Peer Opinion and the Legitimacy of International Organizations

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Abstract: What effect, if any, does peer opinion have on citizens' legitimacy beliefs toward international organizations (IOs)? While previous research has identified multiple sources of IO legitimacy beliefs, it has so far overlooked the potential role of peer opinion. This paper provides the first systematic analysis of peer opinion effects on people's legitimacy beliefs toward IOs. To this end, it develops theoretical expectations about peer opinion effects and the conditions under which these effects are likely to be particularly strong. It tests these hypotheses through three survey experiments administered to nationally representative samples in Brazil, Germany, and the United States, each experiment evaluating one potential source of information about peer opinion: other participants, national polls, and social media. The paper finds broad evidence that peer opinion plays a substantial role in how people form legitimacy beliefs toward IOs, and that this effect is particularly strong when peer opinion is negative and reflects a high level of consensus. These findings suggest that people form legitimacy beliefs toward IOs through a process that is more social and horizontal than previously understood.

Keywords: Cueing, legitimacy, international organizations, peer opinion, public opinion.

International organizations (IOs) have become increasingly contested in recent decades (O'Brien et al. 2000; Zürn, Binder, and Ecker-Ehrhardt 2012; Schmidtke 2019). The rise of anti-globalist populism and public discontent with IOs are two central features of the contemporary backlash against the Liberal International Order. This backlash has clear consequences, evident in Britain's decision to leave the European Union (EU), stalled United Nations (UN) climate negotiations, and hesitant state support for the World Health Organization's (WHO's) handling of COVID-19 (Copelovitch and Pevehouse 2019; Adler-Nissen and Zarakol 2020; Walter 2021).

These developments have spurred growing research on the legitimacy of IOs in the eyes of citizens. In this literature, legitimacy is understood as the extent to which citizens consider that an IO has the right to rule and exercises this authority appropriately (Tallberg and Zürn 2019). This legitimacy is crucial as IOs rely on it to address some of the most important transboundary problems of our time, including climate change, health pandemics, food insecurity, and violent conflict. Legitimacy implies the internalization of values and norms of a governance institution and thus induces cooperation and compliance among individuals – and, by extension, states – with these values and norms (Suchman 1995; Sommerer et al. 2022).

Existing research has found support for a variety of sources of legitimacy, located at the individual (Dellmuth and Tallberg 2015; Schlipphak 2015; Ecker-Ehrhardt 2016), institutional (Anderson, Bernauer, and Kachi 2019; Dellmuth, Scholte, and Tallberg 2019; Bernauer, Mohrenberg, and Koubi 2020), and structural level of global governance (Bernstein 2011; Macdonald 2016; Dellmuth et al. 2022). Previous research has also shown that citizens rely on elite cues to form opinions about IOs (Spilker, Nguyen, and Bernauer 2020; Brutger and Clark 2021; Dür and Schlipphak 2021; Dellmuth and Tallberg 2021; 2023; Ghassim 2022).

Yet, so far, existing scholarship on IO legitimacy has overlooked the role that peer opinion may play in the formation of legitimacy beliefs vis-à-vis IOs. We study "peer opinion" as cues people receive about other citizens' attitudes toward specific objects or issues. There are several reasons to expect peer opinion to matter for IO legitimacy beliefs.

To start with, studies in political psychology have documented the impact of a "consensus heuristic" (Axsom, Yates, and Chaiken 1987), that is, a "socialized tendency for people to associate the popular with the good or intelligent choice" (Mutz 1998, 210). This heuristic helps

to explain why people rely on public opinion polls to form opinions on political candidates (Hardmeier 2008) and policy issues (Kertzer and Zeitzoff 2017; Wratil and Wäckerle 2023).

In addition, peer opinion is likely of particular importance in our digital age, when political communication about global governance increasingly takes place via social media, such as Facebook, Twitter, and Instagram (Williams et al. 2015; Hall, Schmitz, and Dedmon 2020; Ecker-Ehrhardt 2020; Adler and Drieschova 2021). Social media substantially increase the role of peers by shifting communication from a conventional "one-to-many" mode to a new "many-to-many" mode (Klinger and Svensson 2015).

This paper provides the first analysis of when and why people use offline and online information about peer opinion to form legitimacy beliefs toward IOs. Establishing the role of peer opinion for attitudes toward IOs is of critical importance. If peer opinion matters, then we have not only uncovered another source of legitimacy beliefs toward IOs, but also revealed the distinctly social character of those perceptions. It would suggest that people form attitudes toward global governance through processes that are more horizontal than previously thought but also more easily manipulable through selective or fake presentations of public opinion.

Theoretically, we develop an argument for when and why people rely on peer opinion when forming legitimacy beliefs toward IOs. Building on research in political psychology, we argue that people make use of a consensus heuristic stipulating how a majority of fellow citizens think about an issue, which helps people to overcome information complexity and ensure social conformity. We derive hypotheses from this argument about the general effects of peer opinion on legitimacy beliefs toward IOs, as well as four factors that we expect condition this relationship: the valence of peer opinion, the degree of consensus in peer opinion, the extent to which peer opinion is congruent with elite cues, and the recipient's political awareness.

Empirically, we examine these hypotheses through three survey experiments administered to nationally representative samples in Brazil, Germany, and the United States (US). The experiments focused on three distinct ways in which people acquire information about peer opinion, spanning offline and online spheres of communication, and varied the IO in question to avoid potential contamination across experiments. The first experiment evaluated if respondents' legitimacy beliefs toward the WHO are affected when learning about the hypothetical opinions of other participants who had previously taken the survey. The second

experiment similarly assessed the effects of learning about peer opinion toward the International Monetary Fund (IMF) from a national poll, while the third experiment examined the impact of peer opinion on the UN as communicated through social media comments.

We find evidence that peer opinion plays a substantial role in how people form legitimacy beliefs toward IOs. Across all three experiments, information about majorities in peer opinion significantly affected respondents' legitimacy beliefs in the direction of the treatment. Irrespective of whether people learn about peer opinion through other participants, national polls, or social media, they take notice and adjust their attitudes accordingly. In addition, the results tend to support our expectations on the conditioning role of two out of four moderating factors. When peer opinion is negative, the effects on IO legitimacy beliefs are larger than when peer opinion is positive in two out of three experiments. Similarly, stronger consensus in peer opinion leads to larger treatment effects than weak consensus in all three experiments, but not all differences are statistically significant. In contrast, co-occurring elite cues and citizens' level of political awareness do not seem to condition individuals' receptivity to peer opinion, which challenges our initial expectations but reinforces the impression of peer opinion as a factor of general importance.

This paper has several important implications. First, it contributes to research on IO legitimacy, demonstrating that peer opinion constitutes a critical source of legitimacy beliefs, overlooked by previous studies. These effects of peer opinion on legitimacy beliefs toward IOs are independent of other well-known sources, including elite cues. Second, it contributes to the general literature on peer opinion in social and political psychology. While earlier studies mainly have examined peer opinion in a domestic context and with a particular focus on the US, we show that such dynamics extend broadly across governance levels and countries. Third, our findings point to competing normative implications of peer opinion. While they suggest that people form attitudes toward IOs through processes that are more horizontal and more resistant to elite manipulation than previously understood, they also imply that such processes may be exploited by actors seeking to affect citizen attitudes through biased portrayals of peer opinion in offline or online communication.

Effects of Peer Opinion: Theory and Hypotheses

In this section, we develop our argument on peer opinion effects on IO legitimacy beliefs. We begin by situating our research in the literature on sources of IO legitimacy beliefs. We then develop testable hypotheses on how peer opinion may shape IO legitimacy beliefs.

Sources of IO legitimacy beliefs

Citizen legitimacy perceptions toward IOs have attracted increasing scholarly interest over the past two decades. This body of research is chiefly interested in pinpointing the factors explaining IO legitimacy beliefs. Three types of sources are particularly prominent in this debate. They pertain to individual circumstances, structural factors, and communication, respectively.

Studies privileging individual-level explanations have emphasized the role of cost-benefit assessments (Gabel 1998; Hooghe and Marks 2005), cosmopolitan identities (Carey 2002; Mansfield and Mutz 2009; Ecker-Ehrhardt 2016), political values (Norris and Inglehart 2019; Hooghe, Lenz, and Marks 2019), and trust in domestic institutions for citizens' legitimacy perceptions toward IOs (Schlipphak 2015; De Vries 2018). Regarding structural factors, scholars have located the sources of legitimacy beliefs in characteristics of the wider social order, such as cultural norms, economic systems, and political regimes (e.g., Bernstein 2011; Gill and Cutler 2014; Scholte 2018). Moreover, studies have considered the structural features of IOs themselves, paying particular attention to an organization's procedures and performances (Spilker, Nguyen, and Bernauer 2020; Dellmuth and Tallberg 2015), and recently also its social purpose (Dellmuth and Tallberg 2023; Lenz and Viola 2017) and authority (Anderson, Bernauer, and Kachi 2019; Ghassim, Koenig-Archibugi, and Cabrera 2022).

Our study is situated within a third strand of research, which expects legitimacy beliefs to be shaped by communicative factors. In particular, studies have examined the effects of elite communication on IO legitimacy beliefs, mostly in the context of the EU (Hooghe and Marks 2005; Gabel and Scheve 2007; De Vries and Edwards 2009; Maier, Adam, and Maier 2012; Torcal, Martini, and Orriols 2018), but recently also in relation to other IOs (Brutger and Clark 2022; Dellmuth and Tallberg 2023). However, the role of peers in shaping public opinion toward IOs is understudied. A few recent studies have explored the role of peer opinion in the context of foreign policy and European integration (Rothschild and Malhotra 2014; Kertzer and

Zeitzoff 2017; Wratil and Wäckerle 2023), but no study has yet theorized and assessed the effects of peer opinion on IO legitimacy.

