

## Effect of Direct Engagement of International Organization with the Public: Information Source Effect, IO Legitimacy, and Public Opinion

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Can International Organizations (IOs) effectively influence public opinion? Under what conditions information provided by IOs is perceived as more trustworthy by the public, compared to information provided by other public authorities? Many IOs have started to engage individuals directly with the assistance of social network platforms, yet few systematic studies have addressed whether those direct engagements of the public by IOs are effective or under what conditions. Building on the IO legitimacy literature, we theorize that information provided by IOs can be more effective in changing beliefs and behaviors of individuals 1) when IOs are perceived more legitimate – when IOs are perceived as impartial and to be equipped with expertise in a subject area. We also propose that IO's direct engagement with the public is more effective when information is provided to those individuals who do not hold strong prior beliefs on a particular issue. Our analysis of the survey experiment of 2865 Americans shows that independents trust COVID-19 related information provided by the WHO more, compared to information supplied by a public health official, especially when we highlight the professional quality of the WHO staff. Our analysis also demonstrates that individuals who hold strong prior beliefs – Democrats and Republicans in case of the COVID-19 related information – tend to maintain their strong prior beliefs even when new information is provided.

## 1. Introduction

Can International Organizations (IOs) effectively shape public opinion? Many IOs have recently ramped up their efforts to directly engage with the public by disseminating information, initiating campaigns, and supplying endorsement, yet few systematic studies have addressed whether or under what conditions such efforts are effective in influencing individuals' opinion. Do individuals indeed trust information enough to change their attitudes when the information is provided by IOs, compared to when provided by other public authorities? Under what conditions information provided by IOs is perceived as more trustworthy by the public?

Only a few IOs have authority and capacity to provide monitoring and enforcement over their member states. These IOs include the United Nations Security Council that can authorize military and non-military operations to prevent conflicts and to maintain peace; the World Trade Organization that regularly reviews trade practices of member states and provides an impartial tribunal to adjudicate trade disputes; the International Monetary Fund that monitors macroeconomic policies of member states and mandates reforms when it arranges loan agreements with members. But outside of these well-known, highly institutionalized IOs, few other IOs command a comparable authority or capacity, thus rely on other means to make differences.

A vast majority of IOs that lack monitoring and enforcement mechanisms instead work to disseminate information, promote campaigns, and provide endorsement in their own policy areas. Various funds and programs under the United Nations perform primarily these functions, including the United Nations Environment Programme (UNEP), the United Nations Children's Fund (UNICEF), and UN-WOMEN. Specialized agencies, such as the UNESCO and the World Health Organization (WHO), also focus on disseminating information and organizing campaigns. Lastly, many other independent organizations, including the World Bank and the Organization for Economic Cooperation and Development (OECD) also emphasize setting standards and supplying reliable information.

More recently with the assistance of social network platforms, IOs have begun to engage with the public directly. Departing the conventional way to engage with state authorities to disseminate information, many IOs these days try to reach the public directly and provide information to shape and change attitudes held by them. For instance, the WHO routinely tweet to provide information about emerging public health issues such as "what you need to know about monkeypox" and "the WHO air quality guidelines." From the very beginning of the COVID-19 Pandemic, the WHO has tweeted various infographics and card news that seek to provide science-based information and to bust wrong information directly geared to the public. In March 2020 alone, the WHO South-East Asia office sent out more than 45 COVID-19 related tweets.<sup>1</sup> Similarly, the UNESCO routinely send out tweets that include hash tags like "GenderEquality", "ClimateChange", "ProtectEducationFromAttack" and "ProtectHeritage."

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<sup>1</sup> [https://twitter.com/WHOSEARO/status/1239757176320622592?ref\\_src=twsrc%5Etfw](https://twitter.com/WHOSEARO/status/1239757176320622592?ref_src=twsrc%5Etfw)

Despite increasing efforts for IOs to directly engage with individuals around the globe, very few studies assess if, to what extent, and under what conditions such attempts by IOs can effectively influence individuals. Most of studies exploring the nexus between IOs and public opinions focus on how the public perceive a particular international organization or how an IO's endorsement for a state policy shape public opinion, leaving the emerging and increasingly significant direct engagement with the public by IOs little understood. In this paper, we address if and under what conditions an IO can effectively influence attitude of the public in the context of the WHO, the IO in charge of the global health management with the near-universal membership.

We note the importance of IO's perceived legitimacy and theorize that information provided by IOs can be more effective in changing beliefs and behaviors of individuals when IOs are perceived to be more legitimate. Furthermore, building on the recent scholarship on the IO legitimacy, we argue that when IOs are perceived impartial and to be equipped with expertise and professionalism in a subject area. We also propose that IO's direct engagement with the public is more effective when information is provided to those individuals who do not hold strong prior beliefs on a particular issue.

We run the survey experiment of 2,865 Americans on the effect of the WHO as the information source regarding the COVID-19 guidelines. We utilize the actual mythbusters posted on the WHO official website and manipulate the source of the information (the WHO vs. public health officials) and factors that constitute perceived legitimacy of the WHO (neutrality and professional expertise). We do not find a statistically significant effect of the WHO as the information source regardless of cues about the WHO legitimacy. However, we find that independents who do not have strong prior beliefs, when COVID-19 related information is provided by the WHO (compared to a public health official), the level of trust improves and the effect is especially salient when individuals are cued how professional the WHO is. Furthermore, such positive effect of the WHO as the information source evaporates when individuals are cued that the WHO is politically biased as we theorize. We also show that the level of trust of information provided by public authorities, whether it is provided by a generic public health official or by the WHO, is the highest among Democrats, followed by independents and is the lowest among Republicans.

This paper makes important contributions to studies of IOs. First, while its popularity ever-increasing, direct engagement with the public by IOs has not received scholarly attention. By examining the conditions under which IOs' information campaign toward the public can be more effective, we provide the first systematic analysis, to the best of our knowledge, of IOs' direct engagement with the public. Second, building on the IO legitimacy literature, we theorize how two sources of legitimacy – political impartiality and professional expertise of IO staff – influence the effectiveness of IOs' information dissemination. Third, we identify personal political predispositions – partisanship – as the important condition to limit the effectiveness of IOs' information provision. Strong partisans with firm prior beliefs are less likely to be influenced by IO's information provision than independents who are more willing to update their attitudes when new information is supplied by an IO. Lastly, by testing how the public

respond with various information sources regarding the COVID-19, we inform expansive COVID-19 related studies.

The paper is organized as follows. The next section reviews existing studies of IOs' role in influencing publics in general and the WHO's role in shaping individuals' knowledge on the COVID-19 more specifically. The theoretical section develops an argument that the efforts of IOs will be more effective when they are perceived as legitimate and IOs are perceived as legitimate when they are seen as apolitical and equipped with expert knowledge. We further refine the theoretical argument that IOs' efforts to change beliefs and behaviors will be more effective when individuals do not hold strong prior beliefs. The empirical section introduces our survey experiment and presents results from our analysis. The concluding section discusses academic and policy implications of our main findings.

## **2. Literature Review**

For the past 10 years or so, scholars have investigated how the public perceive IOs and how IO's endorsement of a state's policy change individuals' support for the policy. Many of these studies utilize survey experiments to see 1) how individuals perceive IOs and what are the factors associated with more favorable views toward IOs, 2) how IOs' endorsement of a state action influences respondents' support for the policy.

Quite a few studies have identified individual level characteristics that make people to hold a more or less favorable view toward an international organization or conditions under which individuals support an international organization. Kiratli (2020) tries to identify characteristics that would make individuals hold more favorable views on the UN and the NATO. The study finds that citizens who are more dissatisfied with their national economic conditions and those who live in countries with foreign policy preferences that are more distant from other members of an international organization are less likely to hold a favorable view towards the UN and the NATO. Chapman and Chaudoin (2020) hypothesize and empirically demonstrate that citizens tend to display lower level of support for investigations by the International Criminal Court in their own country than in foreign countries. Lastly, Bayram and Shields (2021) investigate why some Americans trust the WHO during the COVID-19 pandemic more than others. They contend that Americans "take heuristic cues from their partisan identity, ideology, foreign policy dispositions, and sense of nationalism to form trust judgments about the WHO during the COVID-19 pandemic (p. 2)" and show that Democrats, political liberals, and those supporting strong internationalist foreign policies tend to trust the WHO more so than republicans, political conservatives, and those supporting more nationalist foreign policies.

Other studies investigate if and to what extent IO's endorsement of a state policy increases citizens' support for the policy. Anjum, Chilton, and Usman (2021) conduct an experiment in Pakistan to demonstrate that when citizens learn that policies aimed at improving womens' rights are proposed by the United Nations, they are more likely to support those policies. Wallace (2017) finds that when a humanitarian intervention is sanctioned by the UN, citizens are more likely to support the operation because they expect the UN to help overcome collective

actions problems. Wallace (2013) demonstrates that being informed about commitment to international laws have an impact on public support for the use of torture. Similarly, Mikulaschek (2019) demonstrate that when a US military intervention is unanimously endorsed by the UN Security Council, Americans are more likely to support the use of force, than when the intervention is approved by the UNSC with dissent.

While existing studies certainly contribute to our understanding of how IOs' endorsement for a state action can increase public's support for the policy, they do not address the increasing common practices of direct and active engagements by IOs to the public. In its stead, these studies generally focus on IOs' impact via state policies.

