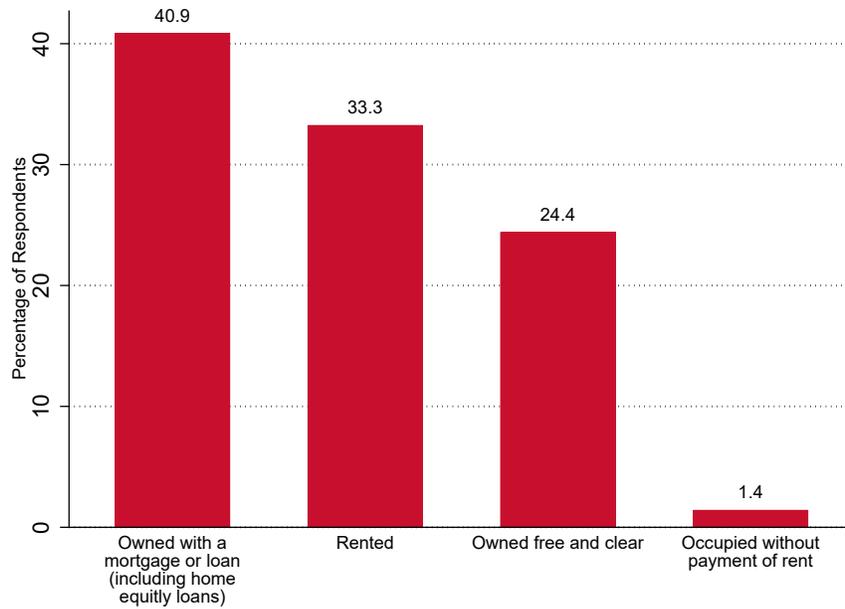
Notes: No data available for the groups of Self-describe/Prefer not to say

## 5.3 Mortgage and Rent

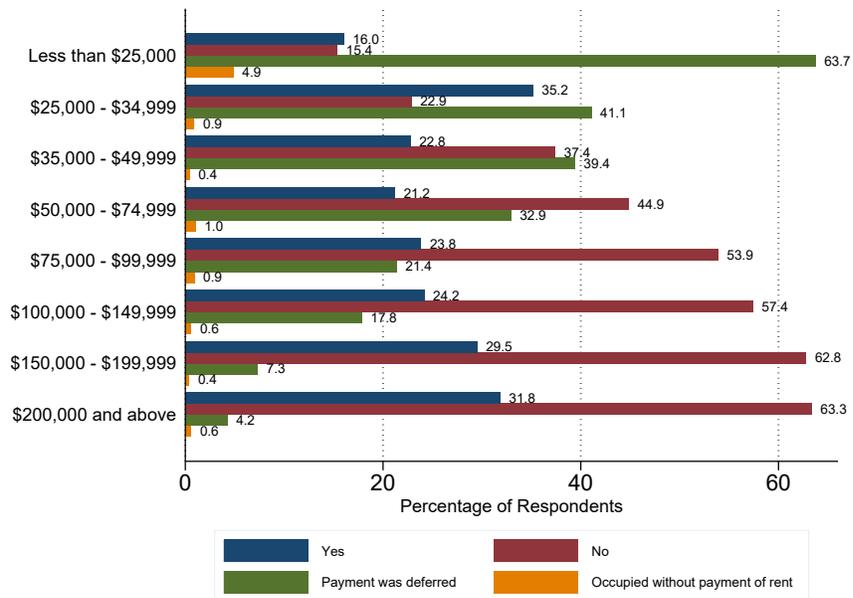
A section in the U.S. Census Bureau Household Pulse Survey (HPS) looks at how the COVID-19 pandemic impacts households' financial conditions on housing. Figure 5.14 show that almost a quarter of respondents own property without a mortgage or loan. About 46% and 28% of respondents either own their own property with a mortgage or live in a rental property, respectively. Figure 5.15 shows that more than half of respondents whose income level is less than \$25,000 are renters. The proportion of renters decreases as the respondents' income increases. More than three-fifths of respondents who earn more than \$100,000 own a property with an existing mortgage or loan.

Figure 5.16 shows that more than three-fifths (65%) of respondents remained confident that they can make rental or mortgage payments on time during the pandemic. About one-fifth were slightly confident that they can make the payments on time. However, approximately 13% of respondents had no confidence in making the payments on time. These confidence levels remained stable over time and were similar between male and female respondents. In terms of race and ethnicity,

**Figure 5.14: Housing Owned or Rented**



**Figure 5.15: Homeowners Vs. Renters by Income Level**



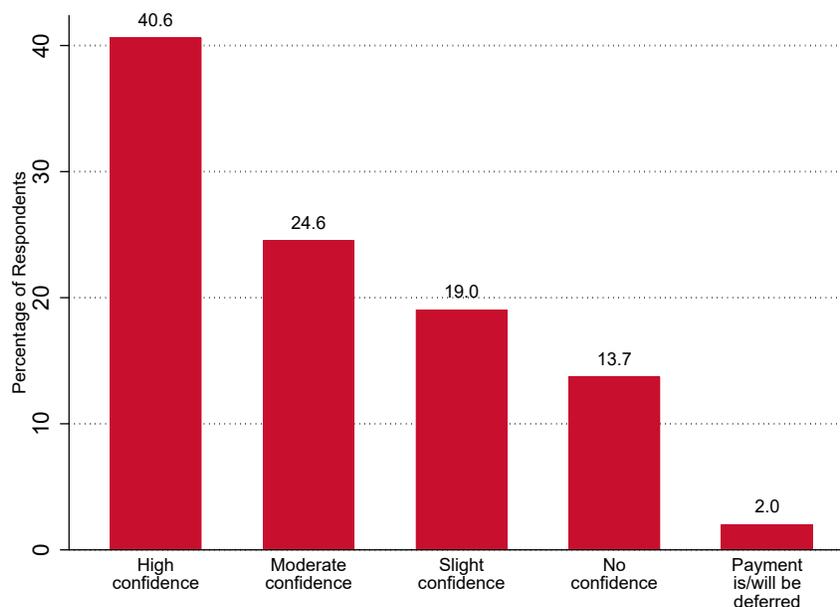
**Figure 5.16:** Confidence in Making Rental or Mortgage Payments