In the following, we develop an argument for why peer opinion should influence people's legitimacy beliefs toward IOs and when those effects are likely to be particularly strong.

Peer opinion and IO legitimacy beliefs

People can form reasoned political attitudes without having information or knowledge about a specific political process by relying on cues (Sniderman, Brody, and Tetlock 1991, 19). In the context of international politics, citizens tend to have less knowledge about political institutions and issues than in the context of domestic politics (Carpini and Keeter 1996). They may, therefore, have to rely even more on cognitive shortcuts such as elite cues to form opinions than in the more familiar context of domestic politics (Popkin and Dimock 2000). Yet citizens may not only look at elites when developing opinions toward international issues. Drawing on a long tradition in political psychology (Festinger 1954; Deutsch and Gerard 1955; Mutz 1998; Cialdini 2007) and beyond (e.g., Kendal et al. 2018), we argue that citizens, similarly, may also listen to peers – that is, other people who do not qualify as elites in terms of power, status, or position – and that such cues may influence citizens' perceptions of IO legitimacy.

To start with, scholarship on social conformity argues that people tend to rely on "social proof," that is, to take what most others do as appropriate conduct (Cialdini 2007). Similarly, other theorists argue that people tend to apply a "consensus heuristic," that is, to use available information about "a consensus (…) as a simple schema indicating that a viewpoint is valid" (Mutz 1998, 210; Axsom, Yates, and Chaiken 1987). In line with such concepts, studies have provided much empirical evidence that a perceived social consensus can foster social learning, for example, in the case of racial stereotypes (Sechrist and Stangor 2001), and affect how people recall their own past political attitudes (Stein 2013). What is more, citizens taking cues from national polls can help to explain why election polls can become "self-fulling prophecies" in terms of a "bandwagon effect" (Simon 1954, 246; Hardmeier 2008; Toff 2018), for example, if a strong lead in public opinion is taken to validate expectations that the respective candidate will perform best if elected. Similarly, recent research has demonstrated the effects of perceived public majorities, for example, on the support for free trade agreements (Rothschild and Malhotra 2014), the use of military force (Kertzer and Zeitzoff 2017), tax cuts for hybrid cars (Rasmussen and Reher 2023), and EU consumer laws (Wratil and Wäckerle 2023). A recent

study on EU membership referenda also found that individual support for implementing its outcome is substantially affected by the degree of public consensus a referendum indicates (Arnesen et al. 2019). Thus, we already have some robust evidence suggesting that peer opinion might have to be taken into account to understand how people make up their minds about domestic as well as international issues.

However, such an approach might have to account for more and alternative emanations of peer opinion, in order to fully grasp its role. While people might use cues from very different kinds of peer interaction to gain political orientation, most scholars focus on the national community as the most pertinent "impersonal other" of citizens' political calculus as they tend to assume (national) polls as the primary "mass feedback mechanism" (Mutz 1998, 3), that is, how peer opinion reveals itself to citizens in the Western world (e.g., Mutz 1998; Hardmeier 2008; Kertzer and Zeitzoff 2017; Wratil and Wäckerle 2023). Still, theories of political communication have pointed to the eminent role of face-to-face encounters as sites of democratic will formation for long as they have more recently turned to discuss the implications of such encounters to increasingly turn online (e.g., Habermas 1962; 2022; Stewart and Hartmann 2020). As a consequence, political communication is increasingly defined by the dynamics (and limitations) of digital spheres of networked communication. As much of recent scholarship has been eager to point out, this also applies to global politics with regard to institutional communication by IOs (Corrie 2015; Bouchard 2020; Ecker-Ehrhardt 2020; 2023a), the mobilization for or against their policies (Hall, Schmitz, and Dedmon 2020; Adler and Drieschova 2021; Ecker-Ehrhardt 2023b) as well as the communication of relevant perceptions of global problems that IOs are tasked to solve—such as public health crises (Dunlop, Cotter, and Perez 2014; Kite et al. 2016; Park, Reber, and Chon 2016; Liang et al. 2019) or climate change (Williams et al. 2015; Guilbeault, Becker, and Centola 2018; Lewandowsky et al. 2019; Chen et al. 2021).

Notably, if taking place on platforms such as Facebook, Twitter, or Weibo, political communication typically shifts its primary mode from mainly broadcasting elite statements "one-to-many"—as in legacy media such as newspapers or TV channels—to a communication "many-to-many" in a much more horizontal mode of communication among peers (Klinger and Svensson 2015). Most strikingly, other users' reactions to online content provide important consensus information, stressing the role of peer opinion in this context and its quality as a social cue. For example, as previous research has shown, users tend to like images decisively

more on Instagram if these images have received many likes before (Sherman et al. 2016). In the case of online book clubs, evidence similarly suggests a strong correlation between author ratings and customer reviews with product sales (Amblee and Bui 2011). Online experiments also demonstrated that the relative distribution of evaluative comments and Likes on Facebook strongly impacts how participants perceive organic food (Hilverda, Kuttschreuter, and Giebels 2018). Notably, users tend to trust peers online more than conventional ("legacy") media organizations to provide relevant information (Bergström and Jervelycke Belfrage 2018). As a consequence, users' recommendations of content thus can outweigh (and potentially correct for) the biases of partisan news outlets regarding what kind of information people receive online (Messing and Westwood 2014). Not too surprisingly, though, a recent study has already found that the distribution of affirmative and critical comments to internet blogs significantly informs readers' perceptions of climate change and whether they find costly policies acceptable or not (Lewandowsky et al. 2019).

How we expect peer opinion to affect legitimacy beliefs

Based on these insights, we expect information about peer opinion to shape individual legitimacy beliefs toward IOs across online and offline scenarios. This general expectation is expressed in our first hypothesis:

H1: When individuals receive information that peer opinion toward an IO is positive (negative), they will find this organization more (less) legitimate.

In addition to this general expectation, we anticipate that this effect will be stronger under four key conditions. First, we expect peer opinion to have varying effects on people's legitimacy beliefs toward IOs depending on the valence of the information about IOs. Individuals tend to respond more strongly to negative information about peer opinion than to positive information. This expectation is based on prospect theory, which suggests that people tend to be risk-averse and, therefore, more sensitive to costs than to rewards of a certain course of action (Tversky and Kahneman 1981). Previous literature on social legitimacy in global governance has provided evidence for this proposition in the study of public opinion formation on IOs as well (Bernauer and Gampfer 2013; Dellmuth and Tallberg 2020).

H2: The effect of peer opinion predicted in H1 will be stronger when this peer opinion is negative compared to when it is positive.

Second, we expect the effects of peer opinion to depend on the level of consensus among peers about an IO. This expectation draws on theories of frequency-dependent cultural transmission, which suggest that people are more likely to adopt an attitude as it becomes more common in people's social environment (Efferson et al. 2008). In line with this, experimental research has found social learning to depend on the degree of consensus among peers (Asch 1951; Morgan et al. 2012; Muthukrishna, Morgan, and Henrich 2016) and among elites (Kertzer and Zeitzoff 2017). Similarly, previous evidence suggests that a "bandwagon effect" increases when opinion polls show a relatively high degree of public consensus (Rothschild and Malhotra 2014; Wratil and Wäckerle 2023).

H3: The effect of peer opinion predicted in H1 will be stronger the higher the level of consensus among peers.

Third, we expect the effects of peer opinion on people's legitimacy beliefs to be shaped by co-occurring elite cues. Previous literature suggests that people rely on elite cues when developing attitudes about international issues (Guisinger and Saunders 2017; Dellmuth and Tallberg 2020; Heinzel and Liese 2021; Dür and Schlipphak 2021). In addition, peer opinion tends to have an impact even when elite cues are present (Kertzer and Zeitzoff 2017). When elite cues are congruent with peer opinion, individuals should respond more strongly to peer opinion when elite cues pull in the same direction.

H4: The effect of peer opinion predicted in H1 will be stronger the higher the level of congruence between peer opinion and elite cues.

Fourth and finally, we expect the effects of peer opinion to depend on individuals' level of political awareness because those less aware should rely more on cognitive shortcuts and heuristics such as peer opinion. Studies in social psychology and beyond have considered individual uncertainty as an important facilitating condition of social influence and learning for long and provided ample evidence for its relevance across disciplines and contexts (e.g., Deutsch and Gerard 1955; Kendal et al. 2018). They show that people tend to rely more on peers to form opinions the lower their cognitive capacities (Muthukrishna, Morgan, and Henrich 2016), the less confident they are in their own judgment (Morgan et al. 2012), or when confronted with an unfamiliar task (Haun, Rekers, and Tomasello 2012). Related experimental

evidence on political attitudes suggests that peer opinion plays a more significant role when pre-treatment attitudes are weak (Hardmeier 2008; Rothschild and Malhotra 2014) or less accessible (Wratil and Wäckerle 2023). For example, public polls particularly affect political preferences among those people with weak or no prior predispositions (Hardmeier 2008; Rothschild and Malhotra 2014). Relatedly, experimental evidence provided by Axsom and colleagues (Axsom, Yates, and Chaiken 1987) suggests that audience reactions substantially influence the persuasiveness of political messages, but mostly for those individuals for which a weak motivation for processing the message itself could be assumed. Mutz reports evidence that the more committed and motivated may even be triggered to change opinion against a public majority ("underdog effect") because their own reasons for taking a stance were rehearsed (Mutz 1998, 237ff). From this kind of evidence, we draw that individuals should also be more likely to follow peer opinion on IO legitimacy when they are less politically aware.

H5: The effect of peer opinion predicted in H1 will be stronger among politically less aware individuals.

