

# COVID, Climate and the Politics of Gender

Kailee Atkinson<sup>1</sup> and Dork Sahagian<sup>1</sup>

<sup>1</sup>Lehigh University

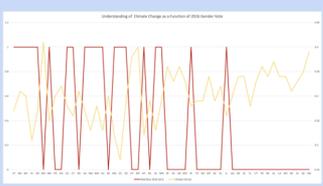
November 22, 2022

## Abstract

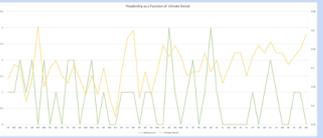
The increasing role of women in leadership roles may be both a cause and effect of public attitudes. Recent politicization of science amidst increasing polarization of American politics juxtaposed with examples of female leadership (Fleadership) throughout the U.S (and abroad) begs the question of how gender impacts crisis response decision-making. Here, we investigate at the state level, female gubernatorial leadership, recent presidential (and VP) voting patterns, climate denial, and COVID/100k. These reveal correlations between climate denial, high COVID/100k, and presidential votes for exclusively male candidates. Americans who embraced federal Fleadership in 2016 and again in 2020 were less likely to deny climate change and spread COVID-19. The results suggest that rather than Fleadership inspiring responsible COVID preventative behavior at state or national levels, or leading to better understanding of climate change, the populations who tend to elect females, also understand science more than those who do not.

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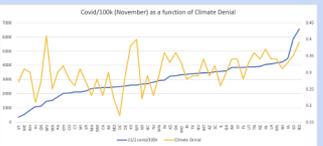
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Note anti-correlation: States with greater climate denial (orange) eschewed Fleadership (red) in 2016 presidential election.



Weak but inverse correlation. Higher rates of climate denial, correlates with less fleadership. (Includes all previous and current female governors.)

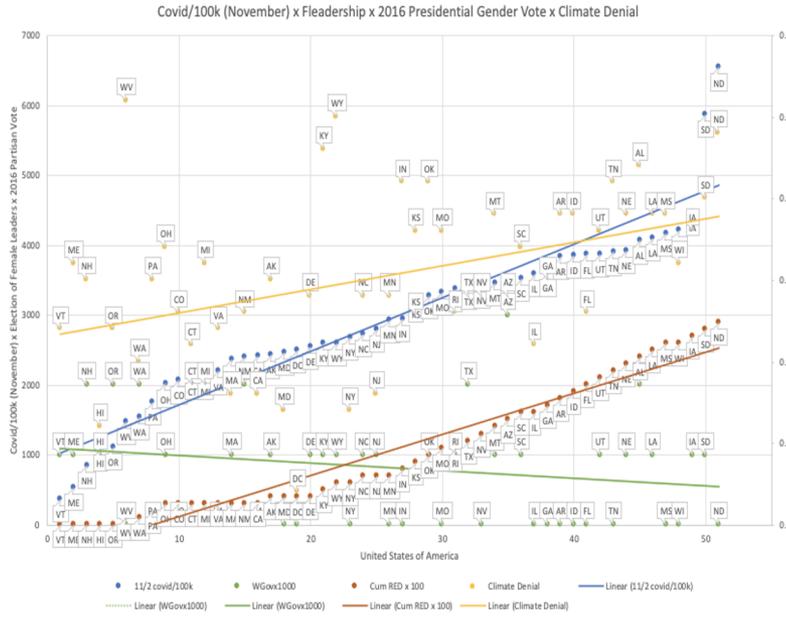


Strong correlation. Higher rates of climate denial, higher COVID/100k (as of Nov 2, 2020).



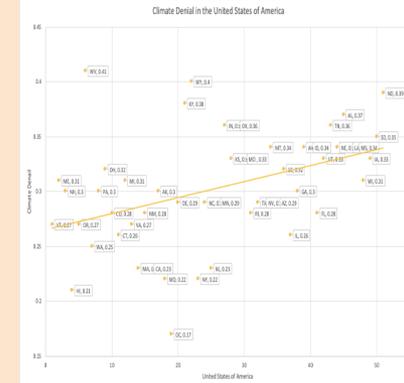
Sources:  
NYT - Covid Data, sourced Nov 2, 2020  
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Yale Climate Opinion Maps 2020

At the state level, populations who elect female governors are also more likely to understand or respect scientific results, and thus respond behaviorally with precautions to avoid COVID-19.