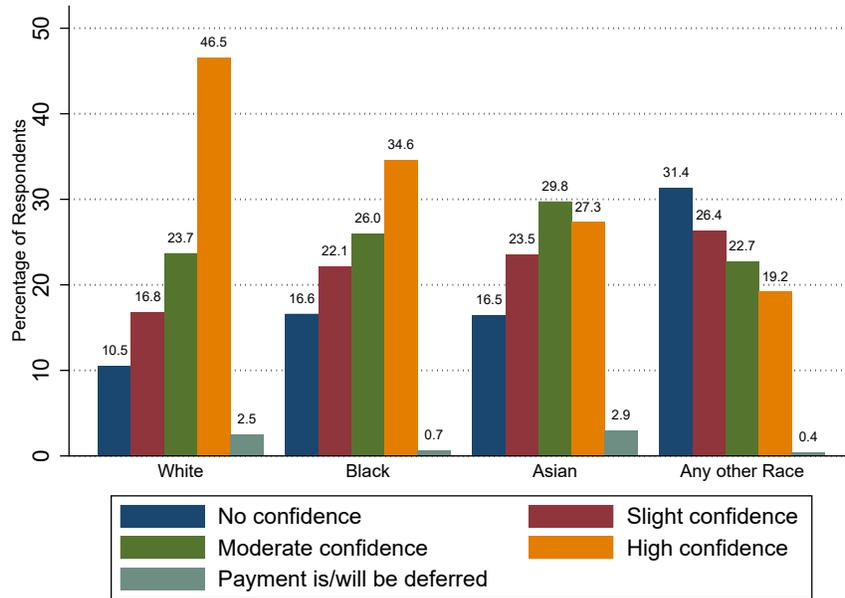
Figure 5.17 depicts that 73% of whites and 65% of Asians and Pacific Islanders are confident in paying their rental or mortgage payments on time, followed by 58% of Black/ African Americans. More than 16% of Black/African Americans have no confidence in making payments on time, while less than 10% of Whites and Asians felt the same way.

**Table 5.1:** Did you pay your last month's rent or mortgage on time?

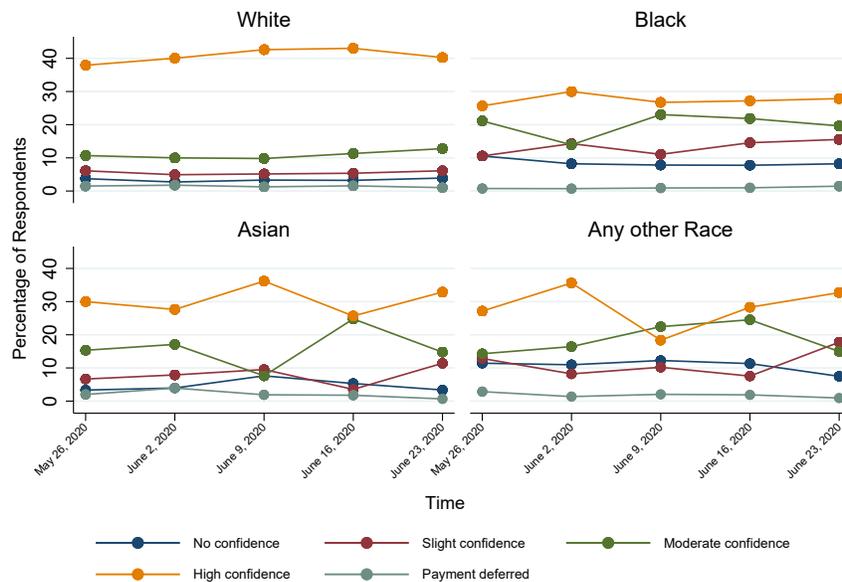
<b>Pay last month's mortgage or rent on time</b>	No.	%
Yes	4,616	85.9
No	507	9.4
Payment was deferred	251	4.7
<b>Total</b>	<b>5,374</b>	<b>100.0</b>

Table 5.1 presents the proportion of respondents who actually made their rental/- mortgage payments on time. It shows that 86% of respondents reported making their mortgage or rent payments on time, 9% reported making zero payment, and 4% deferred their payments. Figure 5.19 presents the proportions of on-time, delayed, and deferred payments in the five weeks- May 20, 2020 and June 2, 2020.

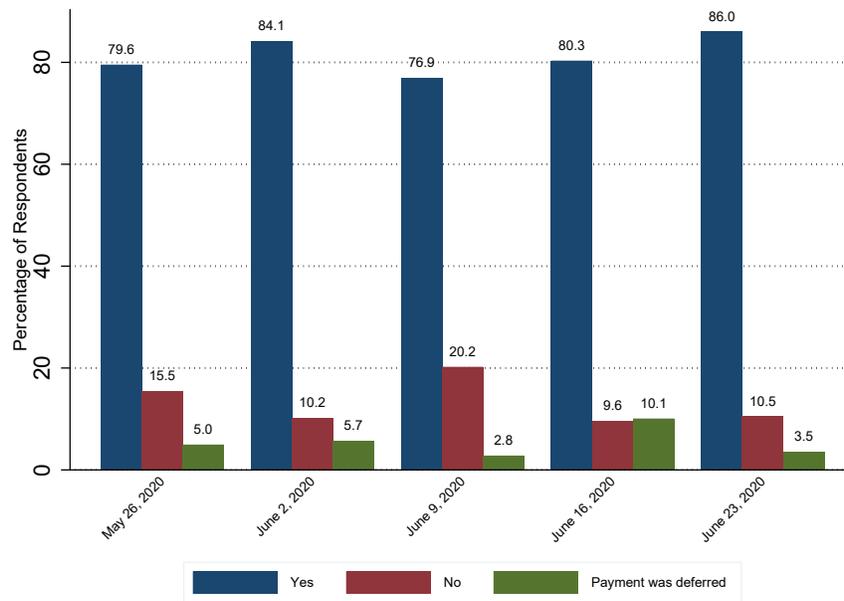
**Figure 5.17:** Confidence in Making Rental or Mortgage Payments On Time by Race/Ethnicity