Research Design

To test our hypotheses, we fielded three survey experiments in Brazil (April 2023), Germany (April 2023), and the US (March 2023).[1] The surveys were conducted by the private research company Dynata, which relied on targeted quotas for age, gender, and education to achieve nationally representative samples at the end of the fieldwork.[2] Dynata collected a sample of about 3,200 respondents for each country and assigned respondents equally across our treatment groups. This corresponds to a group size of about 640 participants per treatment group in the pooled data set (N 9,617) and to more than 210 participants per treatment group in each country (see Table 1 and Appendix B, Table B6 for final sample composition).[3]

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[1] The survey was pre-registered at OSF (https://doi.org/10.17605/OSF.IO/QD2Y7) and approved by the Ethics Committee of the Faculty of Social Sciences at University Duisburg-Essen in February 2023.
[2] Due to feasibility issues, we had to open the quotas for the Brazilian sample before at the end of the fielding phase. This results in an overrepresentation of female respondents by about 2 percent in the Brazilian sample.
[3] Before fielding the surveys, a power analysis indicated that the final experimental analysis would be sufficiently powered (0.80) to find effects at the conventional significance level (p<0.05). Balance tests reported in Appendix B (Table B2) underline our assumption of successful randomization.

Each experiment focused on a different way in which people may receive information about peer opinion and varied the respective IO to avoid contamination of results across experiments. For our investigation, we selected three global IOs with significant political authority in their respective issue area: the International Monetary Fund (IMF) (finance and economic policy), the United Nations (UN) (multi-issue), and the World Health Organization (WHO) (health). We operationalized legitimacy beliefs in these IOs through a question about the extent to which respondents have confidence in the respective IO on a scale from 0 ("none at all") to 10 ("complete confidence"). The confidence measure has two main advantages. First, it aligns well with our understanding of legitimacy as the belief that a governing power has the right to rule and exercises it appropriately. Second, it allows us to evaluate our findings in the context of other studies that have used the confidence indicator (e.g., Caldeira 1986; Brehm and Rahn 1997; Newton and Norris 2000; Inglehart and Welzel 2005; Torgler 2008; Johnson 2011; Kaya and Walker 2014; Dellmuth and Tallberg 2015; 2021).

The first experiment use an *other-participants scenario* in which participants are informed about the hypothetical responses of others who have previously taken the survey (cf. Kertzer and Zeitzoff 2017; Guilbeault, Becker, and Centola 2018). We take this to be the most basic way to provide consensus information on peer opinion – avoiding any reference to specific conditions of communication, as in the two other scenarios. Here, we presented a hypothetical distribution of responses suggesting a certain degree of popular confidence in the WHO. This information was provided in a text and illustrated by a bar chart (see Appendix A).

In the second experiment, we build on previous research suggesting that national polls may function as a "mass feedback mechanism" (Mutz 1998, 3) which provides people with information about peer opinion (Hardmeier 2008; Rothschild and Malhotra 2014). In line with such research, our *national poll scenario* informed participants about the results of recent hypothetical polls of public confidence in the IMF in each respective country, verbalized and graphically illustrated by a bar chart, as in the first scenario.

In the third experiment, we investigate how people tend to confront consensus information on peer opinion in digital spheres of communication (Hilverda, Kuttschreuter, and Giebels 2018; Lewandowsky et al. 2019). With this goal in mind, we devised a *social-media scenario* in which participants see a social media post on the UN, followed by ten evaluative comments as part of a hypothetical reply chain (see Appendix A). The post with comments emulated Twitter design.

The post itself contained neutral information about an upcoming UN meeting. Numbers of shares, replies, and likes were set to a moderately high level to signal relevance. Comments were inspired by recent UN Twitter feeds. However, the content was revised to become more equal in length and to provide no factual information (besides peer opinion) that could trigger attitude change. Also, user names were replaced by fictitious names to enhance de facto anonymity while still keeping a real-world appearance. Numbers of retweets, replies, and likes varied across comments assigned at a low level (between 0 and 2) but remained constant in sum (N=2) to appear realistic while suggesting a similar level of public resonance.

The experiments were presented to the participants in three block-randomized rounds. Each experiment relied on a factorial design in which vignettes varied three factors: valence of peer opinion (positive/negative), the degree of peer consensus (weak/strong), and elite cues (positive/negative, see Table 1). In each round, participants were randomly allocated to one of 15 treatment groups with equal probability. Participants in the control groups did not receive some or all of the respective treatment conditions.

To operationalize H1 and H2, the factor *Valence of Peer Opinion* varied information about a supposed majority of peers expressing (1) low or (2) high levels of confidence in each of the three IOs. To operationalize H3, the factor *Degree of Peer Consensus* varied the degree of consensus by suggesting majorities of 61.3% vs. 89.3% in the WHO and IMF scenarios, and six vs. nine (out of ten comments) in the UN scenario (see Appendix A). We assume that these majorities are sufficiently clear and correspond to how participants might expect larger groups of peers to express confidence in the respective IO.

Table 1: Factorial design of each experiment

Valence of Peer Opinion		Degree of Peer Consensus		Congruence of Elite Cues
Control (no peer opinion)				Control (no elite opinion)
Positive Peer Opinion		Strong Peer Consensus	X	Positive Elite Cues
	X			
Negative Peer Opinion		Weak Peer Consensus		Negative Elite Cues

To operationalize H4, the factor *Congruence of Elite Cues* varied the presence and valence of elite cues as a contextual factor. Dellmuth and Tallberg (2021) have shown that participants tend to rely more on cues from their own national government than from other actors and tend to affected more by negative cues than positive cues. We constructed three alternative treatments. In the *WHO/elite-cue treatment*, the participant's own national government was said to have commended (criticized) the WHO for the high (low) effectiveness of its health programs. In the *IMF/elite-cue treatment*, the government was said to have commended (criticized) the IMF for the high (low) effectiveness of its macroeconomic programs. In the *UN/elite-cue treatment*, a tweet-like post was shown in which the permanent representative of the participant's country commended (criticized) the UN for alleviating (failing to alleviate) many violent conflicts (see Appendix A).

To operationalize H5, we used two established measures, namely educational attainment and political knowledge about IOs (e.g., Gabel and Scheve 2007; Dellmuth et al. 2022). The surveys also included other questions to account for potentially confounding variables that have been shown to matter for IO legitimacy beliefs in previous studies. These variables are indicators of socioeconomic status (education and financial household satisfaction), geographical identification (with the nation-state and the world), domestic institutional trust (confidence in domestic government and democracy satisfaction), and demographics (age, gender).

Finally, the survey included a manipulation check after each experiment and an instructional manipulation check at the end of the questionnaire (Oppenheimer, Meyvis, and Davidenko 2009). The master questionnaire is fully reported in Appendix A.

Analysis

To examine our hypotheses, we estimate average treatment effects (ATE) by comparing the average level of confidence in a certain treatment group with the average confidence in the control group. For this analysis, we pool the data across all three countries, as we are interested in the global average. If we observe treatment effects across our diverse country sample, then this strengthens our conclusions about the supposed effect of peer opinion on IO legitimacy beliefs. For this analysis, we also exclude those respondents who failed the manipulation check associated with the respective experiment, as the data can be assumed to have greater validity

for these respondents.[4] We use ordinary least squares regression (OLS) with dummy coding of treatment conditions (with control groups as the baseline category) to estimate the ATE.

The *first hypothesis* predicts that individuals will find an IO more (less) legitimate when receiving information that peer opinion toward this organization is positive (negative). This hypothesis yields two observable implications: First, mean confidence in the treatment groups receiving information about a positive (negative) peer opinion toward an IO should be significantly higher (lower) compared to the control group receiving no such information. Second, mean confidence between treatment groups receiving information about positive peer opinion should be significantly higher compared to those receiving information about negative peer opinion toward the same IO.

We find evidence in line with both implications. Figure 1 shows average treatment effects, which are statistically significant across all three experiments. In accordance with the first implication, respondents who received a "positive peer opinion" treatment show substantially more confidence in the respective IO than those in the control group (the reference line). Depending on the scenario, Figure 1 suggests a significant increase in confidence ranging from about .4 to .9 points on the confidence scale, on average, when receiving such treatment. Likewise, those respondents in the "negative peer opinion" group responded much more negatively, resulting in levels of confidence that are between -.7 and -1.0 lower than those observed in the control group. Because we estimated treatment effects with the same control group as a reference, the difference in estimated treatment effects equals the differences in IO confidence across treatment groups – the main quantity of interest regarding the second observable implication. These differences range from 1.3 (in the "Social-Media/UN" scenario) to 1.6 (in the Polls/IMF-scenario) points on a 10-point confidence scale, which is again strong evidence in support of our expectations (see Appendix C, Table C1, for detailed results).