The ones that are the closest to our study examine how the public responds when they learn information is provided by an IO. Johnson and Rickard (2017) run a survey experiment to see how individuals respond when they learn Agenda 21 is initiated by the UN. They find that respondents who are informed that Agenda 21 is a UN document are more likely to support it; however, conservatives are less likely to believe Agenda 21 is important if they learn that it is a UN document. While Johnson and Rickard (2017) find a positive effect of the UN, Heinzl and Liese (2021) find no such effect of the WHO. Heinzl and Liese (2021) compare individuals' trust in COVID-19 related measures recommended by different public authorities – health ministries, public health agencies, universities, and the WHO – in Germany and the UK and find that on average, the recommendation by public authorities has little effect on individuals' support for COVID-19 related measures.

Building on these studies, we theorize and empirically explore under what conditions direct public engagement by IOs can influence public attitudes. In theorizing the conditions under which direct engagement by IOs can be more effective, we focus on perceived legitimacy of an IO. We then examine the theoretically generated hypotheses in the context of the WHO and its efforts to provide information regarding the COVID-19.

### **3. Theory**

#### *Legitimacy of international organizations*

Legitimacy is a critical pillar of international organizations and plays an important role in deciding how effective IOs are in performing their mandates. Defined as “beliefs within a given constituency or other relevant audience that a political institution’s exercise of authority is appropriate (586)” by Tallberg and Turn (2019) and as “belief in the rightful use of authority by an institution (718)” by Hurd (2019), legitimacy is determined by audiences’ belief and when an IO is considered as legitimate, they can function more effectively.

Legitimacy is particularly important for international organizations that, unlike states, lack coercive power (Franck 1990; Hurd 1999). When international institutions are perceived as more legitimate, they are better able to secure states and citizens’ compliance with their rules

and decisions. As the Brexit case illustrates well, when citizens perceive an international organization as less legitimate, they are less likely to support not only its decisions but also the organization itself. The lack of popular legitimacy discourages states' active engagement with the international organization (Tallberg and Zurn 2019). Legitimacy also influences international organizations' capacity to craft and promulgate new policy ideas and norms (Tallberg and Zurn 2019).

The legitimacy of international organizations has two important dimensions: procedural and performance legitimacy (Dellmuth and Tallberg 2015; Tallberg and Zurn 2019). Weber argues that "a belief in the legality of enacted rules and the right of those elevated to authority under such rules to issue commands" is important for legitimate rule (Weber, [1922] 1978: 215). That is, rational-legal procedures are a critical source of legitimacy. The same is true of international organizations' legitimacy. When audiences perceive that an international organization adheres to just and fair procedures, its legitimacy is enhanced (Barnett and Finnemore 1999; Hurd 2007). In addition, audiences' perception of how international organizations perform also shapes the legitimacy of international organizations. States delegate authority to international organizations because they believe that international organizations are better capable of addressing international problems better than individual states (Dellmuth and Tallberg 2015, 9). Therefore, international organizations are evaluated based on their performance. When an international organization contributes to solving cross-national problems under its domain and is perceived to meet certain performance standards, it is more likely to elicit citizens' support.

#### *What determines WHO's legitimacy: Impartiality and Professional Expertise*

The WHO is a specialized agency of the United Nations acting as "as the directing and coordinating authority on international health work" (Constitution of the World Health Organization 1948). According to the WHO Constitution, it is supposed to "furnish appropriate technical assistance," "to establish and maintain such administrative and technical services," "promote and conduct research in the field of health," and to "provide information, counsel and assistance in the field of health" (Gruszczynski and Melillo 2022, 7). As many other international organizations, it is charged with solving coordination problems in global health issues by providing knowledge and information (Snidal 1985). Given that globalization has increased states' common vulnerability to global health threats, the WHO was entrusted with the task of coordinating international responses to promote health and prevent disease. It seeks to identify and disseminate information about the most effective ways to address global health concerns. It also has been at the forefront of dealing with global health emergencies, including global pandemics such as SARS and COVID-19, natural disasters, and humanitarian crises.

The World Health Assembly, the WHO's legislative body, is composed of its member states, and the WHO largely relies on member states' contributions. Faced with common challenges regarding global health concerns, states delegate the authority to facilitate coordination among national governments to the WHO. Although the WHO does not have legal authority to enforce its decisions on member states, it has broad legal authority to serve as a forum for international conventions and agreements that address global public health issues (Meier et al. 2020). It is also able to develop and codify non-binding recommendations and regulations.

The WHO's authority to coordinate and lead international responses to global health concerns in the name of the collective interest can confer legitimacy on the WHO. Its reputation for scientific expertise in health issues renders the information provided by the WHO more trustworthy. This will be particularly the case in the context of the COVID-19 related information provisions since there was considerable uncertainty among the public over the causes and consequences of the COVID-19, and the domestic discussion about the COVID-19 was highly politicized. Compared to domestic public health authority that could be heavily influenced by domestic politics, information provided by the WHO will be perceived as more trustworthy. Thus, we derive the following testable implication:

**H1:** *When information is provided by the WHO, the level of trust of it would be higher than when information is provided by a domestic public health authority.*

The effect of the WHO's on the public's perception and behavior will vary according to how the public views the WHO. First, we posit that the perception of the WHO's impartiality, neutrality and procedural fairness is important to the legitimacy of the WHO. When an international organization represents the collective will of many member states, it is perceived to be legitimate (Greenhill 2020). This means, on the flip side, that when an international organization is perceived to represent a specific country's preferences and is dominated by a member country, it is more likely to be perceived to be illegitimate. Information provided by such a politicized organization then will be regarded as biased and would become less credible.

As well known, the WHO has received many criticisms in the process of handling COVID-19. One of the most frequent criticisms was that it tended to adopt a lenient stance toward China; It did not publicly condemn China's belatedness in sharing information about the COVID-19 outbreak and praised China for its transparency and cooperation. This criticism posed a significant threat to the WHO's legitimacy and the public support for it (Taylor 2021). Thus, we hypothesize that when people believe that the WHO maintains close political connections with some countries

for ideological, geopolitical, or economic reasons, the public is more likely to question its legitimacy and is less likely to trust the recommendations and guidelines provided by the WHO.

**H2:** *The more politicized the WHO is perceived to be, the less the information supplied by it will be trusted.*

Second, the WHO's legitimacy and authority can stem from its technical expertise (Heinzel and Liese 2021). The WHO aims to provide guidelines and recommendations based on the best available scientific evidence, which helps states better coordinate in resolving global health problems (Benvenisti 2020). It is composed of more than 8,000 professionals including doctors, epidemiologists, and scientists that are "chosen from among persons most qualified by their technical competence in the field of health" (Constitution of the World Health Organization 1948, Article 11). It also has a team of experts in economics, statistics and emergency relief. Equipped with scientific and bureaucratic experts in several areas, the WHO emphasizes its technical and scientific character as a non-politicized organization aimed at establishing global standards and providing advice to countries (Gruszczynski and Melillo 2022, 7). For example, the director of WHO's Health Emergencies program said in an interview that "[t]he power that we have is the power to persuade through science, persuade through evidence, persuade by demonstrating what other countries are doing and showcasing good examples of good practice." (Huang 2020). Accordingly, we expect that the WHO's expertise and authority in medicine, technology, and science will increase its legitimacy, which boosts people's trust in the guidelines and recommendations issued by it (Hurd 2007). It can be particularly effective in the uncertain information environment surrounding the COVID-19 pandemic. To the degree that the WHO is considered as an organization that exercises its authority through its expertise and scientific approaches, the emphasis on its expertise will strengthen people's trust in the WHO's information.

**H3:** *The more professional expertise the WHO is perceived to command, the more the information supplied by the WHO will be trusted.*

#### *Modifying effects of partisanship*

Until now, we have not considered the effect of people's pre-existing attitudes related to people's trust of the information provided by the WHO. However, people could have had well-established attitudes toward the COVID-19 pandemic and/or the WHO at the time when we conducted our survey experiment in April 2022. Since its outbreak in December 2019, COVID-19 has arguably been one of the most salient issues that have generated many competing claims about the preventive guidelines and false and misleading information, or even conspiracy,



about politics behind COVID-19 pandemic. Having been exposed to a flood of (mis)information about COVID-19 from various sources, citizens may have already possessed strong prior attitudes toward public health agency and the WHO, which have served as the main actors in dealing with the pandemic especially by providing public health advice.

Existing scholarship shows that people tend to adopt positions supported by co-partisan elites, particularly in highly polarized situation (Berinsky 2009; Bullock 2011; Druckman, Peterson and Slothuus 2013; Zaller 1992). This is true even in nonpolitical issues. Elite positions tend to serve as a heuristic for people, helping them determine their attitudes (Berinsky 2009; Zaller 1992). When people have broad attitudes on a subject, they also engage in motivated reasoning; they tend to discount information that is not congruent with their existing attitudes (Western et al. 2006, 1947). Thus, people selectively collect and accept information based on prior opinions and the messengers they trust.