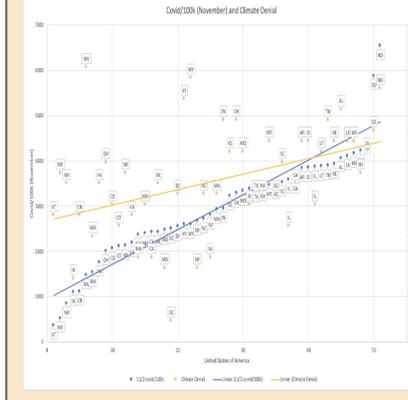


The red line indicates the 2016 Presidential gender vote, incrementing sequentially by 1 for each state that voted to reject female leadership and by 0 for each state that embraced it. There is a strong correlation between states that rejected female leadership in 2016, the highest rates of climate denial, and the greatest COVID/100k. Additionally, these states have generally elected less female governors. Thus raising the question; what matters most? Gender or party? Science or tribalism?

States with higher COVID/100k also have higher rates of climate denial.



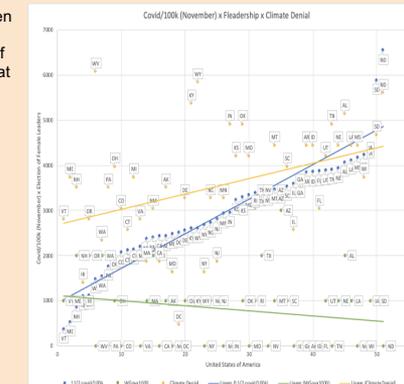
QUANTUM THEORY OF CLIMATE DENIAL



COVID/100k data points added for visual effect. There is a clear correlation here. I find the states that have the highest rates of covid/100k also see a trend in higher rates of climate denial.



Slight anticorrelation between high rates of COVID/100k, climate denial, and counts of female governors. States that have higher rates of covid, also have higher rates of climate denial and have elected less female governors.



\*\*\* For all graphs, states are ordered on the x-axis with lowest COVID/100k on the left increasingly sequentially to highest COVID/100k on the right.

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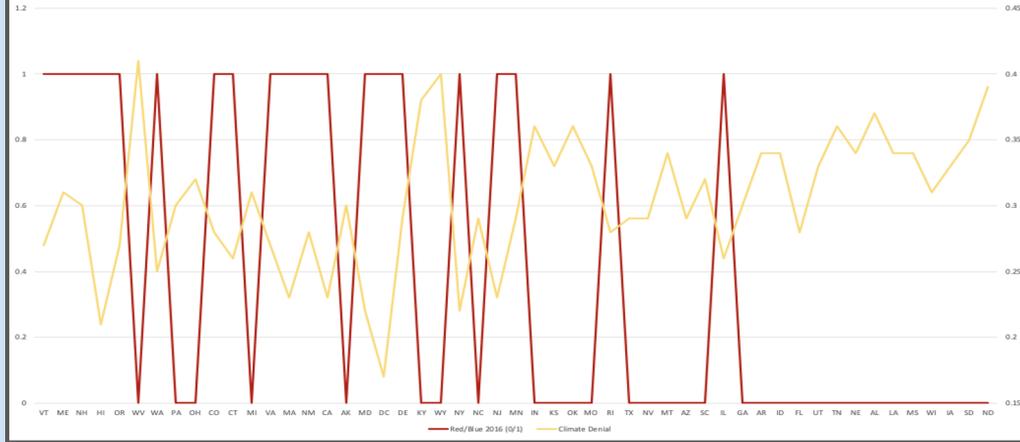
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Understanding of Climate Change as a Function of 2016 Gender Vote