According to our *second hypothesis*, we expect the effect of peer opinion to be stronger when this peer opinion is negative compared to when it is positive. As an observable implication, we should find the absolute size of treatment effects to differ depending on the evaluative direction of peer opinion. We indeed find some support for this expectation (Figure 1). In the case of two

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[4] Note that those respondents choosing the option "about half … expressed confidence" were kept in the analysis, as a weak majority may indeed be deemed to be "about half" of peers. Share of excluded respondents is 16% in case of the first experiment, to 17% in case of the second, and 19% in the third experiment.

scenarios – "Other-respondents/WHO" and "Social-Media/UN" – the effects of negative treatments (-1.0 and -.8) substantially exceed those of the positive treatments (.6 and .4) in terms of absolute size. However, the results of the "Polls/IMF" experiment clearly do not follow this pattern. Here, the estimated treatment effect of negative peer opinion (-.7) is smaller than for positive peer opinion (.9). Thus, we find only mixed evidence in support of our second hypothesis across scenarios.
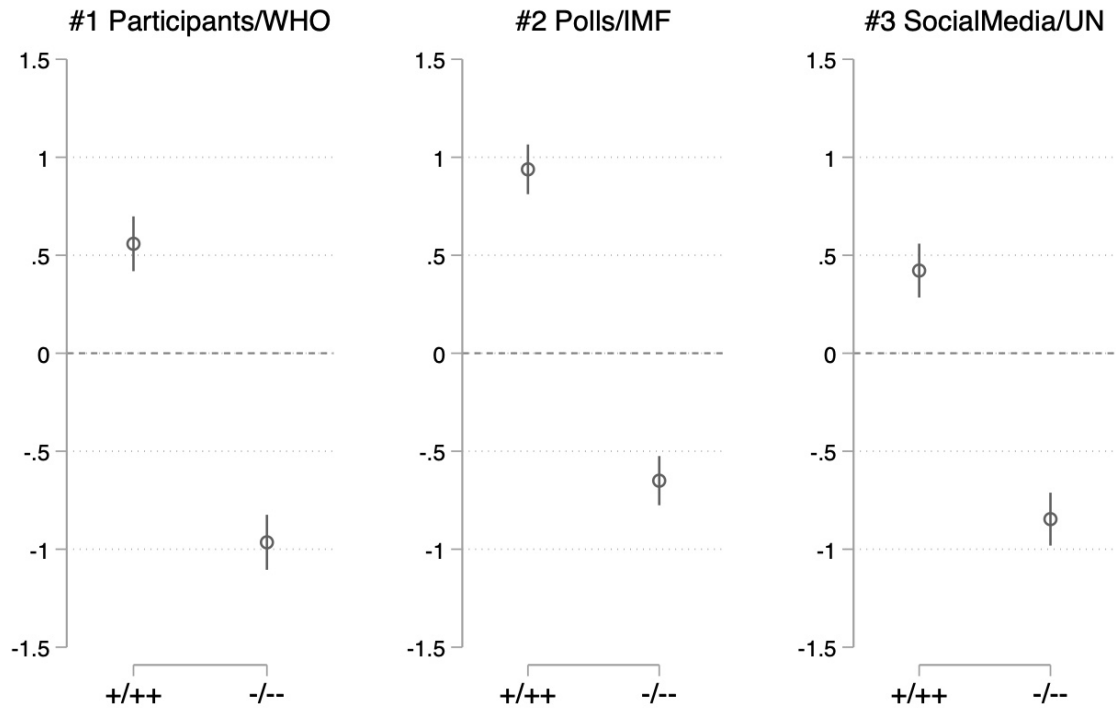

Figure 1: Average treatment effect of peer opinion on IO confidence, by valence

Note: Average treatment effects with their respective 95% confidence intervals, N= 8,159 for WHO, N = 8,021 for IMF, N = 7,793 for UN. Treatment groups for weak and strong peer consensus are pooled; "+/++" for weakly or strongly positive peer consensus and "-/--" for weakly or strongly negative peer consensus. See Appendix C for detailed results.

The *third hypothesis* predicts that *peer opinion will have a stronger effect on confidence the higher the observed level of consensus among peers.* We test this expectation by comparing average treatment effects for vignettes suggesting different degrees of consensus (Figure 2). Overall, we do find some support that the level of consensus affects respondents' level of confidence in expected ways: Across all scenarios, suggesting peers to be in strong consensus (compared to a weak consensus) results in larger treatment effects. However, such differences are statistically significant only for three out of six treatments: for a strong negative peer

consensus in scenarios #1 and #3 as well as a strong positive consensus in scenario #3 (see Appendix C, Table C3 for testing these differences).
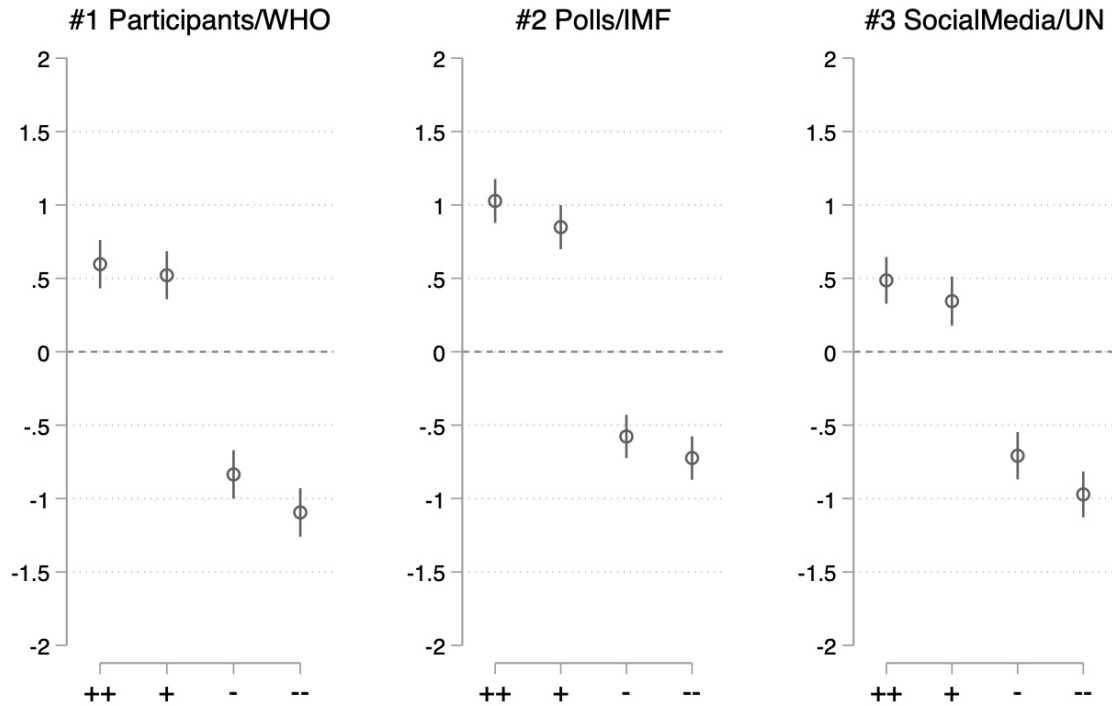

Figure 2: Average treatment effect of peer opinion on IO confidence by the degree of consensus

Note: Average treatment effects with their respective 95% confidence intervals, N= 8,159 for WHO, N = 8,021 for IMF, N = 7,793 for UN; "++" for those receiving information about a strongly positive peer consensus, "+" for weakly positive peer consensus, "-" for weakly negative peer consensus, and "--" for strongly negative peer consensus. See Appendix C for detailed results.

In our *fourth hypothesis*, we expect elite cues to amplify the effect of peer opinion but only if similarly directed. That is, the effect of peer opinion should be stronger the higher the level of congruence between peer opinion and elite cues. To test this expectation, we compare average treatment effects for respondents receiving a congruent or incongruent elite cue (Figure 3). The observable implication of the fourth hypothesis is that the effect of a positive peer opinion treatment should be more positive if respective respondents also received a congruent (that is, positive) elite cue compared to those respondents receiving an incongruent (that is negative) elite cue. Similarly, the effect of a negative peer opinion treatment should be more negative if respective respondents also received a congruent (that is, negative) elite cue compared to those respondents receiving an incongruent (that is, positive) elite cue.
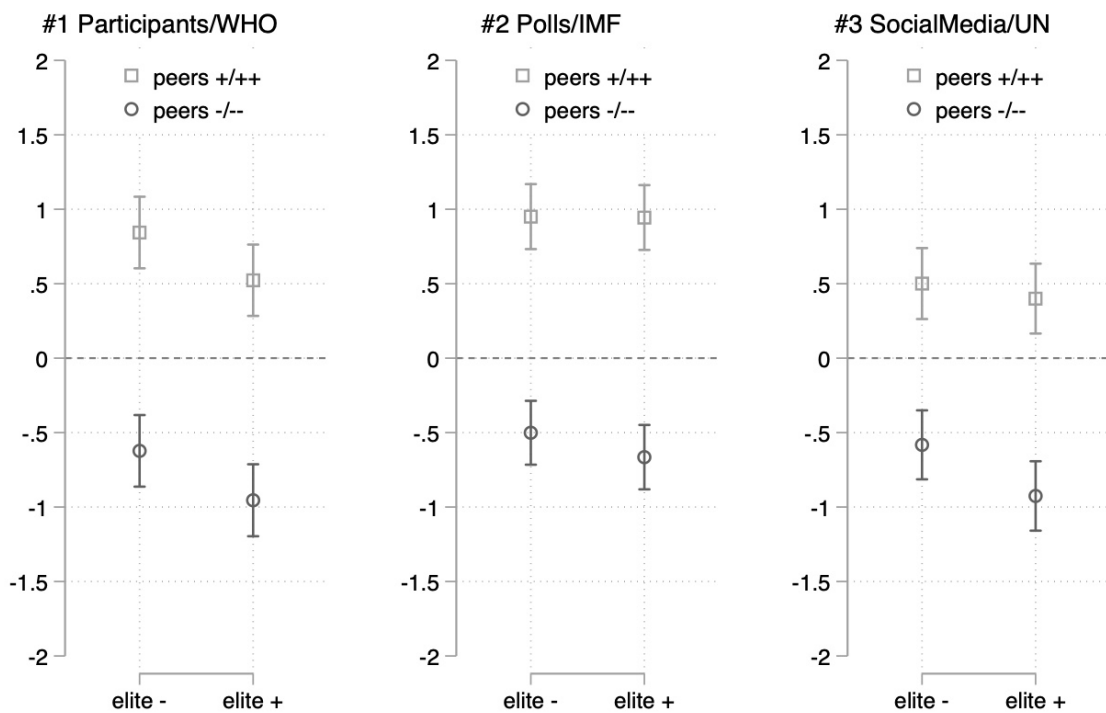
Figure 3: Average treatment effect of peer opinion on IO confidence by elite cues

Note: Average treatment effects with their respective 95% confidence intervals, N= 5,464 for WHO, N = 5,351 for IMF, N = 5,152 for UN. Treatment groups for weak and strong peer consensus are pooled; "peers +/++" for weakly or strongly positive peer consensus and " peers -/--" for weakly or strongly negative peer consensus. See Appendix C for detailed results.