Indeed, existing studies demonstrate partisan differences in the evaluation of COVID-19 policies and public officials responsible for handling the COVID-19 pandemic. The former U.S. President, Donald Trump, played a leading role in downplaying the threat of the COVID-19 pandemic and attacking the importance of the health policy community's expertise in addressing the pandemic (Rutledge 2020). He also frequently criticized WHO's handling of the coronavirus pandemic and accused it of being too close to China. Similarly, the Republican politicians and conservative media displayed similar positions on COVID-19 and the WHO, while the Democrat politicians and liberal media demanded stricter COVID-19 related measures and expressed support for the WHO (Allcott et al. 2020; Clinton et al., 2020; Grossman et al., 2020). These polarized positions affected the U.S. public's responses toward preventative behaviors and policies (Goldstein and Wiedemann 2021; Golos et al., 2022; Hegland et al., 2022; Rodriguez et al. 2022) and the WHO (Bayram and Shields, 2021, Pevehouse 2020). According to a recent survey conducted by Pew Research Center, as of January 2022, 72% of the Democrats believe that public health officials are doing an excellent/good job responding to the coronavirus outbreak, while only 29% of Republican thought so (Funk and Tyson 2022). Also, while around two-thirds of Democrats (64%) had positive views on communication efforts of public health officials while almost same proportion of Republicans (65%) took the opposite view.

Taken together, this discussion suggests that people are likely to have strong pre-existing attitudes toward the COVID-19 related issues and the WHO and that partisanship is a main driver of the pre-existing attitudes. Compared to Republicans, Democrats will be, in general, more supportive and accepting of the WHO's guidelines and recommendations. It also indicates that guidelines and recommendations provided by the WHO will be less effective in influencing the attitudes of strongly partisan respondents who, whether Democrats or Republicans, already

possess strong pre-existing attitudes about the COVID-19 and related policies and recommendations. On the other hand, to the degree to which independents are less likely to have strong pre-existing attitudes toward science, they are more likely to be affected by the WHO's information. We also examine pre-existing trust in public health authorities and the WHO across different partisan groups to test whether our theoretical reasoning is supported.

**H4:** Independents are more likely to be responsive to information provided by the WHO than either Democrats or Republicans.

**H5:** The level of trust on the information provided by a public health authority (whether it is a public health official or the WHO) would be the highest among Democrats, followed by independents, and the lowest among Republicans.

#### 4. Research Design

To investigate whether and how information provided by IOs affect public beliefs and behavioral intention, we conducted an online survey experiment in the U.S. A total of 2,865 U.S. adults are recruited in April 2022 through Dynata, an online survey company. Dynata recruited a target population via soft quota sampling in terms of gender, education, age, income, and regions to match the census (18 and over) averages. As a result, we obtained a diverse sample that is similar to a nationally representative sample. The summary statistics of the socio-demographic characteristics of our sample are presented in the appendix.

To ensure the estimations are based on reliable responses, we rely on two validation checks. First, we removed any respondents that did not pass the Dynata's own quality checks that screen out inattentive responses or speeders, flat-lining or straight-lining through grid questions. Second, we deliberately added a question asking respondents to skip by selecting no answer. Those respondents who chose an answer were dropped from the sample.

The experiment presents respondents with four actual 'mythbusters' about the COVID-19, particularly the Omicron variant, that the WHO publicly announced (accessed in January 2022). These four are chosen as they present information that, to our judgment, might be less well-known than other ones. To provide contents and information environments as realistic as possible that citizens may encounter online, we deliberately present the exact details and wording of the mythbusters that the WHO used in its official website. The actual wordings and contents of each mythbusters are presented in Table 1.

**FACT: Touching a communal bottle of alcohol-based sanitizer will not infect you.**

**MYTH: Touching a communal bottle of alcohol-based sanitizer can infect you.**

Once you've sanitized your hands, you have disinfected them from any germs that may have been on the bottle. If everyone uses sanitizer in a public place such as a supermarket

entrance, the risk of germs on communal items will be lower and will help keep everyone safe.

**FACT: Omicron can reinfect people that have previously had COVID-19.**

**MYTH: Previous infection provides immunity from Omicron.**

If you have had COVID-19 previously, you should still get vaccinated, as reinfection from Omicron is still possible, with the risk that you could become seriously ill, pass on the virus to others or develop Long COVID. Getting fully vaccinated, whether you have had COVID-19 or not, is the best way to protect yourself and others from severe disease, being hospitalized and potentially dying from the virus.

**FACT: Vaccines offer the best available protection against Omicron.**

**MYTH: Vaccines don't work against Omicron.**

Vaccination is expected to provide important protection against severe disease and death caused by Omicron, as it does with the other variants still in circulation. Up to this point, the comparatively lower rate of hospitalizations and deaths from Omicron is in large part thanks to so many people in our Region already being vaccinated. Vaccination prompts the body's immune response to the virus, which not only protects us from the variants currently in circulation – including Omicron – but is also likely to give protection from severe disease due to future mutations of COVID-19

**FACT: Wearing masks is an effective protective measure to help reduce the infection and spread of Omicron.**

**MYTH: Face masks are useless against Omicron as the gaps in them are larger than the virus.**

Based on the evidence that we have so far, all preventive measures that work against the Delta variant continue to be effective against Omicron – and this includes mask wearing. Omicron is moving so quickly that, in addition to vaccination, all other preventive measures – wearing a mask; cleaning hands; physical distancing; avoiding closed, confined or crowded spaces; coughing or sneezing into a bent elbow or tissue; and ensuring good ventilation – are needed to stem the wave of infection and protect health workers and systems.

Table 1 The actual wordings and contents of the experimental vignette about the mythbusters on COVID-19.

Our experiment manipulates the source of the information to capture the importance the identity of information provider to respondents' level of trust in the public health guidelines about COVID-19. We focus on two major sources that frequently provide public health guidelines provider about COVID-19---public health officials and the WHO. While public health agencies such as Centers for Disease Control and Prevention (CDC) serve as a main 'domestic' public health information provider, the WHO, the premier international health organization, has also actively publicized advice on ways to prevent the spread of COVID-19. In our experiment, before presenting the information about the COVID-19 mythbusters, we present

the following sentence: “[Public health officials / The WHO] provide(s) the following guidance for public on ways to protect yourself and prevent the spread of COVID-19.”

To investigate whether the IO’s perceived legitimacy and authority affect citizens’ acceptance of public health information provided by IO, we also manipulate the information about the WHO --- whether the WHO is perceived to be equipped with technical expertise or to be politically biased. Specifically, for the respondents exposed to the WHO treatment conditions, we provide one of the three different experimental conditions that vary specific information about the WHO. First, for one group, we provide only the general description about WHO’s condition (“General WHO” condition). On the other hand, the other two groups received additional information for such general description about either the fact that the WHO is run by world’s experts (“Professional WHO” condition) or a concern about the WHO’s deference to the Chinese government (“Politicized WHO” condition). The actual wordings and contents of each condition are as follows:

**General WHO condition:** “World Health Organization (WHO) is a specialized agency of the United Nations that advises the world on handling health crises. WHO’s primary role is to direct international health within the United Nations’ system and to lead partners in global health responses.”

**Professional WHO condition:** “World Health Organization (WHO) is a specialized agency of the United Nations that advises the world on handling health crises. The WHO’s primary role is to direct international health within the United Nations’ system and to lead partners in global health responses. The WHO officials include 8000+ world’s leading public health experts including doctors, epidemiologists, scientists and managers. Together, they coordinate the world’s response to health emergencies and prevent disease based on scientific evidence.”

**Politicized WHO condition:** “World Health Organization (WHO) is a specialized agency of the United Nations that advises the world on handling health crises. WHO’s primary role is to direct international health within the United Nations’ system and to lead partners in global health responses. Numerous health experts and political observers, however, have raised concerns about WHO officials’ deference to the Chinese government. The WHO has also been blamed for moving too slowly in declaring a global health emergency.”

To measure our dependent variable of interest, after receiving one of the experimental conditions, respondents were asked, “Overall, how much do you think the guidelines mentioned above is trustworthy?” on a 4-point scale ranging from “Not at all” to “Very much.” Further, we asked how much respondents trust each of the four guidelines mentioned using a 4-point scale ranging from “Not at all likely” to “Extremely likely”, respectively. Moreover, for the three behavioral guidelines---touching a communal bottle of alcohol-based sanitizer, vaccination, and wearing a mask---, we asked how likely they would behave as suggested in the guidelines, again, on a 5-point scale. The actual wordings of the questions are presented in

Appendix Section B. In the estimations, we utilize average values of the responses for the guidelines.

In short, the respondents in the “public health officials” condition serve as a control group. By comparing the average levels of trust in the guidelines between “General WHO” treatment group and the control group, we test if public acceptance of the health information depends on who provides the information. Hence, comparisons between the control, on the one hand, and “Professional WHO” condition and “Politicized WHO” condition, on the other, allow us to interrogate whether either positive or negative frames of the WHO as an information provider affect respondents’ perceptions about the COVID guidelines.

To ensure that the pre-treatment characteristics of respondents are balanced across experimental arms, we calculate standardized mean differences in various socio-demographic attributes including age, gender, income, race, education, and partisanship. The results, presented in Tables A1-A2 show weak evidence of covariate imbalances: the standardized mean differences in almost all attributes are below 0.1 and statically indistinguishable from 0 at the conventional level. Still, as a robustness check, we control for the attributes in the analyses and find that the main results remain substantively unchanged.

Hence, to test H4 and H5 about possible heterogeneity in the information effects provided by WHO across the respondent’s party identification, we reproduce the main analyses by splitting the samples into three groups on the basis of the respondents’ partisanship---Democrat, Republican, and Independent.

