Fear and Uncertainty in the Midst of the COVID-19 Pandemic: Understanding the Mental Health Consequences for a U.S. Adult Population

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Overview

• Assessing Fear and Mental Health Consequences
• Project Design
  • Sampling
  • Measurement
• Describing Fear and Mental Health Consequences Across the U.S. Landscape
  • U.S.
  • Regions
  • States
  • Individual-Level
Fear Among Adults in the U.S.

• Fear and Uncertainty

• Fearful of What?

• Research & Opinion Polls

• Fear Varying across the Socially Vulnerable
ANXIETY
Study Design Overview

• Nationally representative sample of adults (n = 10,368)
• Online platform; surveys executed by Qualtrics, Inc.
• Data were collected the 3rd week March 2020
• Data were post-strata weighted (income, gender, race/ethnicity, and geography) to ensure adequate representation and mirroring of the U.S. population per U.S. Census estimates
• Survey asked a range of questions regarding fear, perception, social and behavioral response, sociodemographics, etc.
Measurement Overview (Fear)

- Fear (Subjective)
  - How Fearful are you of the Coronavirus (COVID-19)? (0-10) 8+ = 45%
  - How worried are you that you or your family will get infected by the coronavirus? (Not at all to Extremely) Extremely = 21%
  - What level of threat do you think the coronavirus poses for you and your family? (Very Low Threat to Very High Threat) High Threat = 14%
Measurement Overview (Response)

• Social and Behavioral Responses
  - Specific steps to prepare (hand washing, physical distancing, avoidance, purchase behaviors, etc.) 0-11; Average = 7

  - Specific steps in reaction to (buying extra food, household items, medical supplies etc.) 0-4; Average = 1.2

  - Travel restrictions (flying, driving, interstate, intercontinental, etc.) 75%+ limiting travel during that time
Mental Health Consequences & FEAR

- Depression (CES-D) $r = 0.20^{**}$

- Anxiety (GAD-7) $r = 0.05^{*}$

- Suicidality (SBQ-R) $r = 0.31^{**}$

- Life Satisfaction (5-item Likert) Very Unsatisfied to Very Satisfied $r = 0.02^{*}$
Average Fear Across U.S. Regions (Scale = 0-10)

Average Fear = Median & S.D= 7 ± 2.8

- 0-3: 16.5%
- 4-7: 39%
- 8+: 44.5%
Fear Across States and Counties

County-Level COVID-19 Fear

Legend
Level of Fear
High
Medium
Low

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Fear and COVID-19 Cases Across States and Counties

County-Level Average Level of Fear and Confirmed COVID-19 Cases within each County by March 26th

Legend
Level of Fear:
- High
- Medium
- Low
Cases within County:
- High
- Medium
- Low
State Level Fear (Aggregated Individual Response)  
(Top 10 Most Fearful States)

<table>
<thead>
<tr>
<th>State</th>
<th>Percent Fearful (8+)</th>
<th>Total Number of Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York</td>
<td>53.0%</td>
<td>607</td>
</tr>
<tr>
<td>New Jersey</td>
<td>52.0%</td>
<td>280</td>
</tr>
<tr>
<td>Louisiana</td>
<td>51.7%</td>
<td>145</td>
</tr>
<tr>
<td>South Carolina</td>
<td>51.0%</td>
<td>164</td>
</tr>
<tr>
<td>Connecticut</td>
<td>50.9%</td>
<td>112</td>
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<tr>
<td>Massachusetts</td>
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<td>California</td>
<td>47.4%</td>
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<tr>
<td>Missouri</td>
<td>47.2%</td>
<td>193</td>
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<tr>
<td>Florida</td>
<td>47.1%</td>
<td>688</td>
</tr>
<tr>
<td>Ohio</td>
<td>45.9%</td>
<td>368</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>44.0%</strong></td>
<td><strong>10,368</strong></td>
</tr>
</tbody>
</table>
Individual Responses on Fear-Related Items (n = 10,368)
Individual Responses on Fear-Related Items Across Race and Ethnicity (n = 10,368)
General Observations (Preliminary Findings)

• Fear is highest among vulnerable populations (Hispanics, African-American, Low-income, and Younger respondents)

• Fear is significantly correlated with measures of mental health (depression and suicidality)

• COVID-19 Fear (How would you rate your fear of COVID-19 currently on a scale of 0-10?) is significantly related to food insecurity

• COVID-19 Fear appears to be geo-spatially correlated with outbreak hotspots, aggregate and disadvantaged communities (Gini, % Nonwhite, Median Family Income, etc.)
Thank You! Questions?

Please feel free to cite this work and do not use it without permission from the author (Fitzpatrick).

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