Figure 3 suggests that treatment effects do not change in the expected direction. Elite cues do not affect treatment effects of peer opinion on IO confidence in the first two scenarios. In the third scenario, elite cues significantly moderate the treatment effect of negative peer opinion but in a direction that contradicts our expectations. Here, a positive elite statement about the UN strengthens the effect of mostly negative user comments by about -.4 points of confidence in the UN (and compared to a negative elite cue). Notably, additional results reported in the Appendix (Table C4) suggest that these results are no artifact of ineffective elite cue treatments: the treatments employed to investigate elite cues had a substantial and consistent ("direct") effect on IO confidence across scenarios. Second, one might speculate that elite cues should work more effectively if people trust their government, so treatment effects might be moderated more strongly for an important subset of the population – those who trust the government. However, according to additional evidence provided in the Appendix (Table C5/6), results do not become more consistent if only those respondents with an above-average level of confidence in their own government are considered. Thus, we find no consistent support for the idea that elite cues are important conditions of peer opinion. While results thus contradict our

expectation formulated in Hypotheses 4, this finding also indicates that peer opinion matters irrespective of (congruent or incongruent) elite cues.
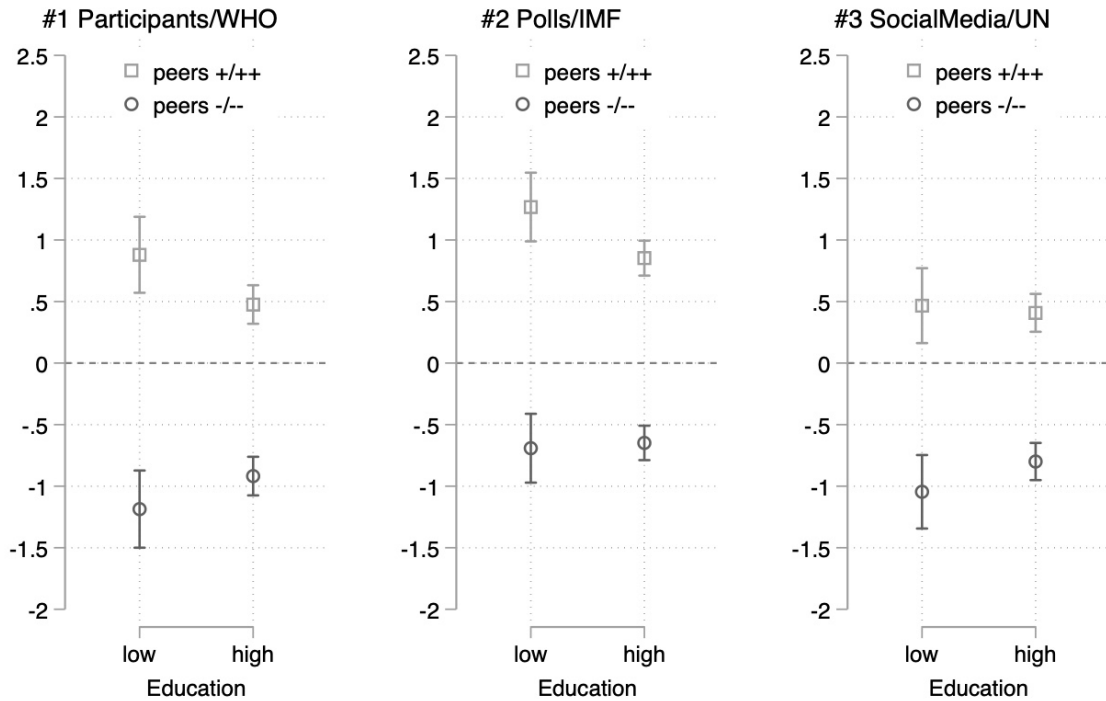

Figure 4: Average treatment effect of peer opinion on IO confidence by educational groups

Note: Average treatment effects with their respective 95% confidence intervals, N= 8,159 for WHO, N = 8,021 for IMF, N = 7,793 for UN. Treatment groups for weak and strong peer consensus are pooled; "+/++" for weakly or strongly positive peer consensus and "-/--" for weakly or strongly negative peer consensus. See Appendix C for detailed results.

Our *fifth and final hypothesis* predicts the effect of peer opinion to be stronger among politically less aware individuals. Our hypothesis suggests treatment effects to be significantly stronger (that is, more negative in the case of a negative treatment and more positive in the case of a positive treatment) for respondents with lower levels of education or knowledge, respectively. However, we find only limited evidence in line with this expectation (Figures 4 and 5). While treatments suggesting positive peer opinion tend to resonate more with the low educated (Figure 4) or those who know less about IOs (Figure 5) in the case of the first and second scenario, we do not find similar differences elsewhere, that is for positive peer opinion in the third scenario, or for negative peer opinion in any of the three scenarios (see Appendix C, Table C6 and C7 for details). Thus, results provide only very limited support for our expectation across different treatment groups. While we cannot rule out that political awareness plays a role in how peer

opinion affects confidence in IOs, results suggest that political awareness does not consistently limit the role of peer opinion.
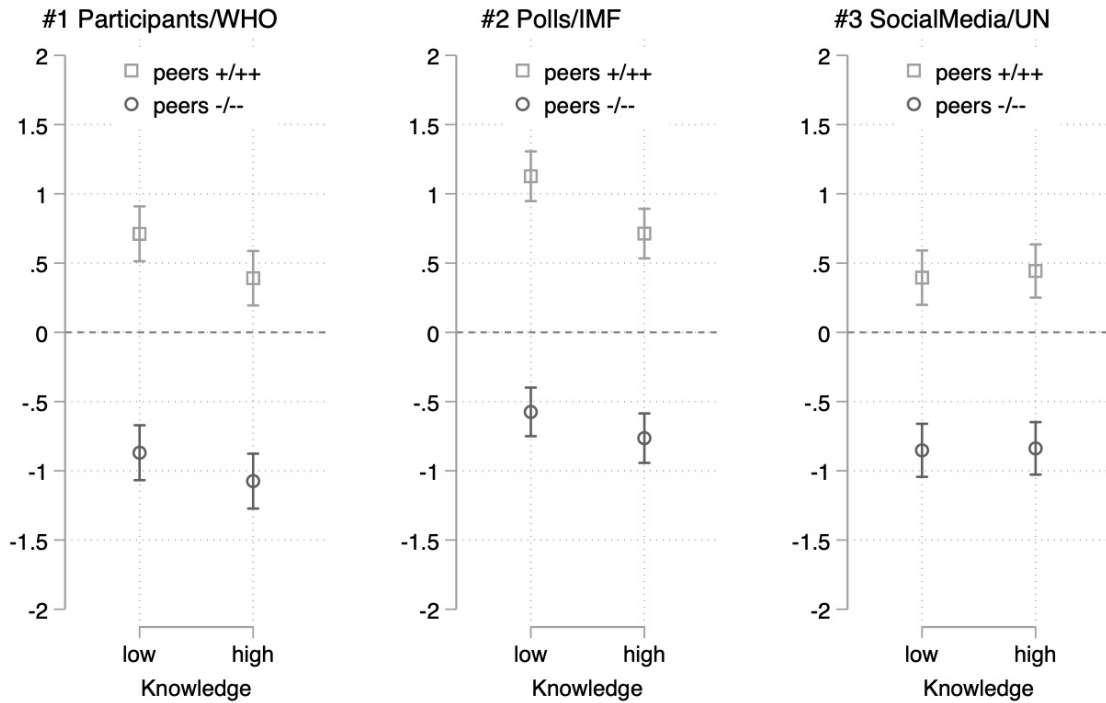
Figure 5: Average treatment effect of peer opinion on IO confidence by level of knowledge

Note: Average treatment effects with their respective 95% confidence intervals, N= 8,159 for WHO, N = 8,021 for IMF, N = 7,793 for UN. Treatment groups for weak and strong peer consensus are pooled; "+/++" for weakly or strongly positive peer consensus and "-/--" for weakly or strongly negative peer consensus. See Appendix C for detailed results.

We tested the robustness of our findings in a number of ways. First, we ran additional models that included fixed effects for country and de-facto ordering of experiments per respondent, as well as a range of potentially confounding variables that have been shown to matter for IO legitimacy beliefs in previous studies, such as financial satisfaction, geographical identification (with the nation-state and the world), domestic institutional trust (confidence in domestic government and democracy satisfaction), and demographics (age, gender). Second, we added sampling weights to enhance structural equivalence with population statistics. However, estimated effects of peer opinion remain unaffected across scenarios by both changes in model specification (see Appendix C, Table C8 and C9 for details).

Third, we ran additional models that also include those respondents who failed our manipulation checks. Overall, the sizes of average treatment effects shrink but remain in line with expectations and are significant for 5 out of 6 treatments (see Appendix C, Table C10). Only in the third scenario, we do not find a significant difference between levels of confidence in the UN if comparing all respondents seeing user comments that are overly positive with those in the control group. Finally, we ran country-specific models to test whether pooling of data might fail to detect important differences across societies (see Appendix C, Table C11 to C15). Again, results do not vary substantially across country samples but support the main conclusions drawn from the analysis of the pooled data.

Conclusions

When and why are people influenced by the opinions of their peers when forming legitimacy beliefs toward IOs? While previous research has implicitly assumed that people make up their minds about global governance independent of their social context, this article has developed and tested a novel argument about the impact of peer opinion on IO legitimacy beliefs. Building on political psychology, we have theorized why citizens are receptive to peer opinion and when those effects are likely to be particularly strong. We have evaluated our expectations through three multi-country survey experiments, each one focused on one potential way in which citizens may learn about dominant views in peer opinion: other participants, public polls, and social media.

