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01:790:391 Data Science for Political Science

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Fault Lines of COVID-19: Demographic Consequences of the 2019 Pandemic

1. Introduction

The COVID-19 pandemic has laid bare many structural and social inequalities in American society, many occurring along racial and ethnic lines. Not only have these inequalities been cast under greater scrutiny since the onset of the disease's spread, but these pre-existing artifacts of American life have been severely exacerbated, raising questions about their trajectory post-pandemic. My research assesses certain economic and healthcare inequalities by race as it relates to the pandemic by analyzing a March 2020 Pew Research dataset. Using self-reported descriptions of individuals' economic and wellness situations and controlling for race, I seek to answer the following question: in its early stages, how did the perceived consequences of COVID-19 differ between White and non-White Americans?

My hypothesis was that there would be notable disparities in the perceived economic security and healthcare coverage between White and non-White respondents; this hypothesis was largely born out in the data. Indeed, the self-reported responses found that Hispanic- and African-Americans were much more likely to be unable to pay basic expenses if laid off for at least two weeks. They were also more likely to be uninsured, with Hispanic respondents uninsured at rates nearly two times the national average. These findings shed light on the unique economic and health vulnerabilities that Hispanic and African-Americans face. If unaddressed in public policy, these disparities could grow as the country grapples with the fallout of the pandemic.

2. Background

Across the country, the response to the 2019 coronavirus pandemic has been largely coordinated on a state-by-state basis led by governors, many of whom have stressed that the guiding philosophy of any public policy response to the pandemic should be, "public health leads to economic health." In addition to suggesting a robust, multi-faceted, and holistic whole-of-government emergency response, this philosophy also suggests that all policymakers -- legislators and executives across state and federal governments -- have much to learn from responses to previous economic disasters, if this is, in fact, what the COVID-19 pandemic is being treated as. After the Great Recession between 2007 and 2009, the federal government passed sweeping legislation to purchase toxic assets from investment banks (or, to "bail out the banks") and to stimulate the American economy. Though neither legislative responses were crafted to specifically alleviate the disproportionate economic pain usually experienced by Hispanic- and African-Americans during economic downturns, racial inequality did decrease "during the Great Recession... in terms of the Levy Institute Measure of Economic Well-Being" (Masterson 2017). However, after the Great Recession, racial inequality along economic lines continued to increase. This trend would suggest that legislative responses crafted to deliberately account for the post-response economic conditions of vulnerable communities -- in this case, Hispanic- and African-Americans -- could meaningfully address enduring trends in inequality.

Of course, as noted by many of our nation's governors, the recovery from this emergency is not strictly an economic one; it is tethered to an effective public health effort. This, too, has major barriers to overcome. Complicating a whole-of-government healthcare response is the significant health disparities in outcomes for racial and ethnic minorities in the United States. Indeed, due to different levels of healthcare coverage and access, among other policies, these groups experience "higher rates of chronic disease and premature death compared to... whites" (Baciu 2017). Given the challenges of the economic

and healthcare contours of the COVID-19 pandemic, the United States government is faced with a crisis of unprecedented scale in terms of the robustness of the response necessary to overcome it.

With this background in mind, my initial theory about what I will uncover in my research is that Hispanic- and African-Americans are more likely to perceive the security of their economic and healthcare situations as more vulnerable to decline during the pandemic than White Americans. I intend to illuminate these perceptions by analyzing differences in the rates at which White Americans and non-White Americans feel economically vulnerable if they are left unemployed for at least two weeks and the rates at which they are left uninsured.

3. Data and Approach

For my analysis, I used data from a March 2020 Pew Research Center survey on the coronavirus pandemic, which was conducted between March 10 and March 16, 2020. The raw dataset had 8,914 rows, each representing an individual's response to the survey's 60 questions. I took particular interest in three variables, which are described in *Table 3.1* on the next page.

To conduct my research, I created a table that summarizes the race of all survey respondents. I then created two subsets of the main dataset. The first subset took survey responses where respondents answered COVIDWORK_W63.5 that they would likely not get paid, and it would be difficult to keep up with their basic expenses. I describe these responses as indicating economic vulnerability. The second subset took survey responses where respondents answered INSURANCE_W63.5 that they are not covered by health insurance. I describe these responses as indicating healthcare vulnerability. To create a proportion of respondents who answered in these ways compared to total respondents, I made another table that summarizes the race of all respondents in these subsets and took vectors of the sums from the total dataset and each of the subsets to create two sets of proportions. I then created a bar graph that compares the percentage of total respondents by race who reported that if they are laid off for at least two

weeks because of the coronavirus, they would not get paid and would be unable to pay basic expenses.

My next bar graph compares the percentage of total respondents by race who reported not having health insurance. This approach allows me to describe racial disparities in economic stability/security and healthcare coverage, which could heavily inform public policy responses to this crisis.