## **4. Findings**

### **4.1. Effects of the WHO as a Public Health Information Provider**

In Figure 1, we report the predicted mean values of different measures that capture public trust and behavioral intention about the COVID-19 related guidelines in each experimental group. First of all, the average trust levels, overall, increase when WHO is identified as a source as opposed to public officials. Specifically, the highest mean trust value is found in the group that received ‘Professional WHO condition,’ followed by the “General WHO condition” and “Politicized WHO condition” groups, suggesting that the emphasis on the WHO’s expertise and scientific approaches may increase public trust in the information provided by the WHO while the negative information about the WHO’s legitimacy may have adverse effects.

Nevertheless, we do not find robust empirical evidence that citizens are more likely to accept the information provided by the international organization than that from a domestic agency. The results also do not show statistically significant evidence that additional cues on the international organization’s legitimacy systematically affect public trust in the guidelines. The predicted mean values of average trust level in all the experimental conditions are clustered closely and are included by the confidence intervals for other conditions, suggesting that the differences are not statistically significant at the conventional level, especially compared to the

estimates for the ‘public officials’ condition, which serves as a control group.<sup>2</sup> Such null results are also found when we consider the average values of how much the respondents trust each of the guidelines and of how likely they would behave accordingly.

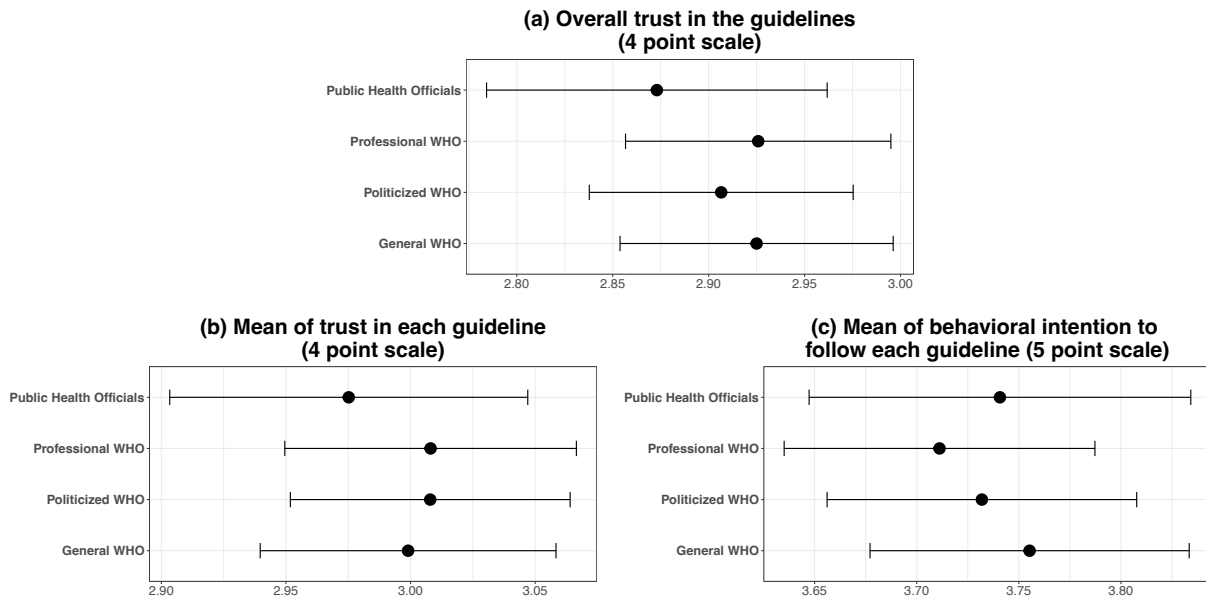


Figure 1 Predicted Mean Values in Each Experimental Condition

How to understand the null findings about the treatment effects? While we cannot exclude the possibility of the type II error (i.e., a failure in detecting the effects though they exist) despite a relatively large survey sample (compared to the similar experimental studies in international relations) or the concerns about weak treatment wordings, we further investigate whether the presence of strong priors on the trust in the WHO and public officials, especially regarding the COVID-19 related issues, if any, can drive the null findings. In other words, American citizens could be strongly ‘pre-treated’ so that the information treatment on the source of COVID-19 guideline provider cannot alter their opinions. Accordingly, we explore potential heterogeneous treatment effects across party identification in the next subsection.

#### 4.2. Heterogeneous Treatment Effects Across Party Identification

Figure 2 reports the predicted mean values of our dependent variables by the respondents’ partisanship. We find evidence for partisan differences not only in general trust in the public health information but also in treatment effects. First of all, Democrat respondents, regardless of the experimental conditions that they received, tend to more trust or follow the guidelines than independent and republican respondents, resonating with the findings reported in earlier studies (i.e., Bayram and Shields 2021). The mean predicted values for the democrats are clustered in the far-right positions compared to other respondents. This implies that democrats may already possess positive stances on the public health information, and their acceptance of

<sup>2</sup> In Appendix Section C, we also report the OLS results.

the Covid-19 guidelines is quite high irrespective of whether the information comes from the international organization or public health officials.

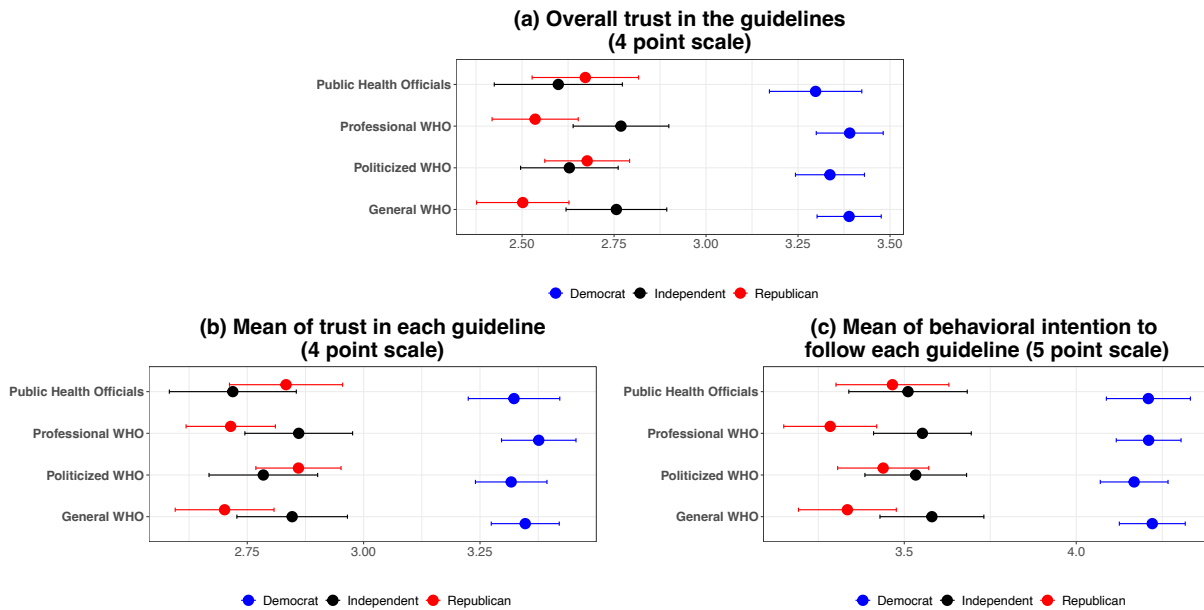


Figure 2 Predicted Mean Values in Each Experimental Condition by Partisanship

On the other hand, interestingly, we find evidence for the positive WHO legitimacy (i.e., professionalism) effects for the independents: the independents assigned to the professional WHO condition are more likely to trust the guidelines than those assigned to domestic public health officials. Specifically, point estimates for those exposed to the professional WHO treatment is greater than those for the respondents who received public health official while the confidence intervals do not include the point estimates.

To better describe the difference in treatment effects across partisanship, we present visualize marginal effects on average level of trust in the guidelines in Figure 3.<sup>3</sup> The figure clearly illustrates positive and statistically significant effects of the professional WHO treatment at the 95% level in the subgroup of independents. The information that the international organization can serve as a legitimate information provider thanks to its professionalism increases the independents' trust in the guidelines. Still, we find weak evidence that such positive information is strong enough to induce behavioral changes. Another notable finding for the independents is that such positive effects of the WHO as the information source disappear when the respondents were informed that the WHO is politically biased: the estimated effects of the politicized WHO condition are close to zero and statistically not significant.<sup>4</sup>

<sup>3</sup> The findings are not substantively different when using different DVs such as the average responses to trust in each guideline and those of behavioral intention to follow each guideline (Appendix Figure XX)

<sup>4</sup>Also, the null effects of the politicized WHO condition for the independents may suggest that among the two dimensions in the legitimacy, only 'professionalism' which may directly determine the effectiveness of the guidelines matters. The politicization itself may not affect the validity of the guidelines since the politicization