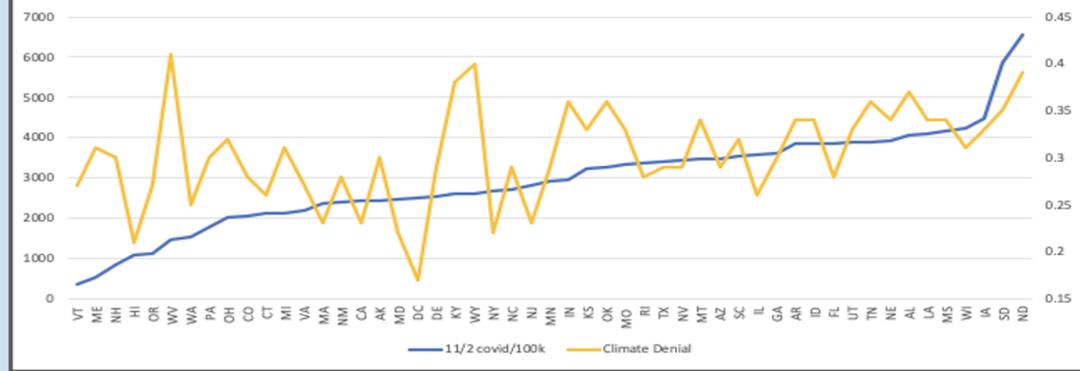


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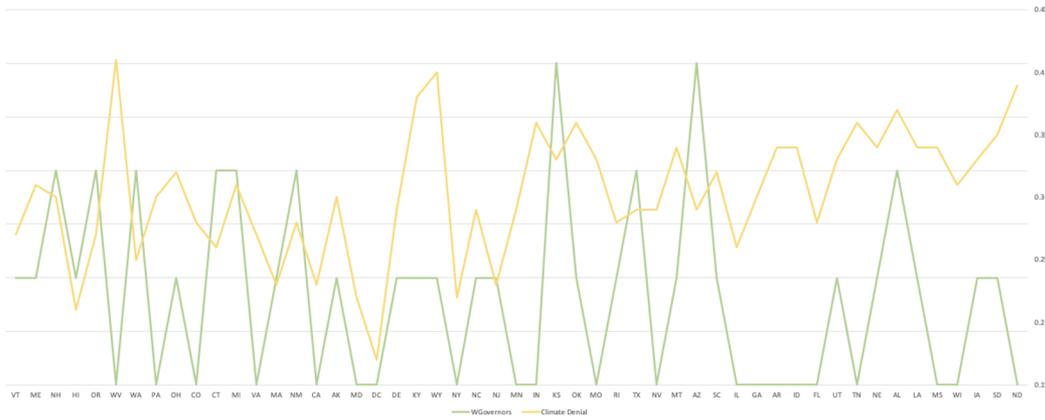
Covid/100k (November) as a function of Climate Denial



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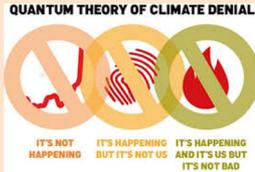
Fleadership as a Function of Climate Denial