Name of Variable	Description
F_RACETHN	This independent variable represents a four-way category combining race and ethnicity into the following categories: White, non-Hispanic; Black, non-Hispanic; Hispanic; Other.
COVIDWORK_W63.5	This dependent variable represents the responses to the question, "What would most likely happen if you could not work for at least two weeks because of the coronavirus?" Answers to the question were: "I would likely continue to get paid," "I would likely not get paid, and it would be difficult to keep up with my basic expenses," "I would likely not get paid, but I would still be able to keep up with my basic expenses," "I am not employed," and "Not sure."
INSURANCE_W63.5	This dependent variable represents the responses to the question, "Are you, yourself, now covered by any form of health insurance or health plan or do you not have health insurance at this time?" Answers to the question were: "Covered by health insurance," "Not covered by health insurance," and "No answer."

Table 3.1 summarizes key variables from the March 2020 Pew Research Center dataset.

4. Results

The summary table that I constructed at the beginning of my analysis shows that there were 6,211 White, non-Hispanic respondents; 668 Black, non-Hispanic respondents; 1,422 Hispanic respondents; and 497 respondents who identified as "Other." For the COVIDWORK_W63.5 subset, there were 807 White, non-Hispanic respondents; 162 Black, non-Hispanic respondents; 455 Hispanic respondents, and 88 respondents who identified as "Other." For the INSURANCE W63.5 subset, there were 261 White,

non-Hispanic respondents; 65 Black, non-Hispanic respondents; 224 Hispanic respondents, and 38 respondents who identified as "Other."

After obtaining the sums by race and inputting the values for each dataset into a vector, I found that almost 32% of Hispanic respondents and 24.55% of Black respondents believe that they are economically vulnerable, as compared to just 12.99% of White respondents and 18.07% of those who identified as "Other." *Figure 4.1* below displays the proportion of economically vulnerable respondents by race, which indicates significant disparities in the perception of economic vulnerability. Though these are self-reported descriptions of one's financial situation, the differences in perceived financial instability and vulnerability suggest that non-White Americans surveyed are more likely to be negatively impacted by the COVID-19 pandemic, as theorized in previous parts of my paper. This confirms my hypothesis, and suggests that public policy responses could benefit from crafting solutions that account for these disparities.

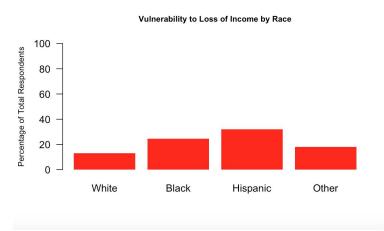


Figure 4.1

As for the healthcare coverage of survey respondents, disparities occur along roughly similar lines, with Hispanic respondents most uninsured, followed by Black respondents and White respondents, respectively. After performing the same analysis as above but for the question of healthcare coverage, I found that Hispanics reported an uninsured rate of 15.75% and Blacks reported an uninsured rate of

9.73%, whereas white reported an uninsured rate of 4.20% and "Other" respondents reported a rate of 7.8%. For reference, the average uninsured rate of all respondents was 6.69%. *Figure 4.2* below displays the results of this analysis in a bar graph, highlighting the disparities of healthcare access and coverage that occurs largely along racial and ethnic lines. This supports Baciu's 2017 analysis of health disparities as previously discussed, and only begins to illuminate potential adverse health outcomes with severe race differentials as the pandemic continues to grow in infections across the United States. Indeed, though significant, this finding does not even begin to analyze the different rates of chronic infections and underlying illnesses, which both serve to exacerbate symptoms for COVID-19 patients, creating bleak morbidity outcomes.

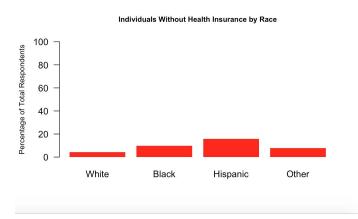


Figure 4.1

5. Conclusion

The economic and health disparities exposed by the COVID-19 pandemic are significant. From the outset, I endeavored to assess how respondents of different races perceive the economic and health consequences of the crisis. My data analysis revealed that Hispanic-Americans are more likely to believe that short- to long-term unemployment creates a dire financial situation for them in terms of basic daily expenses, and they are also more likely to lack healthcare coverage than any other surveyed racial group. African-Americans lightly trail Hispanic respondents in terms of both vulnerabilities, but both groups are

far more vulnerable to these consequences than their White counterparts. Taken together, these outcomes suggest that Hispanic- and African-Americans stand to be most adversely impacted by the ways in which the coronavirus pandemic will exacerbate economic and health disparities in American society. It is worth noting that one particular limitation of this study's data is that the responses are self-reported and not an audit of one's finances or health coverage. Particularly for personal finance questions, there may be self-reporting bias that misrepresents one's actual financial situation positively or negatively.

These findings are important as our public health and elected officials consider the next stages of COVID-19 relief and recovery measures. For instance, "opening up" states and their economies while cases continue to grow would obviously hurt all residents in that area, but this data suggests a deeper and more enduring impact on diverse communities. This should inform policymakers across all levels of government to ensure that any solution accounts for these disparities and seeks to not only mitigate them in the short-term recovery, but remedy them to ensure greater resilience in the long term.

Works Cited

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