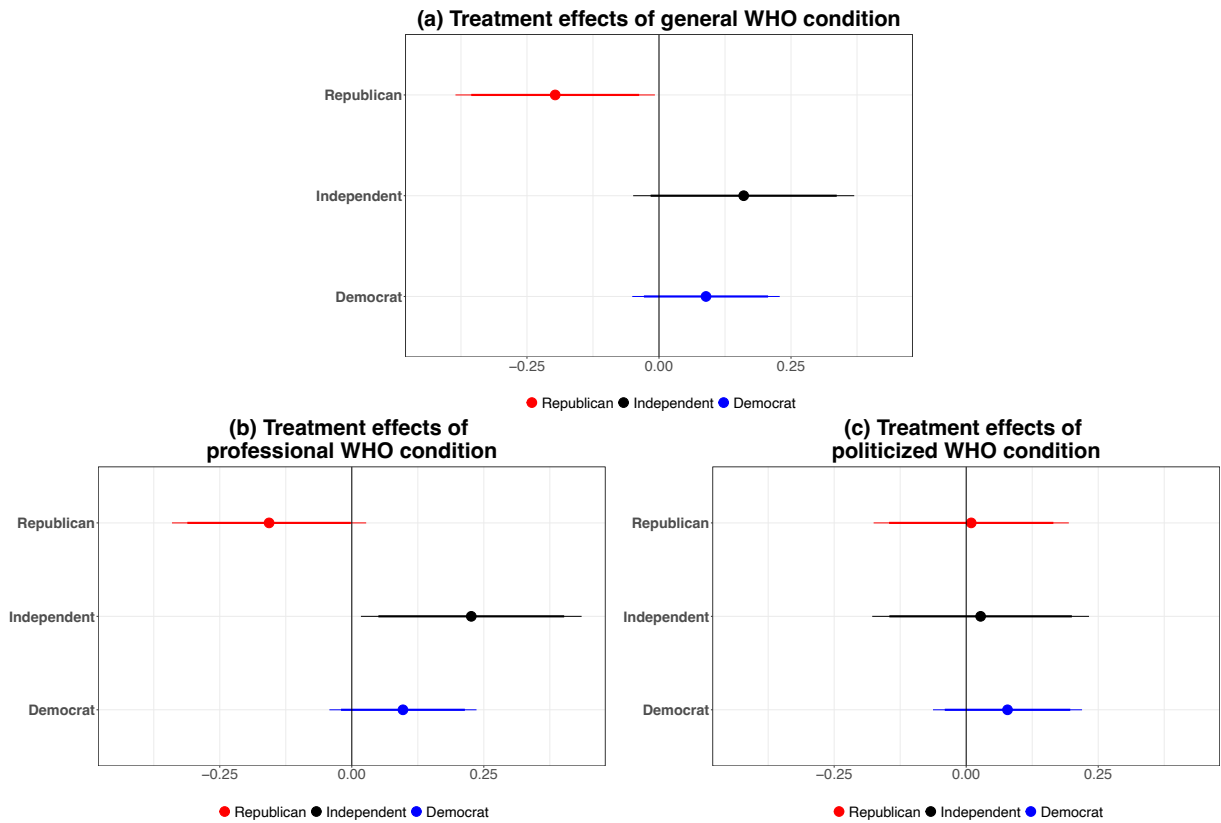


Figure 3 Treatment Effects By Partisans on Trust in the COVID-19 guidelines

For Republicans, the results suggest evidence for the adverse effects of the WHO. As shown in Table 4, the republican respondents exposed to the general WHO condition are less likely to trust the guidelines than those in the public health officials condition group. This may reflect that the republicans are more likely to question the effectiveness and legitimacy of the international organization (Johnson and Rickard 2017, Funk and Tyson 2022). Also, the professionalism cue mitigates such negative effects but only marginally (from -0.23 to -0.21), implying that the positive information about the WHO’s legitimacy may not change republicans’ trust. For the WHO politicized information, the results show null findings. Republicans may already have strong priors that the WHO is politicized, which the Republican media outlets have frequently provided (Stecula and Pickup 2021).

## 5. Exploring Partisan Heterogeneity

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argument mostly points to whether the Chinese government is responsible for the outbreak rather than the preventive guidelines is not trustworthy or effective due to politicization.



## 5.1. A Descriptive Exploration on Partisan Attitudes toward the COVID-19 and Information Providers

How do partisans think the COVID-19 issues and the WHO? How different are the pre-existing beliefs on the COVID-19 issues and the WHO across party identification, which can help better understand the overall null results and partisan heterogeneity of the WHO treatment? To answer these questions, we analyze various individual-level pre-dispositional attitudes toward the major sources of the COVID-19 guideline---public health officials and the WHO--- and the COVID-19 that were asked before we present the experimental conditions.<sup>5</sup>

First, we examine priors on public health officials and the international organization in handling the COVID-19 pandemic. Figure 4 (a) clearly shows that trust in public health officials is far higher for Democrats than independents and Republicans. When we queried how much they trust the public health agencies on a 4-point scale (not at all (1), a little (2), moderately (3), and very much (4)), the mean value for the Democrats' responses is 2.54 (around a mid-point between a little and moderately while those for independents and Republicans are only 1.77 and 1.67, respectively).

Such partisan difference is also observed in priors on the effectiveness of international organization. Figure 4 (b) illustrates how effective the respondents think international organizations are at handling issues of the Covid-19 pandemic on a 5-point scale. Democrats tend to have more positive views on the effectiveness of international organizations than other partisans. The average values of the independent or Republican respondents' evaluations on the effectiveness is much lower while that of the independents' opinions is slightly more favorable than the Republicans.

We find the similar pattern for the trust in scientific experts. As shown in Figure 4 (c), the highest level of trust in scientific experts is also found for Democrats, followed by Independents and Republicans. In fact, Democrats, on average, said that they 'moderately' trust them (the mean value is 3.04) while trust levels for independents and Republicans are close to 'a little' (the mean values for independents and Republicans are 2.46 and 2.11).

Second, we asked a series of questions about the COVID-19. To capture the pre-existing acceptability of the Covid-19 guidelines, we asked respondents how worried they are about the impact of coronavirus on them or their family and how safe they think a COVID-19 vaccine would be on a 4-point scale that ranged from not at all (1) to very much (4). Figures 4 (d) and 4 (e) clearly illustrate partisan difference in attitudes toward COVID-19: overall, Democrats tend to be more worried about COVID-19 than independents and Republicans while they are more likely to consider COVID-19 vaccine safe. Republicans, on the other hand, showed the relatively low worries of COVID-19 and distrust on vaccine safeness than other groups. The independents' worries and safety concerns about the vaccines are between those of Democrats and Republicans.

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<sup>5</sup> We present the exact wordings of the questions and answer choices in the Appendix Section B.

Hence, we checked the respondent's COVID-19 knowledge with a true-false quiz about COVID-19. Specifically, we present 10 true-false questions about the mythbusters.<sup>6</sup> Figure 4 (f) shows the mean numbers of correct answers (out of 10). We find that the knowledge levels are not clearly different between partisanship. While independents tend to be less knowledgeable, the difference from the other groups' means is quite small (around 0.3).

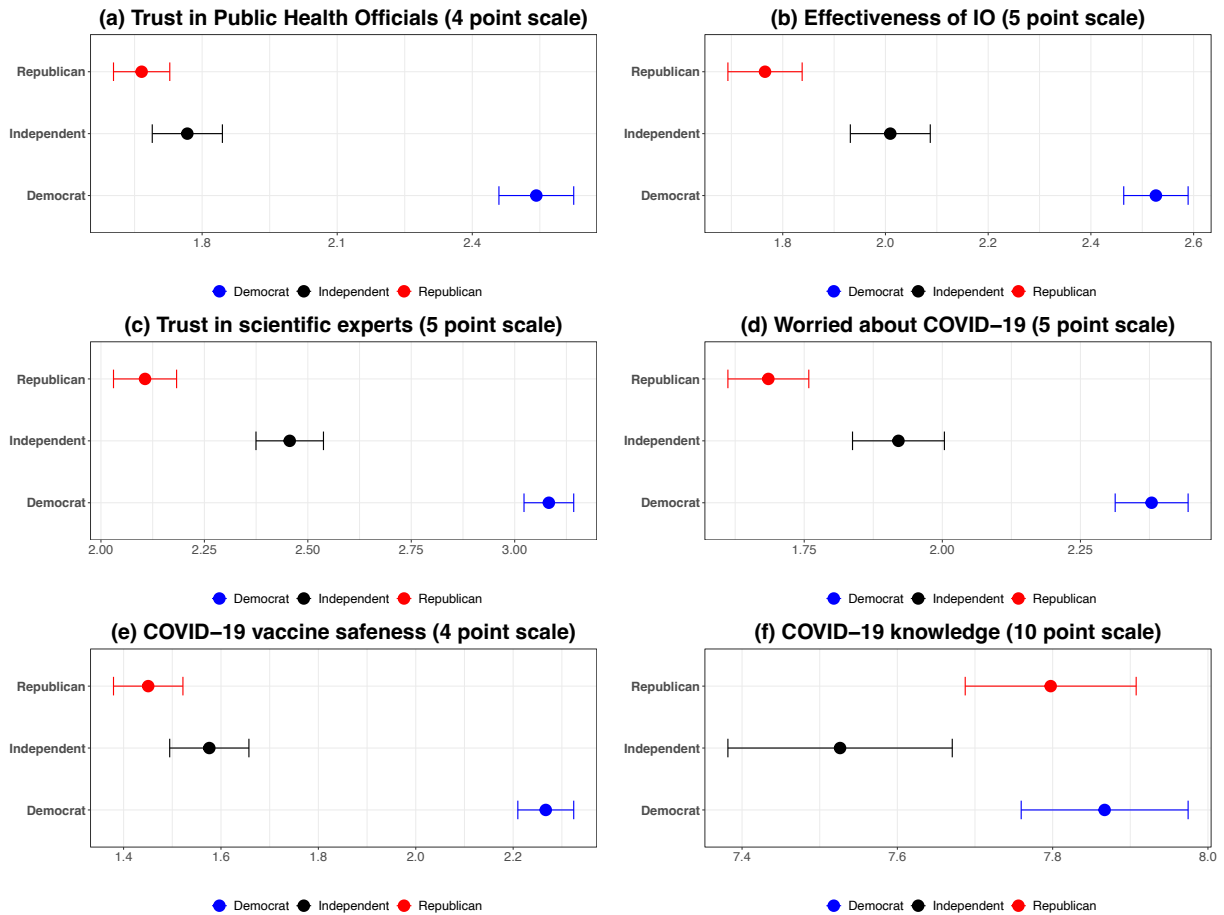


Figure 4: Partisan Responses to Pre-treatment Questions about COVID-19 and Information Providers.