**Figure 5.18:** Confidence in Making Rental or Mortgage Payments On Time by Race/Ethnicity by Week



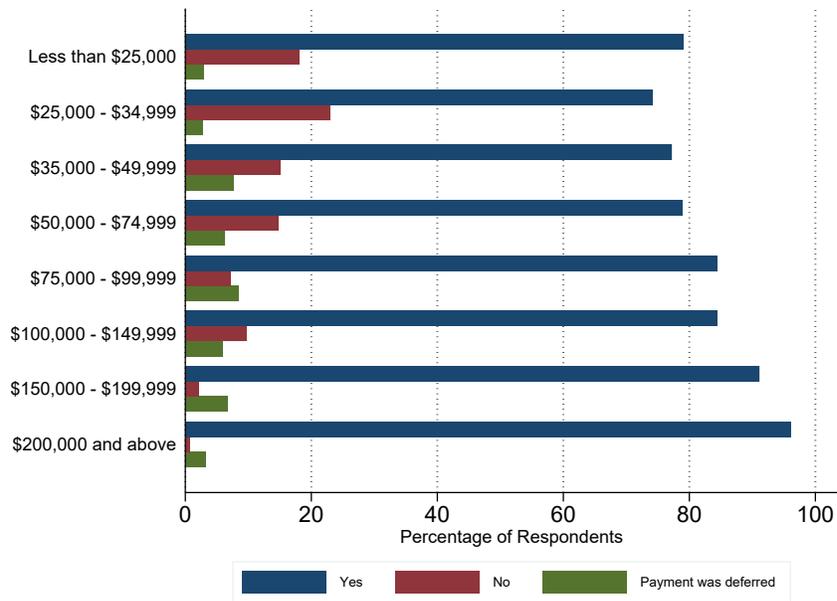
**Figure 5.19:** Making Rent & Mortgage Payments On Time by Week



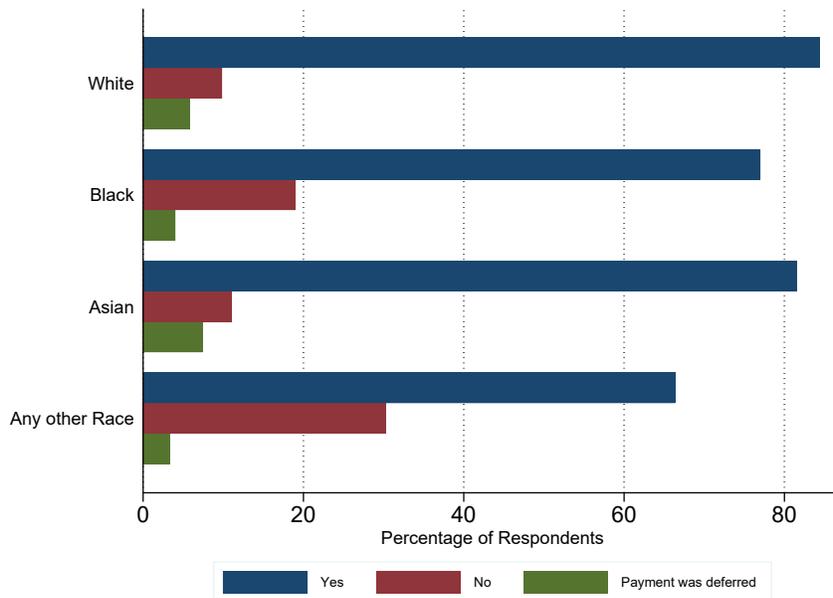
It shows that most households (more than four-fifths of households) could make their payments on time. The figure shows that households were less able to make their payments over time. However, this trend did not increase substantially.

Figure 5.20 shows that lower-income households have more difficulties in making rent payments on time. For example, more than one-fifth of households with less than \$35,000 were unable to pay rents on time. Figure 5.21 illustrates that more than four-fifths of white and Asian and Pacific Islander respondents made their rental/mortgage payments on time. However, slightly less than 80% of Black/African Americans were able to make their payments on time, followed by respondents in any other race (about 70%).

**Figure 5.20: Making Rent Payments On Time by Income**



**Figure 5.21: Making Rent & Mortgage Payments On Time by Race/Ethnicity**



## 5.4 Confidence in Economic Recovery

**Figure 5.22:** How worried are you about the economy recovering after the COVID-19 outbreak?

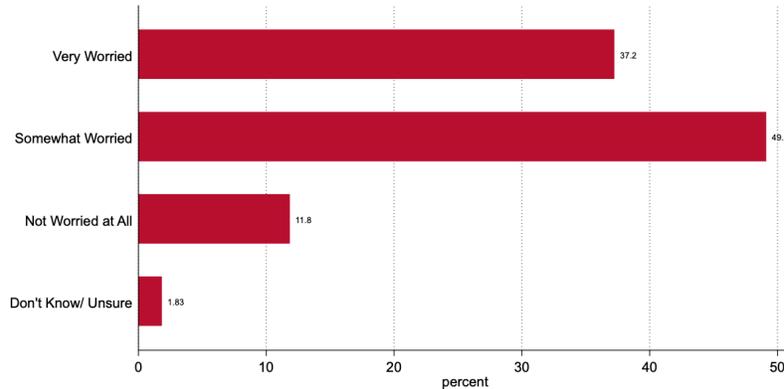


Figure 5.22 shows that most respondents (86%) were worried about the economic recovery after the COVID-19 outbreak. Among them, 37% were 'Very Worried,' and 49% were 'Somewhat Worried.' About 12% of respondents were 'Not Worried at All,' whereas 3% expressed that they did not know or were not sure. Economic uncertainty was distributed somewhat equally across countries.

Figure 5.23 shows that Brazoria County has the most substantial proportion of respondents (94%) who were worried about the economic recovery, followed by Montgomery (89%) and Harris (85%) counties.