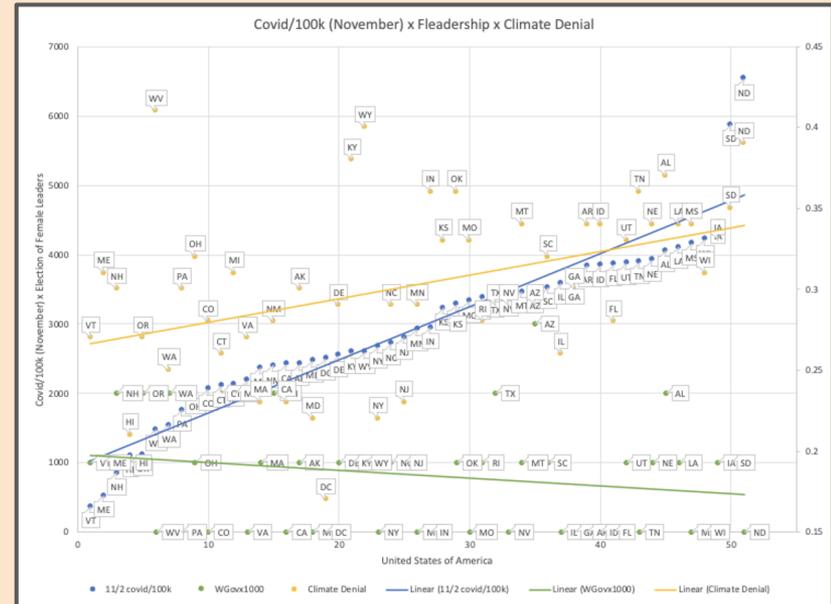
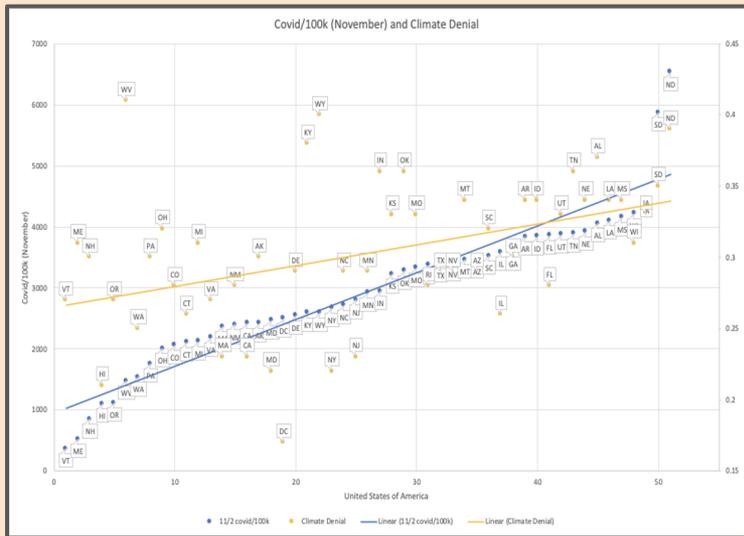
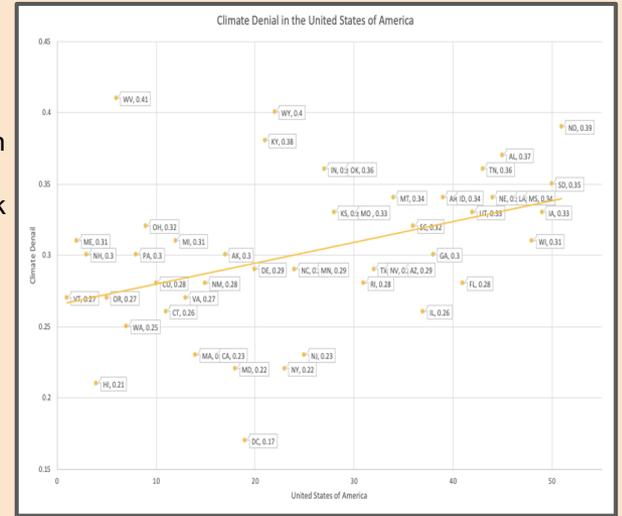
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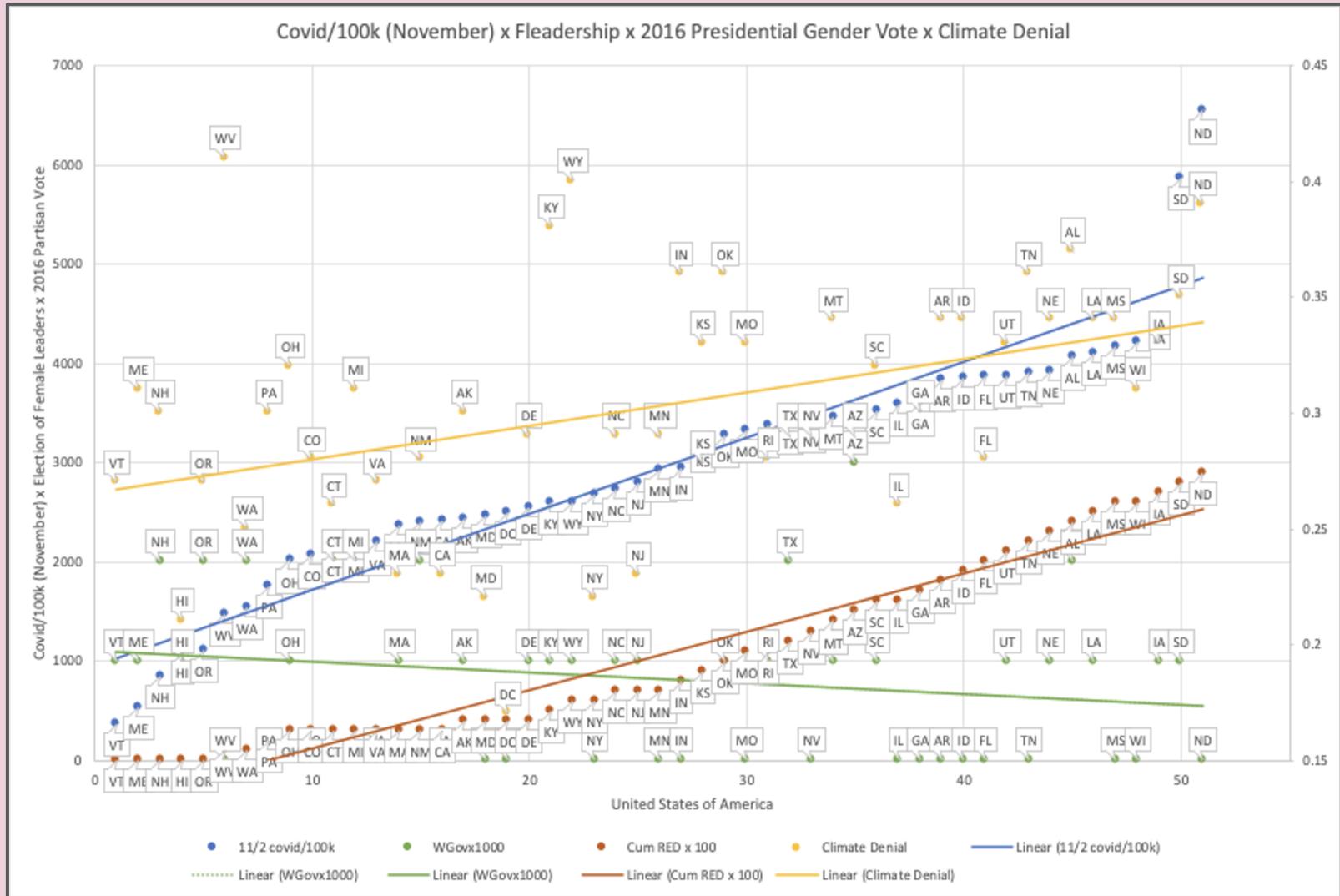