To summarize, a descriptive exploration on priors on the public health agency and the WHO as well as COVID-19 clearly illustrate partisan differences. Overall, trust in public health officials and the WHO's effectiveness, and scientific experts for Democrats is higher than that for independents and Republicans by a wide margin. Such partisan gaps are also observed for the worries of COVID-19 and the safety of vaccines. Overall, Democrats tend to have positive priors

<sup>6</sup> We randomly selected 10 questions from the mythbusters presented in the WHO website. The mythbusters used as the treatment conditions are excluded.

both on public health officials, the WHO, and scientific experts along with a relatively strong acceptability of the guidelines, which can mute the treatment effects. On the contrary, Republicans are already pre-dispositioned against these actors and the guidelines. In particular, Republicans see international organizations ineffective and consider the WHO as illegitimate information provider. Such negative pre-existing beliefs on the WHO may drive the adverse effects of the WHO treatment. At the same time, Republicans trust ‘a little’ in scientific experts which possibly explain the null effects of the WHO professional treatment for the Republican. On the other hand, independents have relatively weaker pre-existing attitudes, deeming somewhat larger room for the WHO treatment effects than the Democrats and Republican respondents. Intriguingly, however, the partisan difference is quite small for COVID-19 knowledge. This suggests that the extent to which the partisan respondents were informed about the COVID-19 guidelines does not explain the partisan heterogeneity in the WHO treatment effects.

## **5.2. Checking Mechanisms Behind Partisan Heterogeneous Treatment Effects**

Next, we further investigate potential mechanisms behind the heterogeneous treatment effects across partisanship---particularly, the positive effects of the professional WHO condition for independents and the negative effects of the general WHO condition for Republicans.

First, utilizing a set of post-treatment questions about the WHO, we estimate a series of nonparametric average causal mediation effect (ACME) models (Imai et al., 2011) in which we explore how much the treatment effects occurs indirectly through the changes in opinions about the WHO. To determine the pre-treatment attitudes toward the WHO, we inquired how much they agree with the three statements about the WHO: (i) the information provided by the WHO is trustworthy, (ii) the WHO is a professional organization that can provide credible guidelines about public health issues and (iii) the WHO has recently been politicized on a 5 scale---strongly disagree (1) to strongly agree (5).

Figure 5 (a) reports the average causal mediation effects (ACMEs) of the professional WHO condition for independents. We see evidence that the treatment effects of the professional WHO condition are mainly driven by the changes in the opinions about professionalism in the WHO. The ACME for the opinions about the WHO as a professional guideline provider is positive and statistically significant ( $p < 0.052$ ). We also find positive ACMEs for trust in the WHO information, which is statistically significant at the 90% level ( $p < 0.076$ ). Overall, the results suggest that independents exposed to the vignette that emphasize professionalism in the WHO are more likely to view the WHO a professional and trustworthy information provider than those who received the public health officials condition. Noticeably, such effects through the perceptions about the WHO are not found for Democrats and Independents (Appendix Figures XXX).

The ACMEs of the general WHO condition for Republicans are presented in Figure 5 (b). The ACMEs for all the mediators are negative but statistically indistinguishable from 0. On the other hand, the average direct effects (ADE) for ‘WHO Trustworthy’ and ‘WHO politicized’

moderators are estimated to be negative and significant at the 5% level,<sup>7</sup> indicating that the adverse effects of the general WHO condition are largely direct ones. Rather than changes in the perceptions of the WHO, a direct comparison between public health officials and the WHO can constitute a main channel through which the general WHO condition leads Republicans to less trust the guidelines.

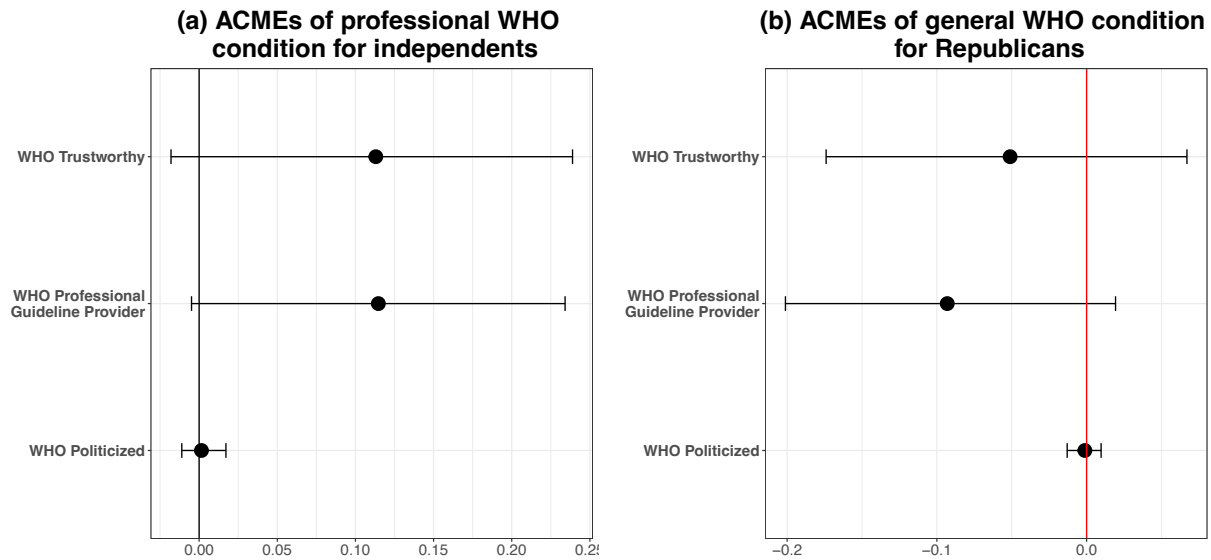


Figure 5 Average Causal Mediation Effects of (a) professional WHO condition for independents and of (b) general WHO condition for Republicans

Further, we explore whether the attitudes toward the WHO are systematically affected by the experimental conditions that respondents received. Using the post-treatment questions about the WHO introduced above as dependent variables, we estimate OLS regression models in which key explanatory variables are the indicators for the three experimental conditions --- general WHO, professional WHO, and politicized WHO conditions---for Democrats, Republicans, and Independents, respectively. In Figure 6, we report estimation results in coefficient plots. For Democrats and Republicans, the results show null effects of the WHO treatment effects across all dependent variables. For independents, however, we find evidence that those who received the professional WHO condition are more likely to consider the WHO as a trustworthy and professional COVID-19 guideline provider. As shown in Figure 6 (a) and (b), the coefficient of the professional WHO condition is positive and statistically significant at the conventional level. This result provides further evidence that independents are more likely to trust the information from the WHO when they are informed about the WHO’s scientific and technical expertise.

<sup>7</sup> The estimation results of the ACMEs and ADEs are presented in Appendix Table XXX.