## 5.4. Confidence in Economic Recovery

**Figure 5.23:** Confidence in Economic Recovery by County of Residence

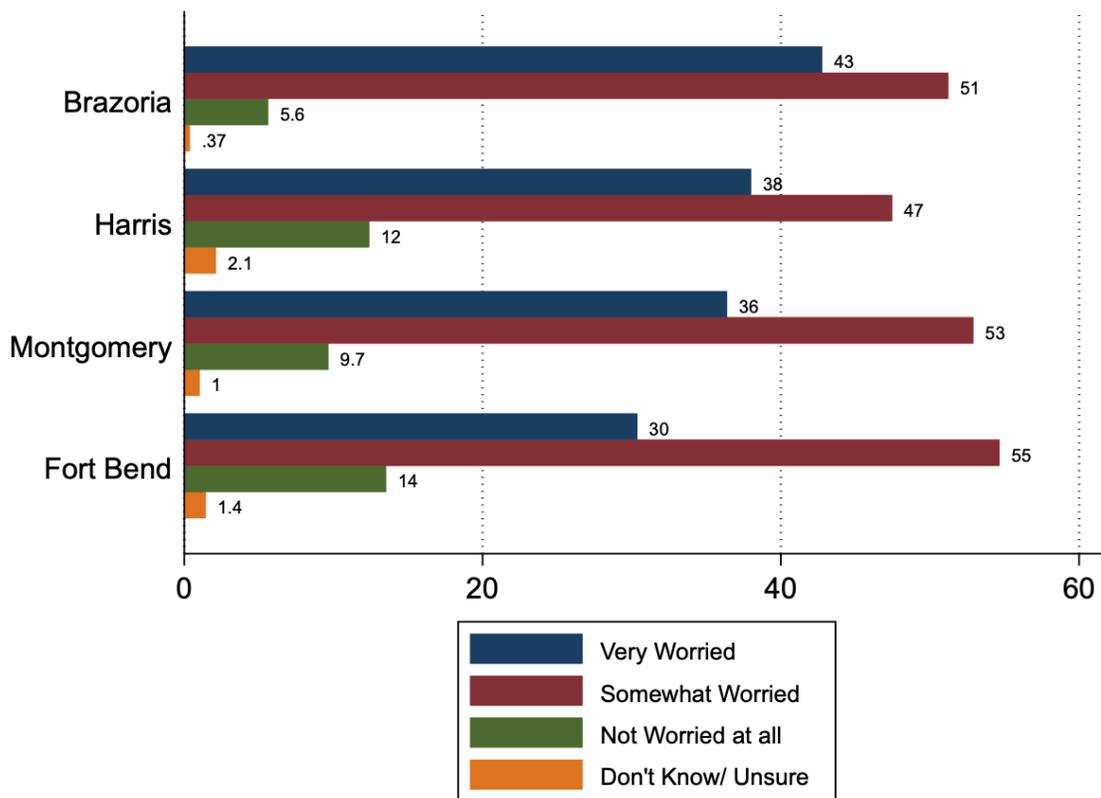
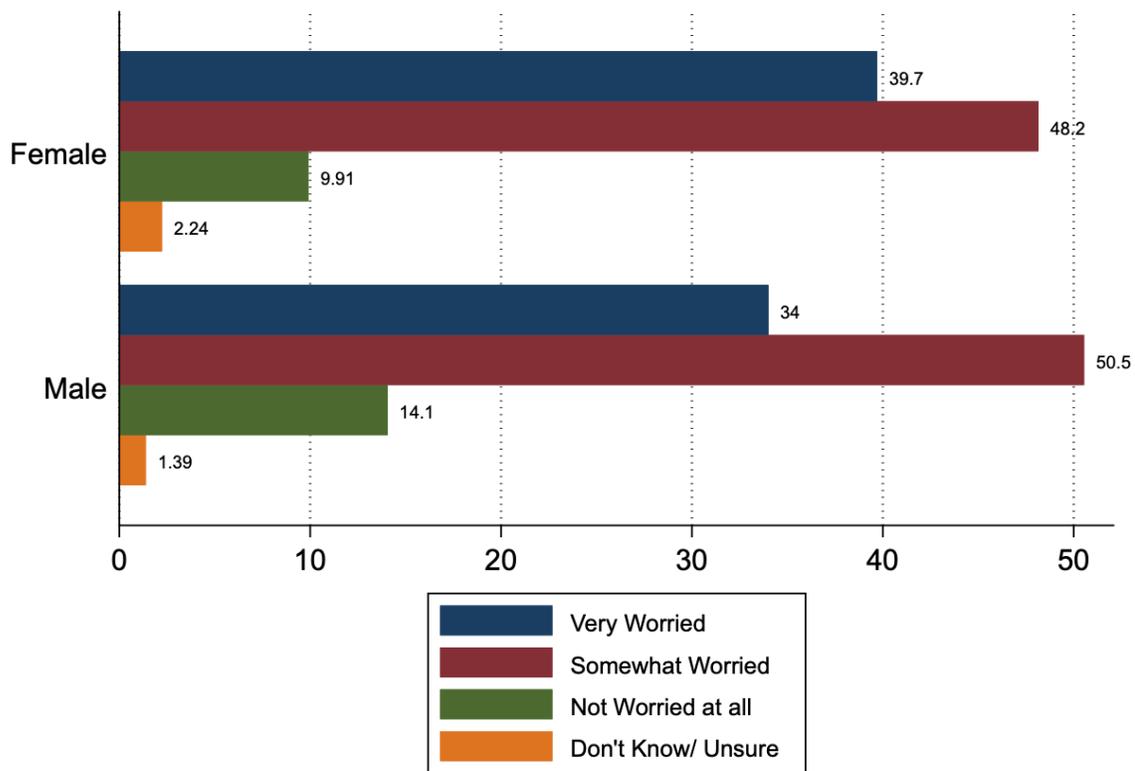


Figure 5.24 shows that about 40% of female respondents and 34% of male respondents were 'Very Worried' about the economic recovery. Slightly more female respondents are worried about the restoration of the economy.

Figure 5.25 shows that younger respondents, aged between 18 and 29 years, and senior respondents, who were over 65 years old, were relatively less worried about the economic recovery than mid-aged respondents aged between 30 and 64 years. Over 90% of 30-44 years old respondents were worried about the economic recovery after the COVID-19 outbreak, followed by 89% of the 45-64 age group respondents. About three-quarters of younger respondents and 85% of senior respondents were worried about the post-COVID economic recovery.