Our analysis yields two key findings. First, peer opinion appears to matter extensively for people's legitimacy beliefs toward IOs. Across all three experiments, information about peer opinion had a significant causal effect on individuals' confidence in the WHO, IMF, and UN, respectively. This result holds both in the aggregate and for individual country samples, suggesting that peer opinion is of general importance for IO legitimacy beliefs. It is consistent with the notion of a consensus heuristic – a cognitive shortcut allowing citizens both to reduce information complexity and to achieve social conformity. In all, people seem not to form attitudes toward global governance in a social vacuum but to listen to their fellow citizens.

Second, peer opinion appears to be particularly influential under certain conditions. Specifically, the experiments showed two features of peer opinion to moderate its impact on individuals' confidence in IOs. When peer opinion is negative, it tends to have a stronger impact

on IO legitimacy beliefs than when it is positive. Similarly, peer opinion tends to have a greater impact when it reflects a high level of consensus compared to a low level of consensus. In contrast, co-occurring elite cues and citizens' level of political awareness do not seem to condition individuals' receptivity to peer opinion to the same extent – findings that partly challenge our initial expectations, but reinforce the picture of peer opinion as a force of general importance.

These findings have several significant implications. First, they suggest that peer opinion constitutes a critical additional source of IO legitimacy beliefs. While previous research has identified drivers of legitimacy beliefs at several levels of analysis (e.g., Tallberg, Bäckstrand, and Scholte 2018; Bernauer, Mohrenberg, and Koubi 2020; Dellmuth et al. 2022), it has overlooked how important fellow citizens are in the formation of such attitudes. In those cases where earlier studies have examined communicative processes, it has been with an exclusive focus on elite cueing (e.g., Guisinger and Saunders 2017; Ghassim 2022; Dellmuth and Tallberg 2023). Our findings show that peer opinion impacts people's legitimacy beliefs toward IOs independent of several other well-known sources, such as elite cues and individual factors. Future research on this topic may fruitfully explore how peer opinion interacts with other contextual features in shaping IO legitimacy beliefs, as it may broaden the scope of analysis beyond (impersonal) consensus effects to the influence of personal relationships.

Second, our findings speak to the general literature in social and political psychology on peer opinion as a determinant of attitudes (Axsom, Yates, and Chaiken 1987; Mutz 1998; Kertzer and Zeitzoff 2017). While previous research primarily has explored dynamics of peer influence in the domestic context, and often with an empirical focus on the US, our study demonstrates the wider applicability of this phenomenon. People's inclination to follow fellow citizens appears to extend broadly across governance levels and countries (Wratil and Wäckerle 2023). Perhaps paradoxically, people even seem prepared to listen to their peers on topics like global governance, where those peers tend to be less informed (Carpini and Keeter 1996; Dellmuth 2016). Future studies may extend our analysis of peer opinion beyond a consensus heuristic and a focus on peers as "impersonal others" (Mutz 1998) in order to further explore the causal mechanisms underlying this observation beyond the domestic realm.

Third, our findings suggest several normative implications. On the positive side, they indicate that people's formation of attitudes toward IOs is a more horizontal process than previously

understood. Citizens are clearly receptive to opinions from their peers, and this dynamic, in turn, seems to make people more resistant to manipulation by elites. Listening to other citizens appears to be an integral part of how individuals develop their political preferences as democratic subjects. However, on the negative side, this sensitivity to peer opinion may be exploited by actors with less innocent intentions, thus reintroducing elite influence through other channels. Actors can strategically commission public opinion polls to affect citizen attitudes on an issue (West 1991) or set up troll farms to flood the digital sphere with messages that create false portrayals of peer opinion (Bjola and Pamment 2016).

References

Adler, Emanuel, and Alena Drieschova. 2021. "The Epistemological Challenge of Truth Subversion to the Liberal International Order." *International Organization* 75 (2): 359–86.

Adler-Nissen, Rebecca, and Ayşe Zarakol. 2020. "Struggles for Recognition: The Liberal International Order and the Merger of Its Discontents." *International Organization*, 1–24. https://doi.org/10.1017/S0020818320000454.

Amblee, Naveen, and Tung Bui. 2011. "Harnessing the Influence of Social Proof in Online Shopping: The Effect of Electronic Word of Mouth on Sales of Digital Microproducts." *International Journal of Electronic Commerce* 16 (2): 91–114.

Anderson, Brilé, Thomas Bernauer, and Aya Kachi. 2019. "Does International Pooling of Authority Affect the Perceived Legitimacy of Global Governance?" *The Review of International Organizations* 14 (4): 661–83. https://doi.org/10.1007/s11558-018-9341-4.

Arnesen, Sveinung, Troy S Broderstad, Mikael P Johannesson, and Jonas Linde. 2019. "Conditional Legitimacy: How Turnout, Majority Size, and Outcome Affect Perceptions of Legitimacy in European Union Membership Referendums." *European Union Politics* 20 (2): 176–97.

Asch, SE. 1951. "Effects of Group Pressure upon the Modification and Distortion of Judgments."

Axsom, Danny, Suzanne Yates, and Shelly Chaiken. 1987. "Audience Response as a Heuristic Cue in Persuasion." *Journal of Personality and Social Psychology* 53 (1): 30.

Bergström, Annika, and Maria Jervelycke Belfrage. 2018. "News in Social Media." *Digital Journalism* 6 (5): 583–98. https://doi.org/10.1080/21670811.2018.1423625.

Bernauer, Thomas, and Robert Gampfer. 2013. "Effects of Civil Society Involvement on Popular Legitimacy of Global Environmental Governance." *Global Environmental Change* 23 (2): 439–49.

Bernauer, Thomas, Steffen Mohrenberg, and Vally Koubi. 2020. "Do Citizens Evaluate International Cooperation Based on Information about Procedural and Outcome Quality?" *The Review of International Organizations* 15 (2): 505–29. https://doi.org/10.1007/s11558-019-09354-0.

Bernstein, Steven. 2011. "Legitimacy in Intergovernmental and Non-State Global

Governance." *Review of International Political Economy* 18 (1): 17–51.

Bjola, Corneliu, and James Pamment. 2016. "Digital Containment: Revisiting Containment Strategy in the Digital Age." *Global Affairs* 2 (2): 131–42.

Bouchard, Caroline. 2020. "The United Nations in the Digital Age." In *Digital Diplomacy and International Organisations: Autonomy, Legitimacy and Contestation*, edited by Bjola, Corneliu and Zaiotti, Ruben, 101–25. Milton Park: Routledge.

Brehm, John, and Wendy Rahn. 1997. "Individual-Level Evidence for the Causes and Consequences of Social Capital." *American Journal of Political Science*, 999–1023.

Brutger, Ryan, and Richard Clark. 2021. "At What Cost? Power, Payments, and Public Support of International Organizations." In *1st Seminar Series on The Political Economy of International Organization Monday, 11am EST, January 25-March 29, 2021*.

———. 2022. "At What Cost? Power, Payments, and Public Support of International Organizations." *The Review of International Organizations*, 1–35.

Caldeira, Gregory A. 1986. "Neither the Purse nor the Sword: Dynamics of Public Confidence in the Supreme Court." *American Political Science Review* 80 (4): 1209–26.

Carey, Sean. 2002. "Undivided Loyalties: Is National Identity an Obstacle to European Integration?" *European Union Politics* 3 (4): 387–413.

Carpini, Michael X Delli, and Scott Keeter. 1996. *What Americans Know about Politics and Why It Matters*. Yale University Press.

Chen, Ted Hsuan Yun, Ali Salloum, Antti Gronow, Tuomas Ylä-Anttila, and Mikko Kivelä. 2021. "Polarization of Climate Politics Results from Partisan Sorting: Evidence from Finnish Twittersphere." *Global Environmental Change* 71: 102348.

Cialdini, Robert B. 2007. *Influence: The Psychology of Persuasion*. Vol. 55. Collins New York.

Copelovitch, Mark, and Jon C. W. Pevehouse. 2019. "International Organizations in a New Era of Populist Nationalism." *The Review of International Organizations* 14 (2): 169–86. https://doi.org/10.1007/s11558-019-09353-1.

Corrie, Karen L. 2015. "The International Criminal Court: Using Technology in Network Diplomacy." In *Digital Diplomacy*, edited by Corneliu Bjola and Marcus Holmes, 159–77. New York: Routledge.

De Vries, Catherine E. 2018. "The Cosmopolitan-Parochial Divide: Changing Patterns of Party and Electoral Competition in the Netherlands and Beyond." *Journal of European Public Policy* 25 (11): 1541–65.

De Vries, Catherine E, and Erica E Edwards. 2009. "Taking Europe to Its Extremes: Extremist Parties and Public Euroscepticism." *Party Politics* 15 (1): 5–28.

Dellmuth, Lisa M. 2016. "The Knowledge Gap in World Politics: Assessing the Sources of Citizen Awareness of the United Nations Security Council." *Review of International Studies* 42 (4): 673–700. https://doi.org/10.1017/S0260210515000467.

Dellmuth, Lisa M., Jan Aart Scholte, and Jonas Tallberg. 2019. "Institutional Sources of Legitimacy for International Organisations: Beyond Procedure versus Performance." *Review of International Studies* 45 (4): 627–46.

Dellmuth, Lisa M., Jan Aart Scholte, Jonas Tallberg, and Soetkin Verhaegen. 2022. *Citizens, Elites, and the Legitimacy of Global Governance*. Oxford: Oxford University Press.

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 (03): 451–75.

———. 2020. "Elite Communication and the Popular Legitimacy of International Organizations." *British Journal of Political Science*, 1–22. https://doi.org/10.1017/S0007123419000620.

———. 2021. "Elite Communication and the Popular Legitimacy of International Organizations." *British Journal of Political Science* 51 (3): 1292–1313.

———. 2023. *Legitimacy Politics: Elite Communication and Public Opinion in Global Governance*. Cambridge University Press.

