Political Beliefs, Partisanship, and Health Behaviors during the COVID-19 Pandemic: Examining the Role of Political Climates in Behavioral Responses

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**Abstract**

Studies during the COVID-19 pandemic systematically showed that political beliefs/affiliations were associated with health behaviors. For instance, they find that Democrats/liberals are more likely to wear masks. We extend this literature by analyzing examining the modulation of partisanship's influence on health behaviors amidst incongruence between individual political affiliations and the prevailing ideologies within their immediate social environments. We take advantage of the Berkeley Interpersonal Contact Study (BICS) which collected information on the number of interpersonal contacts, mask-wearing, and COVID-19 vaccine status during the pandemic. Our initial findings reveal that Republicans, consistent with prior studies, are less concerned about coronavirus spread, a trend unaffected by residing in Democratic-led districts. Behavioral adjustments in face-to-face interactions during the pandemic exhibit subtle variations influenced by the political leaning of the respondent's congressional district, with Democrats and Republicans in Democratic districts showing contrasting tendencies to limit physical interactions.

**Introduction**

During the COVID-19 pandemic, studies consistently indicated a relationship between political beliefs/affiliations and health behaviors, with Democrats/liberals generally more inclined towards protective measures such as mask-wearing (Lu et al., 2021; Milosh et al., 2020; Howard, 2021; Alcott et al, 2020; Camobreco, He, 2022). Utilizing the rich data from the Berkeley Interpersonal Contact Study (BICS), we embark on a nuanced exploration of this dynamic, probing the interplay between individual political beliefs and the prevailing ideological climate of one's surroundings. Our inquiry is grounded in the hypothesis that the inclination of Democrats/liberals to adopt protective behaviors may be diluted in predominantly Republican/conservative environments, and vice versa, with potential variations by race/ethnicity and region.

Building upon established literature that underscores partisan divisions in health behaviors (Lu et al., 2021; Milosh et al., 2020), our study uniquely delves into the potential modulation of these behaviors by the political alignment of one’s environment. This analysis is particularly vital as it extends beyond the diverse and non-uniform implementation of pandemic-related restrictions across different states, ensuring that we control for these variables to isolate the impacts of political alignment on health behaviors (Gollwitzer, 2020). We aim to trace the progression of the partisanship gap during the first year of the pandemic, offering insights into how individual political beliefs are modulated by the surrounding political environment. This analysis will provide a nuanced understanding of how the layered influences of age, socioeconomic status, and political beliefs collectively shape public responses to health emergencies within varied political contexts.

**Data and Methods**

We utilized data from the Berkeley Interpersonal Contact Study (BICS), conducted during the initial year of the COVID-19 pandemic, utilizing 5 waves from June 2020 to May 2021 (collected on 06/2020, 09/2020, 12/2020, 02/2021, and 05/2021). BICS offers insights into interpersonal contacts and associated health behaviors, captured via online surveys detailing the frequency and nature of both physical and conversational interactions over specific 24-hour periods. We focus on questions on mask usage, political affiliations, COVID-19 vaccination status, and contacts beyond the household to explore the intersections between these variables. The study includes respondents' demographic data, education levels, and ZIP Codes.

Using the HUD-USPS ZIP Code Crosswalk data from the Office of Policy Development and Research, we associated each respondent's ZIP code with a congressional district (CD). This allowed us to determine the political representation (Republican or Democrat) of each ZIP code in the House of Representatives for the 2019-2020 term. Additionally, the HUD data facilitated matching ZIP codes to estimated counties of residence. Assignment of both county and congressional district was based on the highest likelihood of the ZIP code's location, considering the proportion of the area encompassed by each. To account for the influence of local policies on behavior, we matched the estimated county to its respective mask mandates and included this in our analysis. We further classified counties as urban or rural using U.S. Department of Agriculture data and calculated cumulative prevalence rates for each county based on Census population counts. County-level case counts were obtained from the Johns Hopkins county-level COVID-19 tracker. Archived GitHub commits were utilized to access historical prevalence data, ensuring the retrieval of information as it was contemporaneously reported and received by the public.

**Results**

In the preliminary analysis, we observed that Republicans consistently exhibited less concern about the spread of COVID-19 than Democrats, a trend that was unaffected by the political orientation of their congressional districts. When assessing changes in face-to-face interactions, we discovered nuanced variations. Democrats, particularly those in Democrat-led districts, were less likely to reduce interpersonal contacts. Conversely, Republicans in Democratic districts were marginally more inclined to limit such interactions. These patterns were consistent throughout the selected study waves.

These findings introduce an additional layer to the understanding of how political beliefs and affiliations influence health behaviors, particularly during the COVID-19 pandemic. Existing literature predominantly supports the notion that Democrats/liberals are more likely to adhere to recommended health protocols, such as mask-wearing and social distancing. However, this study indicates that the political composition of one’s environment can moderate these behaviors.

**Discussion**

In its early stages, this research is already shedding light on the complex relationship between individual health behaviors and the surrounding political landscape, particularly exploring the propensity for diminished health-conscious behaviors in politically contrasting environments. Preliminary results indicate a steadfast low level of COVID-19 concern among Republicans, a trend unswayed by residing in Democrat-led districts. Contrastingly, evidence of peer effects emerges, with noticeable alterations in face-to-face interactions for individuals residing in politically discordant districts.

These initial insights hold potential implications for tailoring effective, context-sensitive public health policies, underscoring the need to account for the intricate behavioral nuances shaped by political affiliations. However, the study's constraints, including the broad geographical reach of congressional districts and the omission of influential variables such as population density and urbanicity, necessitate caution. The employment of ZIP Codes, with their inherent overlap issues, further complicates the analysis.

As we advance this research, our focus will be on enhancing methodological precision to navigate these challenges, aiming for a refined exploration that yields deeper, actionable insights into how political and social contexts intersect to shape health behaviors during pandemics. The quest is to extract lessons that can be instrumental in crafting policies adept at navigating the multifaceted human responses to health crises, embedded in and influenced by their political environments.

Plot 1

A graph of a bar chart

Description automatically generated with medium confidence

Plot 2

A graph with colored lines and dots

Description automatically generated

References

Allcott, H., Boxell, L., Conway, J., Gentzkow, M., Thaler, M., & Yang, D. (2020). Polarization and Public Health: Partisan differences in social distancing during the coronavirus pandemic. *Journal of Public Economics*, *191*. <https://doi.org/10.3386/w26946>

Camobreco, J. F., & He, Z. (2021). The party-line pandemic: A closer look at the partisan response to covid-19. *PS: Political Science &amp; Politics*, *55*(1), 13–21. <https://doi.org/10.1017/s1049096521000901>

Gollwitzer, A., Martel, C., Brady, W. J., Pärnamets, P., Freedman, I., Knowles, E., & Van Bavel, J. J. (2020). *Partisan Differences in Physical Distancing Are Linked to Health Outcomes during the COVID-19 Pandemic.* <https://doi.org/10.31234/osf.io/t3yxa>

Howard, M. C. (2021). Are face masks a partisan issue during the covid‐19 pandemic? differentiating political ideology and political party affiliation. *International Journal of Psychology*, *57*(1), 153–160. <https://doi.org/10.1002/ijop.12809>

Lu, J. G., Jin, P., & English, A. S. (2021). Collectivism predicts mask use during COVID-19. *Proceedings of the National Academy of Sciences*, *118*(23). <https://doi.org/10.1073/pnas.2021793118>

Milosh, M., Painter, M., Van Dijcke, D., & Wright, A. L. (2020). Unmasking partisanship: How polarization influences public responses to collective risk. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3664779