## 5.4. Confidence in Economic Recovery

**Figure 5.24:** Confidence in Economic Recovery by Gender



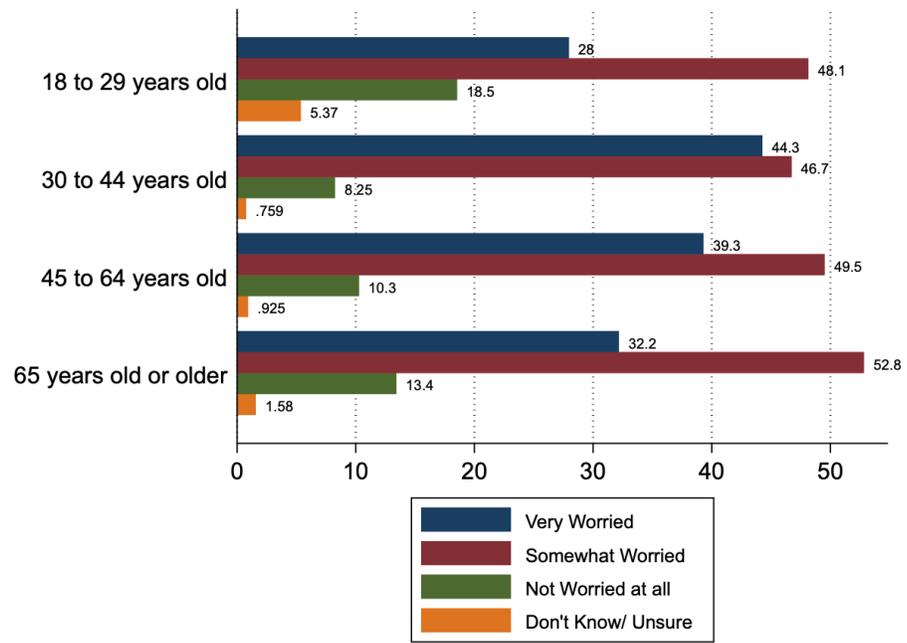
Notes: No data available for the groups of Self-describe/Prefer not to say

Figure 5.26 shows that there were higher proportions of Asian/Pacific Islanders (92%) and white (89%) respondents who were worried the most about the economy. Among Hispanic respondents, 87% were either very worried or somewhat worried about the economic recovery. About 78% of Black or African American respondents were worried about the recovery of the economy.

Uncertainty over economic recovery does not vary substantially among respondents who identify as Republican, Democrat, or Independent, as illustrated in Figure 5.27, 88% percent and 85% of Democrats and Republicans, respectively, were either 'Very Worried' or 'Somewhat Worried' about the post-COVID economic recovery. About 15% of Republicans were more optimistic and not worried at all, whereas almost 10% of Democrats were not worried about the recovery of the

## 5.4. Confidence in Economic Recovery

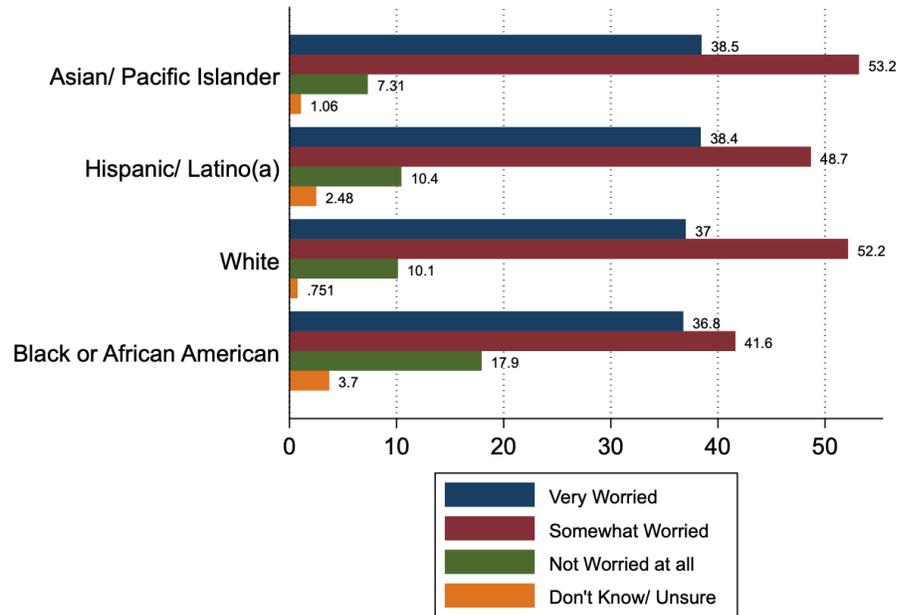
**Figure 5.25:** Confidence in Economic Recovery by Age Group



economy.

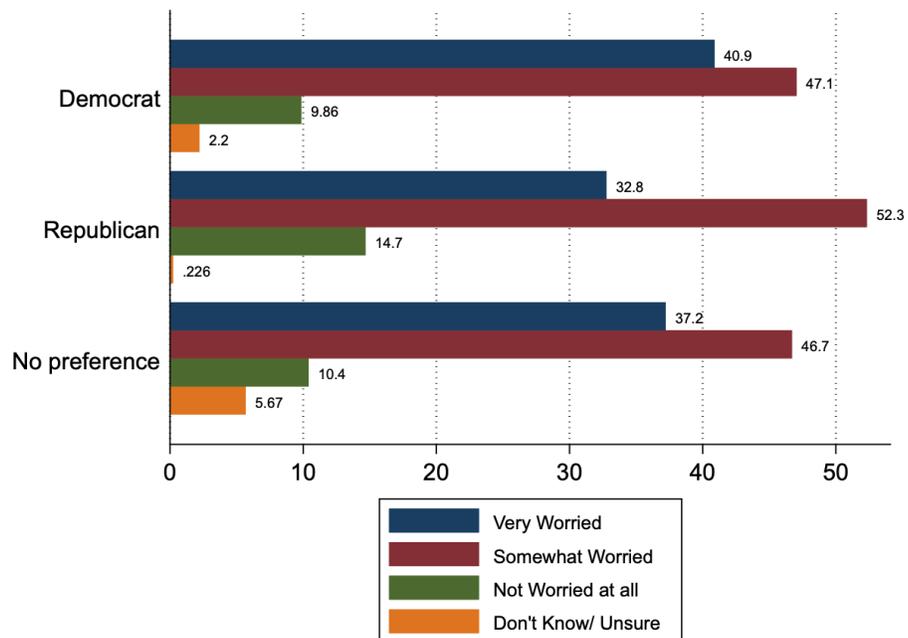
## 5.4. Confidence in Economic Recovery

**Figure 5.26:** Confidence in Economic Recovery by Race/Ethnicity



Notes: Insufficient data for the groups of American Indian or Alaska Native and others

**Figure 5.27:** Confidence in Economic Recovery by Party ID



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## Conclusion

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The data from the Hobby School Hurricane Harvey Panel Survey and the U.S. Census Household Pulse Survey indicate that households in the Houston areas have been negatively impacted by the COVID-19 pandemic and its concomitant closures and restrictions on business operations. As a result of social distancing and business closures, aspects of family preferences and children's schooling have been altered. Approval of how federal and state office holders responded to the outbreak has been poor. The impacts of COVID-19 spilled over into health and schooling, household mental health, and children's education. Many households report a growing level of worry, anxiety, and loss of interest in doing things. Looking closely at the distributional impacts of these adverse effects show significant heterogeneity in job loss, health status, and level of worry across gender and racial groups. Any palliative measure must take these distributional impacts seriously.