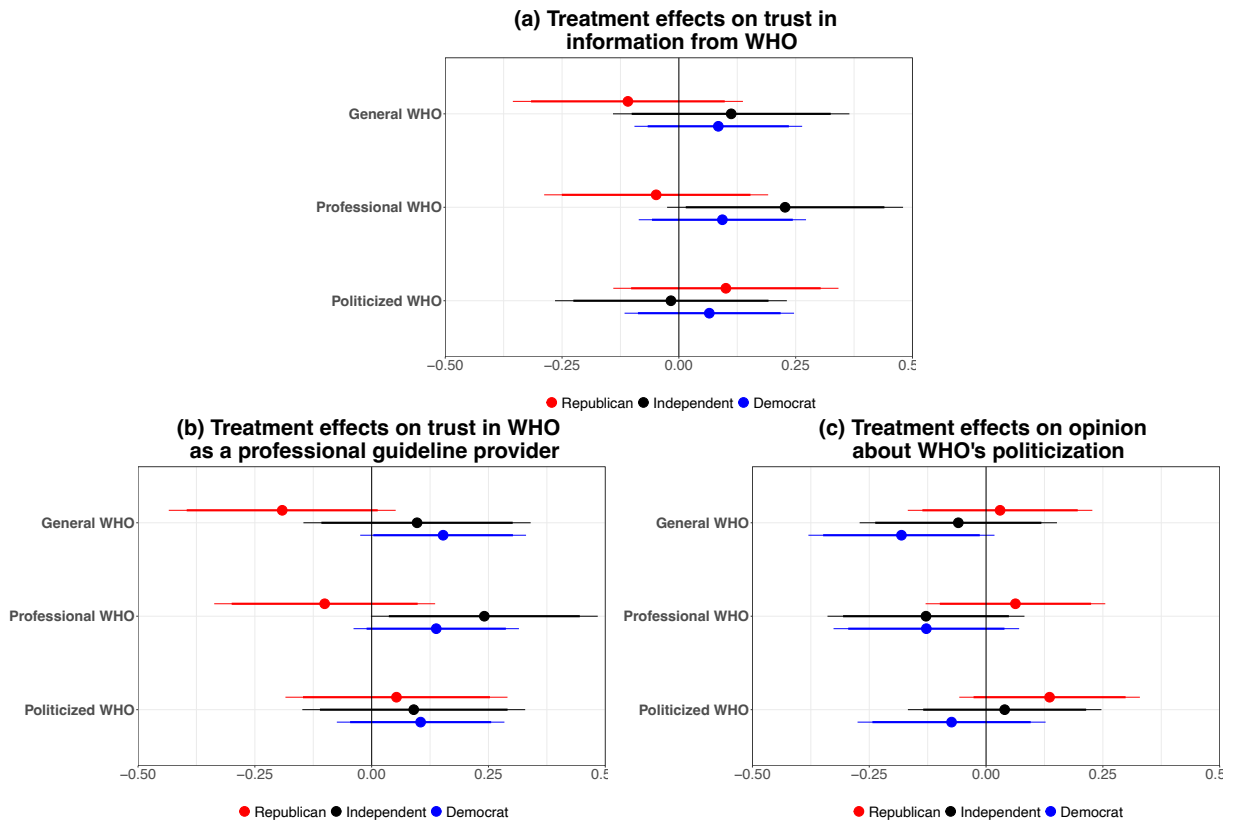
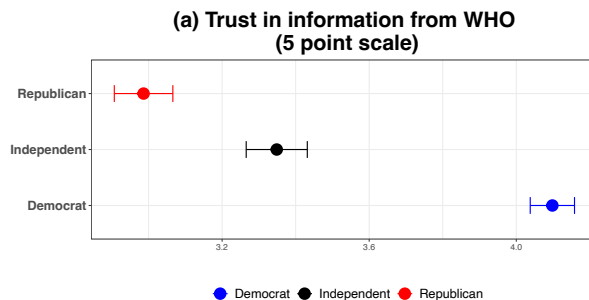


Figure 6 Treatment Effects on Post-treatment Questions about the WHO

Lastly, we descriptively check how different partisans think of the WHO as an information provider. Figure 7 shows the average responses to the three post-treatment questions about the WHO. As shown in Figures 7 (a) and (b), Democrats (Republicans) are more (less) likely to believe that the information provided by the WHO is trustworthy and that the WHO is a professional organization that can provide credible guidelines about public health issues than independents and Republicans. Also, independents have less (more) positive views on the WHO than Democrats (Republicans), suggesting their relatively weak priors than other partisans. On the other hand, for the statement about the politicized WHO, Republicans are more likely to agree with, as clearly illustrated in Figure 7 (c).



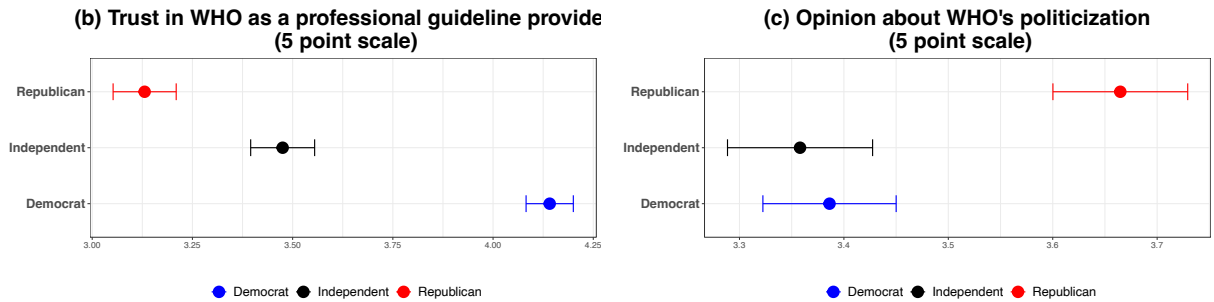


Figure 7 Partisan Responses to Post-treatment Questions about the WHO

In brief, the mechanism for the positive effects of the WHO's professionalism condition for independents seems very likely to be information: independents, who have relatively more neutral views on the WHO and public health agency than Republicans and Democrats, are more likely to believe that the WHO can provide credible and trustworthy guidelines when informed that the WHO is a professional organization. Notably, such positive effects of the information are not found for Democrats and Republicans, who have stronger priors on the WHO. In addition, we find that the adverse effects of the WHO treatment for Republicans are not likely explained by the information effects. Rather, our analysis suggests that the negative image of the WHO may drive the negative treatment effects.

## 6. Discussion

How IOs can effectively engage with the public directly and influence their attitudes is a theoretically and practically important question. In this article, we examine whether and under what conditions an IO can effectively influence attitudes of the public. Specifically, we focus on the WHO and explore whether the public perceives information provided by the international organization as more trustworthy than information provided by other public health authorities. Our central argument is that the effectiveness of information disseminated by the WHO depends on two factors: the WHO's perceived legitimacy and individuals' prior beliefs on a particular issue related to the information. We posit that citizens are more likely to consider the COVID-19-related information provided by the WHO more trustworthy than that from a domestic authority when they perceive the WHO more legitimate. The WHO's perceived legitimacy is enhanced when it is perceived to be equipped with scientific and professional expertise in health-related issues as well as to be apolitical. We further argue that the effect of information from the WHO relative to that of information from a domestic authority is greater when pre-existing attitudes about the COVID-19 and related policies and recommendations are weak.

Our survey experiment shows that the WHO makes little difference in changing public attitudes about the guidelines related to the COVID-19. Regardless of whether we manipulate the information about either procedure or performance legitimacy of the WHO, little significant difference between different sources of information (WHO vs. domestic health officials) exists.

However, we find that the independents receiving the professional WHO condition are more likely to trust the WHO's COVID-19 guidelines than those in the control group exposed to the condition of domestic public health officials. By contrast, the same is not true of both democrats and republicans that have, on average, stronger pre-existing attitudes about the COVID-19. No significant evidence exists that the WHO's information is more effective in affecting democrats or republicans than domestic health officials' information.

Our findings have important implications for IOs and their strategies to directly engage with the public. First, they suggest the potential effectiveness of the WHO's efforts to reach out to the public in affecting the public's attitude and behavior. Particularly, emphasizing the WHO's scientific and professional expertise is helpful in increasing the trustworthiness of their message. This finding is consistent with the WHO's emphasis on its power to persuade through scientific evidence and good examples of good practice. At the same time, the perception of the WHO's politicization seems to interfere with its efforts to persuade and influence the public. However, our results also indicate the limitation of such efforts since we find that the WHO's COVID-19 guidelines exert no effect on individuals who hold strong prior beliefs on the COVID-19 issues. Additional positive or negative cues on the WHO's legitimacy did not systematically affect trust in the guidelines by Republican or Democrat respondents who have strong pre-existing attitudes.

Second, our finding on the information source effect might be applicable only to the IOs that disseminate scientific information. People might be more likely to trust and accept this type of information from an IO than any normative information from it. For instance, the strong modifying effect of pre-existing attitudes suggests that any IOs attempting to promote human rights and improve human rights practices across the globe would face greater obstacles in persuading people and motivating their attitudinal and behavioral changes. People would be likely to have stronger prior beliefs on human rights-related issues. This implies that future research should study other types of IOs and their messages to further explore in general the effectiveness of IO's direct engagement with the public.

Future study could also directly explore how people perceive an IO's legitimacy and what factors influence the perceived legitimacy. An increasing number of studies emphasizes the importance of legitimacy for IOs (Chapman 2009; Hurd 2019; Tallberg and Zurn 2019; Greenhill 2020). Yet, few studies directly investigate these questions. Our study only provides indirect evidence for the importance of an IO's legitimacy. Thus, we need a systematic empirical examination of the following questions: What factors affect people's perception of an IO's legitimacy? Do people attach different weight to different dimensions of legitimacy? How do people update their perception of an IO's legitimacy? To answer these questions, it is necessary to understand the micro-foundational cognitive processes through which individuals perceive legitimacy. To this end, future study should draw on the social psychology literature on legitimacy and legitimation.





## References

Li, Hongmei, et al. "Americans' Trust in COVID-19 Information from Governmental Sources in the Trump Era: Individuals' Adoption of Preventive Measures, and Health Implications." *Health Communication* (2022): 1-10.

Latkin, Carl A., et al. "An assessment of the rapid decline of trust in US sources of public information about COVID-19." *Journal of health communication* 25.10 (2020): 764-773.

Ipsen, Catherine, Andrew Myers, and Rayna Sage. "A cross-sectional analysis of trust of information and COVID-19 preventative practices among people with disabilities." *Disability and health journal* 14.2 (2021)

Bayram, Burcu A., and Todd Shields. "Who Trusts the WHO? Heuristics and Americans' Trust in the World Health Organization During the COVID-10 Pandemic." *Social Science Quarterly* (2021).

Heinzel, Mirco and Andrea Liese "Expert authority and support for COVID-19 measures in Germany and the UK: a survey experiment" *West European Politics*, 44:5-6 (2021), 1258-1282

Fridman, Ilona, et al. "Association between public knowledge about COVID-19, trust in information sources, and adherence to social distancing: cross-sectional survey." *JMIR public health and surveillance* 6.3 (2020): e22060.