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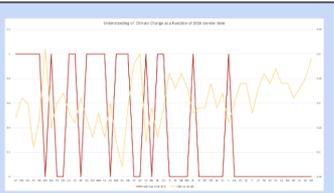


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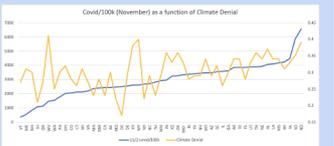
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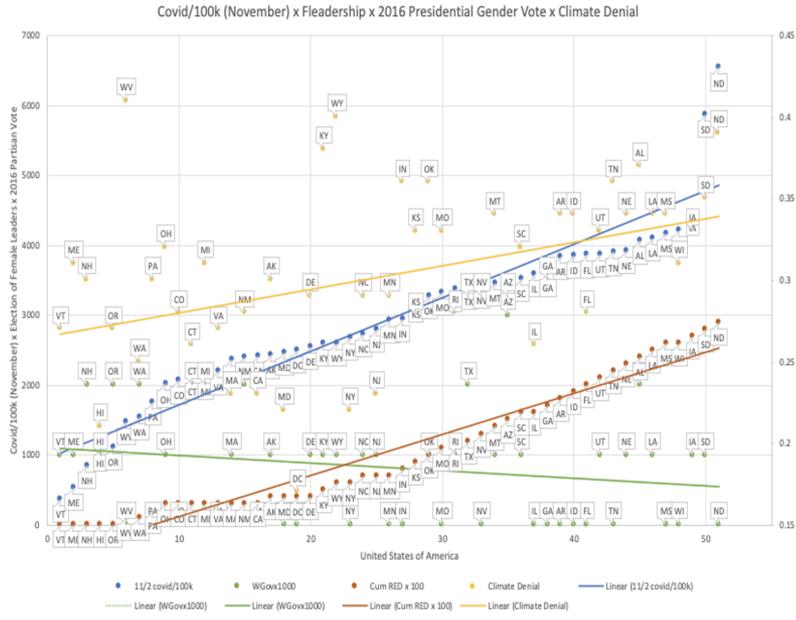
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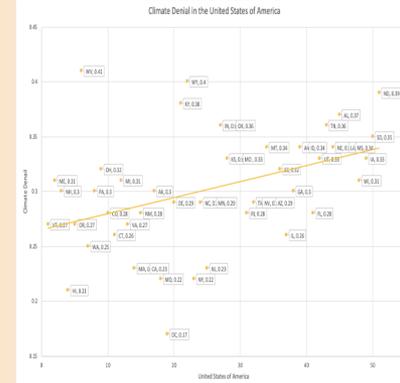
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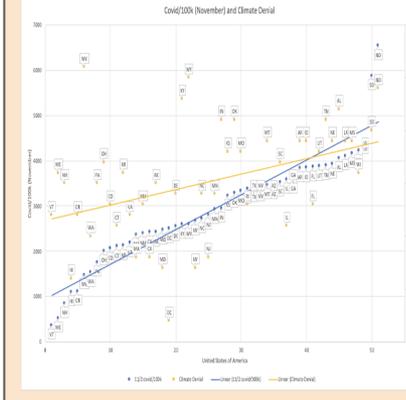
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