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# Appendix A: Technical Note

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## Methodology of the Hurricane Harvey Survey

The Hobby School of Public Affairs at the University of Houston conducted an online survey between May 20 and June 23, 2020. We collected responses from a representative sample of residents from Brazoria, Fort Bend, Harris and Montgomery counties aged 18 and above. In total, 1,065 individuals responded to our survey. Interviews were conducted in English and Spanish by Customer Research International (CRI), a survey research firm headquartered in San Marcos, Texas.

For the sampling, we included demographic quotas for County, Age, Race, and Gender based on the 2019 data of the Census Bureau American Community Survey. Weights were applied for the sample to reflect the current share of Race, Sex, Age, and Party Identification. The margin of error for the entire sample of 1,065 is +/- 3%. The margin of error for the Harris County portion of the sample is +/-4%. The margins of error for other sub-samples (e.g., counties, racial and ethnic groups) vary and exceed 4%.

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## Appendix B: Demographics

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This appendix provides summary statistics on demographic questions included in the Hurricane Harvey survey. All tables and figures exclude DK/NA responses.

**Table B1: Gender of Respondents**

	No.	%
Female	556	52.3
Male	503	47.4
Self-describe/Prefer not to say	4	0.4
<b>Total</b>	<b>1,063</b>	<b>100.0</b>

**Table B2: Ethnicity and Race of Respondents**

	No.	%
White	496	46.7
Black or African American	253	23.8
Hispanic/Latino(a)	229	21.5
Asian/ Pacific Islander	60	5.7
Other	24	2.3
<b>Total</b>	<b>1,063</b>	<b>100.0</b>

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**Table B3: Distribution of Age Groups**

	No.	%
18 to 29 years old	197	18.5
30 to 44 years old	299	28.2
45 to 64 years old	363	34.2
65 years old or older	203	19.1
<b>Total</b>	<b>1,063</b>	<b>100.0</b>

**Table B4: Respondents' County of Residence**

	No.	%
Brazoria	66	6.2
Harris	763	71.8
Fort Bend	126	11.9
Montgomery	108	10.1
<b>Total</b>	<b>1,063</b>	<b>100.0</b>

**Table B5: Respondents' Party ID**

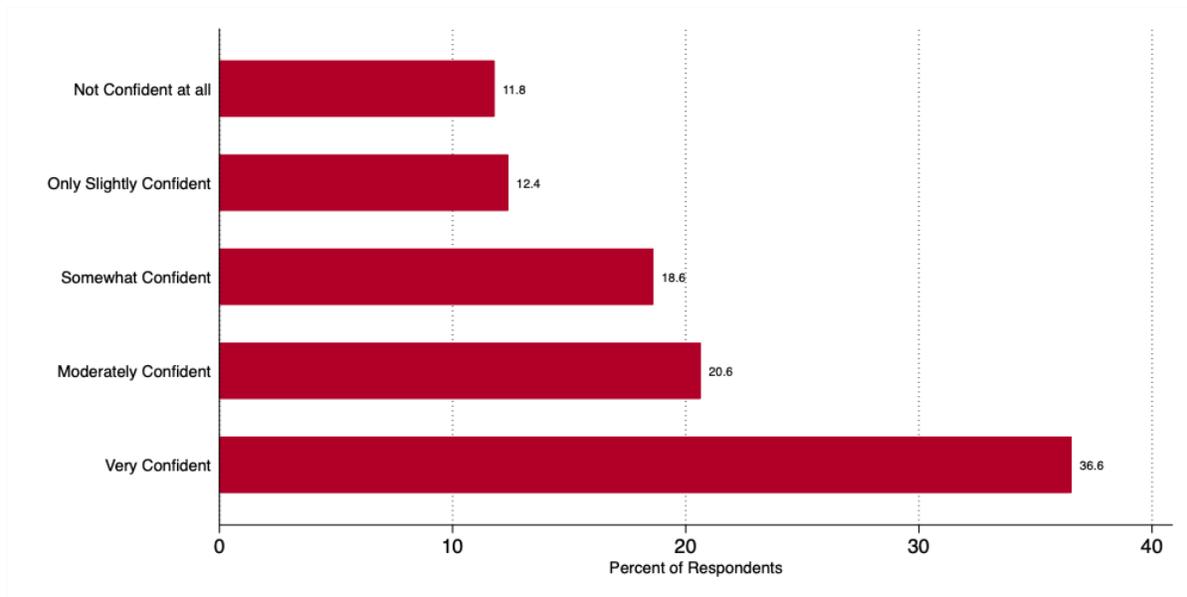
	No.	%
Democrat	515	48.5
Republican	422	39.7
No preference	125	11.8
<b>Total</b>	<b>1,063</b>	<b>100.0</b>