Deutsch, Morton, and Harold B. Gerard. 1955. "A Study of Normative and Informational Social Influences upon Individual Judgment." *The Journal of Abnormal and Social Psychology* 51: 629–36. https://doi.org/10.1037/h0046408.

Dunlop, Sally M, Trish Cotter, and Donna Perez. 2014. "When Your Smoking Is Not Just about You: Antismoking Advertising, Interpersonal Pressure, and Quitting Outcomes." *Journal of Health Communication* 19 (1): 41–56.

Dür, Andreas, and Bernd Schlipphak. 2021. "Elite Cueing and Attitudes towards Trade Agreements: The Case of TTIP." *European Political Science Review* 13 (1): 41–57.

Ecker-Ehrhardt, Matthias. 2016. "Why Do Citizens Want the UN to Decide? Cosmopolitan Ideas, Particularism and Global Authority." *International Political Science Review* 37 (1): 99–114. https://doi.org/10.1177/0192512114540189.

———. 2020. "IO Public Communication Going Digital? Understanding Social Media Adoption and Use in Times of Politicization." In *The Digital Diplomacy of International Organizations: Autonomy, Legitimacy and Contestation in the Global Digital Age*, edited by Ruben Zaiotti and Corneliu Bjola, 21–50. Milton Park: Routledge.

———. 2023a. "Public Legitimation by 'Going Personal'? The Ambiguous Role of International Organization Officials on Social Media." *Politics and Governance; Vol 11, No 3 (2023): Publics in Global Politics* 11 (3): 213–25. https://doi.org/10.17645/pag.v11i3.6767.

———. 2023b. "Building Bridges or Digging the Trench? International Organizations, Social Media, and Polarized Fragmentation." *The Review of International Organizations*, November. https://doi.org/10.1007/s11558-023-09517-0.

Efferson, Charles, Rafael Lalive, Peter J Richerson, Richard McElreath, and Mark Lubell. 2008. "Conformists and Mavericks: The Empirics of Frequency-Dependent Cultural Transmission." *Evolution and Human Behavior* 29 (1): 56–64.

Festinger, Leon. 1954. "A Theory of Social Comparison Processes." *Human Relations* 7 (2): 117–40.

Gabel, Matthew. 1998. *Interests and Integration: Market Liberalization, Public Opinion, and European Union*. Ann Arbor, MI: University of Michigan Press.

Gabel, Matthew, and Kenneth Scheve. 2007. "Estimating the Effect of Elite Communications on Public Opinion Using Instrumental Variables." *American Journal of Political Science* 51 (4): 1013–28.

Ghassim, Farsan. 2022. "The Effects of (De)Legitimation on Citizens' Legitimacy Beliefs about Global Governance: An International Survey Experiment." In *Legitimation and Delegitimation in Global Governance: Practices, Justifications, and Audiences*, edited by Magdalena Bexell, Kristina Jönsson, and Anders Uhlin, 237–58. Oxford University Press. https://doi.org/10.1093/oso/9780192856111.003.0011.

Ghassim, Farsan, Mathias Koenig-Archibugi, and Luis Cabrera. 2022. "Public Opinion on Institutional Designs for the United Nations: An International Survey Experiment." *International Studies Quarterly* 66 (3): sqac027.

Gill, Stephen, and A Claire Cutler. 2014. *New Constitutionalism and World Order*. Cambridge University Press.

Guilbeault, Douglas, Joshua Becker, and Damon Centola. 2018. "Social Learning and Partisan Bias in the Interpretation of Climate Trends." *Proceedings of the National Academy of Sciences* 115 (39): 9714–19.

Guisinger, Alexandra, and Elizabeth N. Saunders. 2017. "Mapping the Boundaries of Elite Cues: How Elites Shape Mass Opinion across International Issues." *International Studies Quarterly* 61 (2): 425–41. https://doi.org/10.1093/isq/sqx022.

Habermas, Jürgen. 1962. *Strukturwandel Der Öffentlichkeit*. Darmstadt: Hermann Luchterhand Verlag.

———. 2022. "Reflections and Hypotheses on a Further Structural Transformation of the Political Public Sphere." *Theory, Culture & Society* 39 (4): 145–71. https://doi.org/10.1177/02632764221112341.

Hall, Nina, Hans Peter Schmitz, and J Michael Dedmon. 2020. "Transnational Advocacy and NGOs in the Digital Era: New Forms of Networked Power." *International Studies Quarterly* 64 (1): 159–67.

Hardmeier, Sibylle. 2008. "The Effects of Published Polls on Citizens." *The SAGE Handbook of Public Opinion Research*, 504–13.

Haun, Daniel B.M., Yvonne Rekers, and Michael Tomasello. 2012. "Majority-Biased Transmission in Chimpanzees and Human Children, but Not Orangutans." *Current Biology* 22 (8): 727–31. https://doi.org/10.1016/j.cub.2012.03.006.

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*, February, 1–25. https://doi.org/10.1080/01402382.2021.1873630.

Hilverda, Femke, Margôt Kuttschreuter, and Ellen Giebels. 2018. "The Effect of Online Social Proof Regarding Organic Food: Comments and Likes on Facebook." *Frontiers in Communication* 3: 30. https://doi.org/10.3389/fcomm.2018.00030.

Hooghe, Liesbet, Tobias Lenz, and Gary Marks. 2019. "Contested World Order: The Delegitimation of International Governance." *The Review of International Organizations* 14 (4): 731–43. https://doi.org/10.1007/s11558-018-9334-3.

Hooghe, Liesbet, and Gary Marks. 2005. "Calculation, Community and Cues. Public Opinion on European Integration." *European Union Politics* 6 (4): 419–43.

Inglehart, Ronald, and Christian Welzel. 2005. *Modernization, Cultural Change, and Democracy: The Human Development Sequence*. Cambridge: Cambridge University Press.

Johnson, Tana. 2011. "Guilt by Association: The Link between States' Influence and the Legitimacy of Intergovernmental Organizations." *The Review of International Organizations* 6 (1): 57–84.

Kaya, Ayse, and James T Walker. 2014. "How Do Multilateral Institutions Influence Individual Perceptions of International Affairs? Evidence from Europe and Asia." *The European Journal of Development Research* 26 (5): 832–52.

Kendal, Rachel L, Neeltje J Boogert, Luke Rendell, Kevin N Laland, Mike Webster, and

Patricia L Jones. 2018. "Social Learning Strategies: Bridge-Building between Fields." *Trends in Cognitive Sciences* 22 (7): 651–65.

Kertzer, Joshua D., and Thomas Zeitzoff. 2017. "A Bottom-up Theory of Public Opinion about Foreign Policy." *American Journal of Political Science* 61 (3): 543–58.

Kite, James, Bridget C. Foley, Anne C. Grunseit, and Becky Freeman. 2016. "Please like Me: Facebook and Public Health Communication." *PloS One* 11 (9): e0162765.

Klinger, Ulrike, and Jakob Svensson. 2015. "The Emergence of Network Media Logic in Political Communication: A Theoretical Approach." *New Media & Society* 17 (8): 1241–57.

Lenz, Tobias, and Lora Anne Viola. 2017. "Legitimacy and Institutional Change in International Organisations: A Cognitive Approach." *Review of International Studies* 43 (5): 939–61.

Lewandowsky, Stephan, John Cook, Nicolas Fay, and Gilles E. Gignac. 2019. "Science by Social Media: Attitudes towards Climate Change Are Mediated by Perceived Social Consensus." *Memory & Cognition* 47 (8): 1445–56. https://doi.org/10.3758/s13421-019-00948-y.

Liang, Hai, Isaac Chun-Hai Fung, Zion Tsz Ho Tse, Jingjing Yin, Chung-Hong Chan, Laura E Pechta, Belinda J Smith, Rossmary D Marquez-Lameda, Martin I Meltzer, and Keri M Lubell. 2019. "How Did Ebola Information Spread on Twitter: Broadcasting or Viral Spreading?" *BMC Public Health* 19 (1): 1–11.

Macdonald, Terry. 2016. "Institutional Facts and Principles of Global Political Legitimacy." *Journal of International Political Theory* 12 (2): 134–51. https://doi.org/10.1177/1755088216630995.

Maier, Michaela, Silke Adam, and Jürgen Maier. 2012. "The Impact of Identity and Economic Cues on Citizens' EU Support: An Experimental Study on the Effects of Party Communication in the Run-up to the 2009 European Parliament Elections." *European Union Politics* 13 (4): 580–603. https://doi.org/10.1177/1465116512453957.

Mansfield, Edward D, and Diana C Mutz. 2009. "Support for Free Trade: Self-Interest, Sociotropic Politics, and out-Group Anxiety." *International Organization* 63 (3): 425–57.

Messing, Solomon, and Sean J Westwood. 2014. "Selective Exposure in the Age of Social Media: Endorsements Trump Partisan Source Affiliation When Selecting News Online." *Communication Research* 41 (8): 1042–63.

Morgan, Thomas JH, Luke E Rendell, Micael Ehn, William Hoppitt, and Kevin N Laland. 2012. "The Evolutionary Basis of Human Social Learning." *Proceedings of the Royal Society B: Biological Sciences* 279 (1729): 653–62.

Muthukrishna, Michael, Thomas J.H. Morgan, and Joseph Henrich. 2016. "The When and Who of Social Learning and Conformist Transmission." *Evolution and Human Behavior* 37 (1): 10–20. https://doi.org/10.1016/j.evolhumbehav.2015.05.004.

Mutz, Diana C. 1998. *Impersonal Influence: How Perceptions of Mass Collectives Affect Political Attitudes*. Cambridge University Press.

Newton, Kenneth, and Pippa Norris. 2000. "Confidence in Public Institutions: Faith, Culture, or Performance?" In *Disaffected Democracies: What's Troubling the Trilateral Countries?*, edited by Susan Pharr and Robert Putnam, 52–73. Princeton, NJ: Princeton University Press.