Fletcher, Richard, Antonis Kalogeropoulos, and Rasmus Kleis Nielsen. "Trust in UK government and news media COVID-19 information down, concerns over misinformation from government and politicians up." *Reuters Institute for the Study of Journalism* (2020).

Allcott, Hunt et al. 2020. "Polarization and Public Health: Partisan Differences in Social Distancing during the Coronavirus Pandemic." *Journal of Public Economics* 191: 104254.

Alvarez, José E. 2020. "The WHO in the Age of the Coronavirus." *American Journal of International Law* 114(4): 578–87.

Barnett, Michael N., and Martha Finnemore. 1999. "The Politics, Power, and Pathologies of International Organizations." *International Organization* 53(4): 699–732.

Bayram, A. Burcu, and Todd Shields. 2021. "Who Trusts the WHO? Heuristics and Americans' Trust in the World Health Organization During the COVID-19 Pandemic." *Social Science Quarterly*: 10.1111/ssqu.12977.

Bell, James et al. 2020. "2. United Nations and World Health Organization Receive Positive Ratings across Most Countries." Pew Research Center's Global Attitudes Project. <https://www.pewresearch.org/global/2020/09/21/united-nations-and-world-health-organization-receive-positive-ratings-across-most-countries/> (June 5, 2022).

Bromme, Rainer et al. 2022. "An Anchor in Troubled Times: Trust in Science before and within the COVID-19 Pandemic." *PLOS ONE* 17(2): e0262823.

Brutger, Ryan, and Richard Clark. "At What Cost? Power, Payments, and Public Support of International Organizations." : 69.

Chapman, Terrence L. 2009. "Audience Beliefs and International Organization Legitimacy." *International Organization* 63(4): 733–64.

Dellmuth, Lisa M., and Jonas Tallberg. 2015. The Social Legitimacy of International Organisations: Interest Representation, Institutional Performance, and Confidence Extrapolation in the United Nations. *Review of International Studies*, 41(3), 451–475.

Dellmuth, Lisa M., and Jonas Tallberg. 2021. "Elite Communication and the Popular Legitimacy of International Organizations." *British Journal of Political Science* 51(3): 1292–1313.

Druckman, James N., Erik Peterson, and Rune Slothuus. 2013. "How Elite Partisan Polarization Affects Public Opinion Formation." *American Political Science Review* 107(1): 57–79.

Franck, Thomas M. 1990. *The Power of Legitimacy Among Nations*. Oxford, England: Oxford University Press.

Goldstein, Daniel A. N., and Johannes Wiedemann. 2021. "Who Do You Trust? The Consequences of Partisanship and Trust for Public Responsiveness to COVID-19 Orders." *Perspectives on Politics*: 1–27.

Golos, Aleksandra M., Daniel J. Hopkins, Syon P. Bhanot, and Alison M. Bутtenheim. 2022. "Partisanship, Messaging, and the COVID-19 Vaccine: Evidence From Survey Experiments." *American Journal of Health Promotion* 36(4): 602–11.

Greenhill, Brian. 2020. "How Can International Organizations Shape Public Opinion? Analysis of a Pair of Survey-Based Experiments." *The Review of International Organizations* 15(1): 165–88.

Grossman, Guy, Soojong Kim, Jonah M. Rexer, and Harsha Thirumurthy. 2020. "Political Partisanship Influences Behavioral Responses to Governors' Recommendations for COVID-19 Prevention in the United States." *Proceedings of the National Academy of Sciences* 117(39): 24144–53.

Gruszczynski, Lukasz, and Margherita Melillo. 2022. "The Uneasy Coexistence of Expertise and Politics in the World Health Organization: Learning from the Experience of the Early Response to the COVID-19 Pandemic." *International Organizations Law Review* 1(aop): 1–31.

Haas, Peter M. 1989. "Do Regimes Matter? Epistemic Communities and Mediterranean Pollution Control." *International Organization* 43(3): 377–403.

Hegland, Austin, Annie Li Zhang, Brianna Zichettella, and Josh Pasek. 2022. "A Partisan Pandemic: How COVID-19 Was Primed for Polarization." *The ANNALS of the American Academy of Political and Social Science* 700(1): 55–72.

Heinzel Mirko, Jonas Richter, Per-Olof Busch, Hauke Feil, Jana Herold, and Andrea Liese (2020). 'Birds of a Feather? The Determinants of Impartiality Perceptions of the IMF and the World Bank', *Review of International Political Economy*, 1–25.

Heinzel, Mirko, and Andrea Liese. 2021. "Expert Authority and Support for COVID-19 Measures in Germany and the UK: A Survey Experiment." *West European Politics* 44(5–6): 1258–82.

Hurd, Ian. 2007. *After Anarchy: Legitimacy and Power in the United Nations Security Council*. Princeton, N.J.:Princeton University Press.

Hurd, Ian. 2019. "Legitimacy and contestation in global governance: Revisiting the folk theory of international institutions." *The Review of International Organizations* 14(4): 717-729.

Huang, Pien. 2020. "Explainer: What Does The World Health Organization Do?" <https://www.npr.org/sections/goatsandsoda/2020/04/28/847453237/what-is-who-and-what-does-it-do>

Krause, Nicole M., Dominique Brossard, Dietram A. Scheufele, Michael A. Xenos, and Keith Franke. 2019. "Trends—Americans' trust in science and scientists." *Public Opinion Quarterly* 83 (4): 817–36.

Kushner Gadarian, Shana, Sara Wallace Goodman, and Thomas B. Pepinsky. 2020. Partisanship, Health Behavior, and Policy Attitudes in the Early Stages of the COVID-19 Pandemic. Rochester, NY: Social Science Research Network. SSRN Scholarly Paper. <https://papers.ssrn.com/abstract=3562796> (June 2, 2022).

Meier, Benjamin Mason et al. 2020. "The World Health Organization in Global Health Law." *Journal of Law, Medicine & Ethics* 48(4): 796–99.

Pevehouse, Jon C. W. 2020. "The COVID-19 Pandemic, International Cooperation, and Populism." *International Organization* 74(S1): E191–212.

Rodriguez, C. G., Gadarian, S. K., Goodman, S. W., & Pepinsky, T. B. (2022). "Morbid Polarization: Exposure to COVID-19 and Partisan Disagreement about Pandemic Response." *Political Psychology*.

Rutledge, Paul E. 2020. "Trump, COVID-19, and the War on Expertise." *The American Review of Public Administration* 50(6–7): 505–11.

Javed Siddiqi, *World Health and World Politics* (University of South Carolina Press, Columbus, 1995)

Snidal, Duncan. 1985. "Coordination Versus Prisoners' Dilemma: Implications for International Cooperation and Regimes", *American Political Science Review* 79.

Tallberg, Jonas, and Michael Zürn. 2019. "The Legitimacy and Legitimation of International Organizations: Introduction and Framework." *The Review of International Organizations* 14(4): 581–606.

Thompson, Alexander. 2006. "Coercion Through IOs: The Security Council and the Logic of Information Transmission." *International Organization* 60(1): 1–34.

Westen, Drew, Pavel S. Blagov, Keith Harenski, Clint Kilts, and Stephan Hamann. 2006. "Neural bases of motivated reasoning: An fMRI study of emotional constraints on partisan political judgment in the 2004 U.S. presidential election." *Journal of Cognitive Neuroscience* 18 (11): 1947–5

Zaller, John R. 1992. *The Nature and Origins of Mass Opinion*. New York, NY: Cambridge University Press.

Goldstein, D.A. and Wiedemann, J., 2022. Who do you trust? The consequences of partisanship and trust for public responsiveness to COVID-19 orders. *Perspectives on Politics*, 20(2), pp.412-438.

Hegland, A. *et al.* (2022) 'A Partisan Pandemic: How COVID-19 Was Primed for Polarization', *The ANNALS of the American Academy of Political and Social Science*, 700(1), pp. 55–72.  
doi: [10.1177/00027162221083686](https://doi.org/10.1177/00027162221083686).

Stecula, Dominik A., and Mark Pickup. "How populism and conservative media fuel conspiracy beliefs about COVID-19 and what it means for COVID-19 behaviors." *Research & Politics* 8.1 (2021): 2053168021993979.

TERNULLO, STEPHANIE. "'I'm Not Sure What to Believe': Media Distrust and Opinion Formation during the COVID-19 Pandemic." *American Political Science Review* 116, no. 3 (2022): 1096–1109. doi:10.1017/S000305542200003X.

Imai, Kosuke, Luke Keele, Dustin H. Tingley and Teppei Yamamoto. 2011. "Unpacking the Black Box of Causality: Learning about Causal Mechanisms from Experimental and Observational Studies." *American Political Science Review* 105(4):765–789.

Taylor, Adam. 2021. "Analysis | How Chinese Pressure on Coronavirus Origins Probe Shocked the WHO — and Led Its Director to Push Back." *Washington Post*.  
<https://www.washingtonpost.com/world/2021/08/19/covid-origins-who-pressure/> (November 14, 2022).

Funk, Cary and Alec Tyson. 2022. "Lack of Preparedness Among Top Reactions Americans Have to Public Health Officials' COVID-19" Pew Research Center Report, October 5, 2022,  
<https://www.pewresearch.org/science/2022/10/05/lack-of-preparedness-among-top-reactions-americans-have-to-public-health-officials-covid-19-response/>