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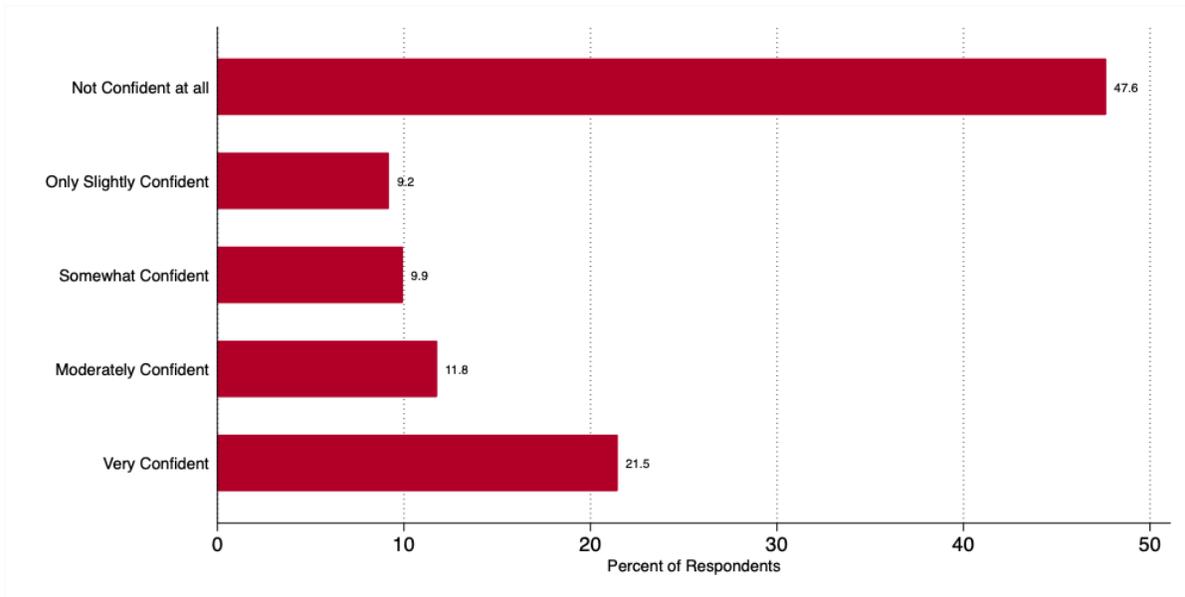
# Appendix C: Confidence in Political Leaders

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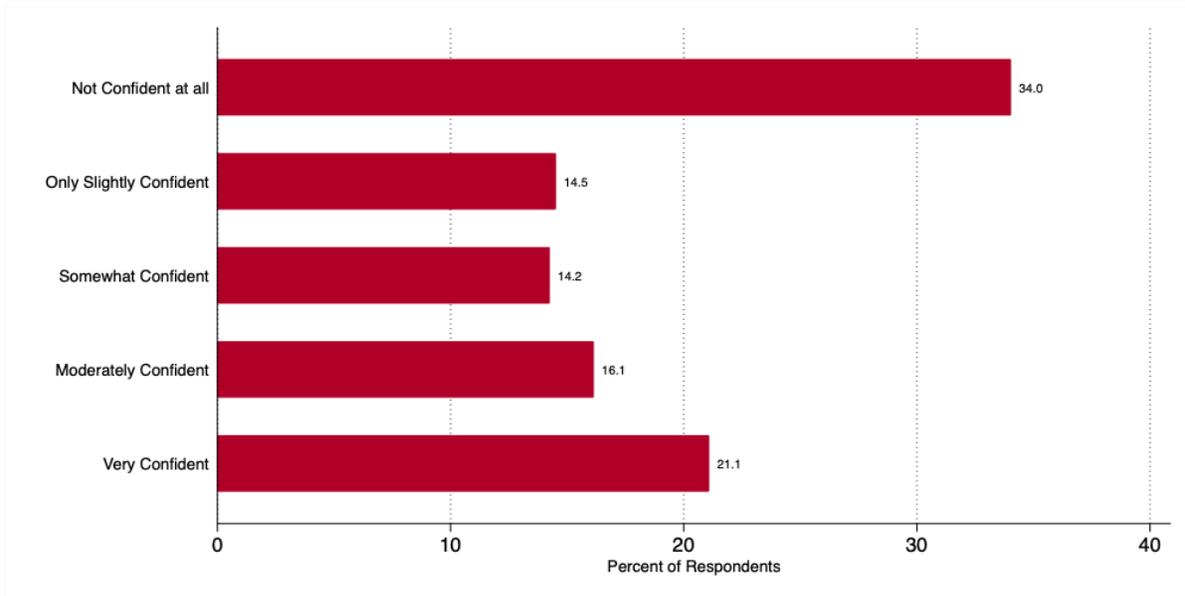
**Figure C1: Level of Confidence in Dr. Anthony Fauci**



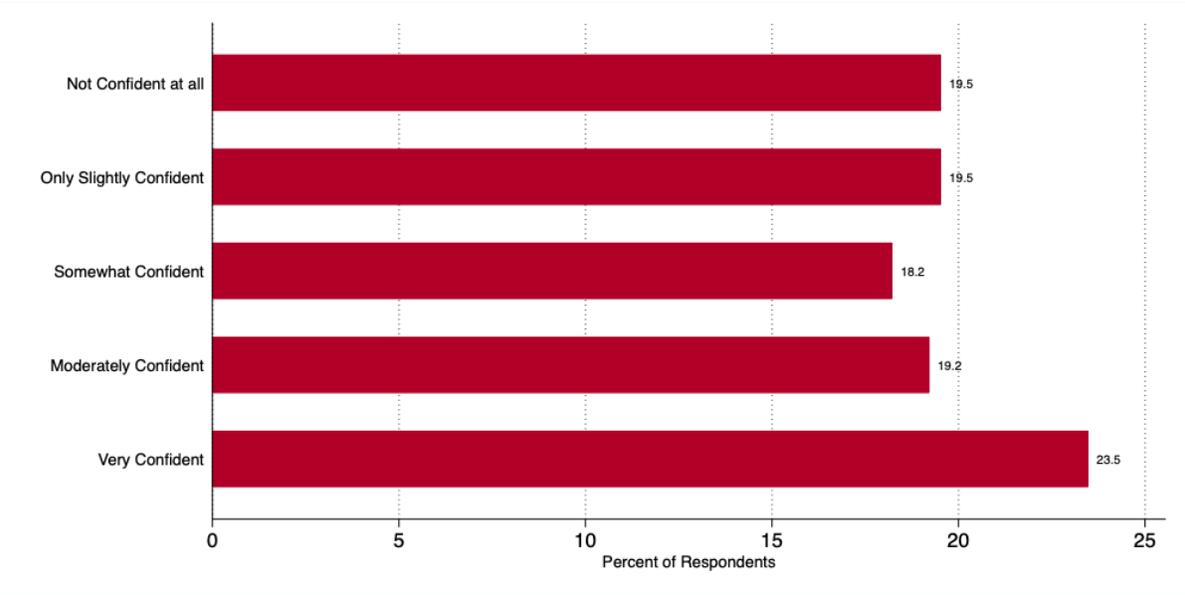
**Figure C2: Level of Confidence in President Donald Trump**



**Figure C3: Level of Confidence in Vice President Mike Pence**



**Figure C4: Level of Confidence in Governor Greg Abbott**



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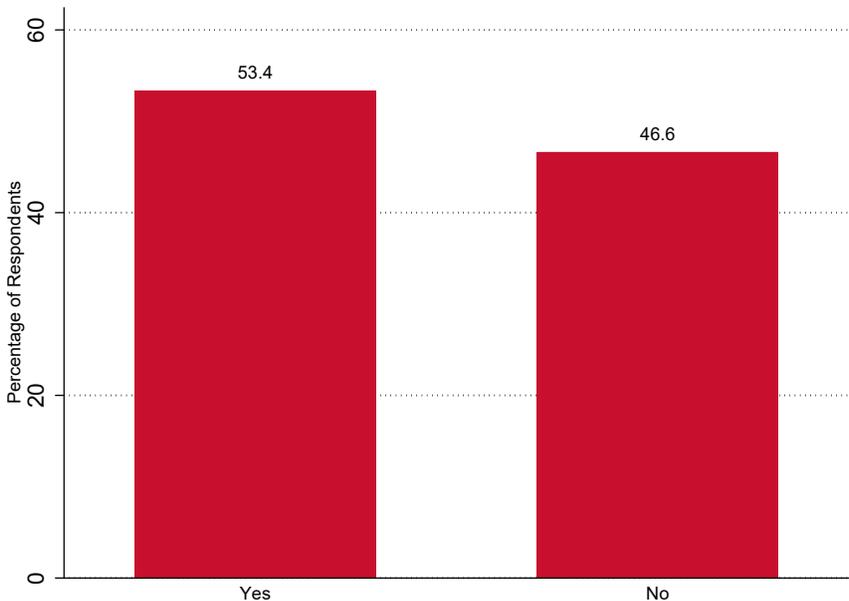
## Appendix D: Household Pulse Survey on Employment Conditions

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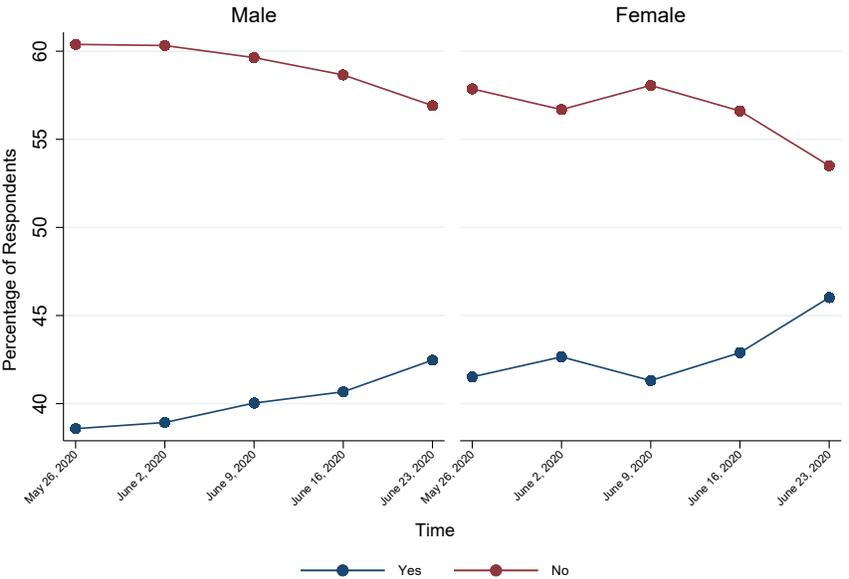
Many businesses have furloughed and laid-off employees to cushion the effects of COVID-19. We analyzed the impact of job loss and cuts to the number of hours worked on U.S. households using the information from the [US Census Bureau, Household Pulse Survey \(HPS\)](#). The experimental Household Pulse Survey is designed to quickly and effectively collect information on how the COVID-19 pandemic has impacted the lives of U.S. residents. The HPS is a weekly panel covering 12 weeks beginning from April 23, 2020.

HPS respondents were asked if a household member reported job loss in the past seven days. As seen in Figure D1, 41% reported a job loss in their household, while 59% reported no loss in income in their household. We further broke down household job loss by gender. As seen in Figure D2, more than half of the male respondents reported job losses, and the share of males reporting job losses has been trending upward since Week 6 (June). On average, xx% of female respondents reported job losses, and xx% of males reported job losses.

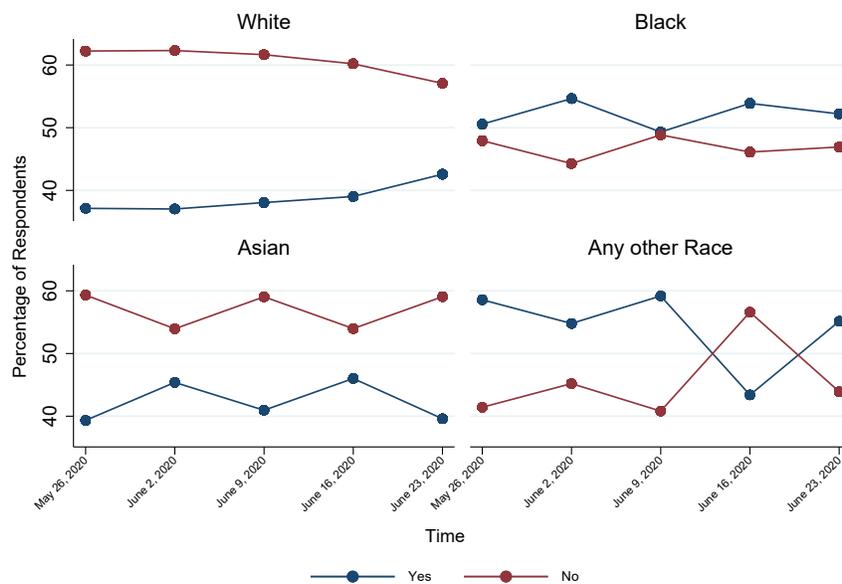
**Figure D1:** Have you, or has anyone in your household experienced a loss of employment income?



**Figure D2:** Recent Household Job Loss by Gender



**Figure D3: Recent Household Job Loss by Race by Week**



In Figure D3, we decompose job loss by race. On average, Black (56%) and other race (56%) reported someone in their household experienced a job loss, compared with White (48%) and Asian (52%). For Blacks and any other race, the share of respondents reporting job loss has been increasing since the first week in June.