Norris, Pippa, and Ronald Inglehart. 2019. *Cultural Backlash: Trump, Brexit, and Authoritarian Populism*. Cambridge, UK: Cambridge University Press.

O'Brien, Robert, Anne Marie Goetz, Jan Aart Scholte, and Marc Williams. 2000. *Contesting Global Governance: Multilateral Economic Institutions and Global Social Movements*. Cambridge: Cambridge University Press.

Oppenheimer, Daniel M, Tom Meyvis, and Nicolas Davidenko. 2009. "Instructional Manipulation Checks: Detecting Satisficing to Increase Statistical Power." *Journal of Experimental Social Psychology* 45 (4): 867–72.

Park, Hyojung, Bryan H. Reber, and Myoung-Gi Chon. 2016. "Tweeting as Health Communication: Health Organizations' Use of Twitter for Health Promotion and Public Engagement." *Journal of Health Communication* 21 (2): 188–98. https://doi.org/10.1080/10810730.2015.1058435.

Popkin, Samuel L, and Michael A Dimock. 2000. "Knowledge, Trust, and International Reasoning." *Elements of Reason: Cognition, Choice, and the Bounds of Rationality*, 214–38.

Rasmussen, Anne, and Stefanie Reher. 2023. "(Inequality in) Interest Group Involvement and the Legitimacy of Policy Making." *British Journal of Political Science* 53 (1): 45–64. https://doi.org/10.1017/S0007123422000242.

Rothschild, David, and Neil Malhotra. 2014. "Are Public Opinion Polls Self-Fulfilling Prophecies?" *Research & Politics* 1 (2): 2053168014547667. https://doi.org/10.1177/2053168014547667.

Schlipphak, Bernd. 2015. "Measuring Attitudes toward Regional Organizations Outside Europe." *The Review of International Organizations* 10 (3): 351–75.

Schmidtke, Henning. 2019. "Elite Legitimation and Delegitimation of International Organizations in the Media: Patterns and Explanations." *The Review of International Organizations* 14 (4): 633–59.

Scholte, Jan Aart. 2018. "Social Structure and Global Governance Legitimacy." In *Legitimacy in Global Governance: Sources, Processes, and Consequences*, edited by Jonas Tallberg, Karin Bäckstrand, and Jan Aart Scholte, 75–98. Oxford University Press. https://doi.org/10.1093/oso/9780198826873.003.0005.

Sechrist, Gretchen B, and Charles Stangor. 2001. "Perceived Consensus Influences Intergroup Behavior and Stereotype Accessibility." *Journal of Personality and Social Psychology* 80 (4): 645.

Sherman, Lauren E., Ashley A. Payton, Leanna M. Hernandez, Patricia M. Greenfield, and Mirella Dapretto. 2016. "The Power of the Like in Adolescence: Effects of Peer Influence on Neural and Behavioral Responses to Social Media." *Psychological Science* 27 (7): 1027–35. https://doi.org/10.1177/0956797616645673.

Simon, Herbert A. 1954. "Bandwagon and Underdog Effects and the Possibility of Election Predictions." *Public Opinion Quarterly* 18 (3): 245–53.

Sniderman, Paul M., Richard A. Brody, and Philip E. Tetlock. 1991. *Reasoning and Choice. Explorations in Political Psychology*. Cambridge etc.: Cambridge University Press.

Sommerer, Thomas, Hans Agné, Fariborz Zelli, and Bart Bes. 2022. *Global Legitimacy Crises: Decline and Revival in Multilateral Governance*. Oxford: Oxford University Press.

Spilker, Gabriele, Quynh Nguyen, and Thomas Bernauer. 2020. "Trading Arguments: Opinion Updating in the Context of International Trade Agreements." *International Studies Quarterly* 64 (4): 929–38.

Stein, Randy. 2013. "The Pull of the Group: Conscious Conflict and the Involuntary Tendency towards Conformity." *Consciousness and Cognition* 22 (3): 788–94.

Stewart, Evan, and Douglas Hartmann. 2020. "The New Structural Transformation of the Public Sphere." *Sociological Theory* 38 (2): 170–91.

Suchman, Marc C. 1995. "Managing Legitimacy: Strategic and Institutional Approaches." *The Academy of Management Review* 20 (3): 571–610.

Tallberg, Jonas, Karin Bäckstrand, and Jan Aart Scholte. 2018. *Legitimacy in Global Governance: Sources, Processes, and Consequences*. Oxford University Press.

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. https://doi.org/10.1007/s11558-018-9330-7.

Toff, Benjamin. 2018. "Exploring the Effects of Polls on Public Opinion: How and When Media Reports of Policy Preferences Can Become Self-Fulfilling Prophesies." *Research & Politics* 5 (4): 2053168018812215. https://doi.org/10.1177/2053168018812215.

Torcal, Mariano, Sergio Martini, and Lluis Orriols. 2018. "Deciding about the Unknown: The Effect of Party and Ideological Cues on Forming Opinions about the European Union." *European Union Politics* 19 (3): 502–23.

Torgler, Benno. 2008. "Trust in International Organizations: An Empirical Investigation Focusing on the United Nations." *The Review of International Organizations* 3 (1): 65–93.

Tversky, Amos, and Daniel Kahneman. 1981. "The Framing of Decisions and the Psychology of Choice." *SCIENCE* 211: 30.

Walter, Stefanie. 2021. "The Backlash against Globalization." *Annual Review of Political Science* 24: 421–42.

West, Darrell M. 1991. "Polling Effects in Election Campaigns." *Political Behavior* 13 (2): 151–63. https://doi.org/10.1007/BF00992294.

Williams, Hywel TP, James R. McMurray, Tim Kurz, and F. Hugo Lambert. 2015. "Network Analysis Reveals Open Forums and Echo Chambers in Social Media Discussions of Climate Change." *Global Environmental Change* 32: 126–38.

Wratil, Christopher, and Jens Wäckerle. 2023. "Majority Representation and Legitimacy: Survey-experimental Evidence from the European Union." *European Journal of Political Research* 62 (1): 285–307.

Zürn, Michael, Martin Binder, and Matthias Ecker-Ehrhardt. 2012. "International Authority and Its Politicization." *International Theory* 4 (1): 69–106.

Peer Opinion and the Legitimacy of International Organizations

Appendix A Questionnaire

[Introduction]

Research project on international cooperation

This survey is part of a research project on public opinion toward international cooperation conducted by researchers at University of Duisburg-Essen, Germany, and Stockholm University, Sweden. We are interested in what you think about international organizations such as the United Nations (UN), the International Monetary Fund (IMF), and the World Health Organization (WHO).

People tend to have different opinions about these organizations. We are interested in your personal opinions in this survey. Some questions may be perceived as sensitive. Providing information in response to these questions is entirely voluntary and you may withdraw your consent at any time. The answers that you provide will be used only for academic research. The data will only be published in terms of aggregate results, and your responses will be strictly confidential. We will not store any of your personal information, and we will not share your personal information with any third party. For more information about how your information will be processed and protected, please contact us at ecker-ehrhardt@gcr21.org.

Do you consent to the collection of this information?
o Yes, I consent
o No, I do not consent

[Screener demographics]
[age]
[gender]
[education]

[Additional items/pre-treatment]
[q1] *How interested would you say you are in* <u>*politics*</u>*? Are you*
[1] *Very interested*
[2] *Somewhat interested*
[3] *Not very interested*
[4] *Not at all interested*

[media use]
People learn what is going on in this country and the world from various sources. For each of the following sources, please indicate whether you use it to obtain information daily, weekly, monthly, less than monthly, or never

[Scale for each item]
[1] *daily*

[2] *weekly*
[3] *monthly*
[4] *less than monthly*
[5] *never*

[q2] *Daily newspaper*
[q3]   *TV*   *news*
[q4] *Radio news*
[q5]   *Internet*
[q6] *Social media (Facebook, Twitter, etc.)*
[q7] *Talk with friends or colleagues*

[q8] *Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?*

Need to be very careful	o	o	o	o	o	o	Most people can be trusted
	[1]	[2]	[3]	[4]	[5]	[6]	

[q9] *How satisfied are you with the economic situation of in the US?*

Completely dissatisfied	o	o	o	o	o	o	Completely satisfied
	[1]	[2]	[3]	[4]	[5]	[6]	

[q10] How satisfied are you with the financial situation of your household?

Completely dissatisfied	o	o	o	o	o	o	Completely satisfied
	[1]	[2]	[3]	[4]	[5]	[6]	

[q11] *How satisfied are you with how the political system is functioning in your country these days?*

Completely dissatisfied	o	o	o	o	o	o	Completely satisfied
	[1]	[2]	[3]	[4]	[5]	[6]	

[q12] *How much confidence do you have in your government?*

None at all	o	o	o	o	o	o	Complete confidence
	[1]	[2]	[3]	[4]	[5]	[6]	

[National Identity]

People have different views about themselves and how they relate to the world. How close do you feel to ...
[q13] *Your village, town or city*
[q14] *Your country*
[q15] [*North America]*
[q16] *The world*

[1] Not close at all
[2] Not very close
[3] Close
[4] Very close

[q17] *Generally speaking, to what extent do you agree that international cooperation is a good way to solve transboundary problems, even in those cases when this reduces a country's freedom of action?*

Strongly agree	o	o	o	o	o	o	Strongly agree
	[1]	[2]	[3]	[4]	[5]	[6]	

[Vignette experiments]

[Instruction to the programmer: What follows are three vignette experiments, each varying the same three factors: F1 Valence of Peer Opinion (positive/negative), F2 Degree of Peer Consensus (strong/weak), F3 Elite Cues (positive/negative). However, because F2 and F3 are combined in four treatments, there are only two different sets of treatments per experiment

- Set F12 with five conditions: F12-0 (control), F12-1, F12-2, F12-3, F12-4
- Set F3 with three conditions: F3-0 (control), F3-1, F3-2

In each experimental round, randomly assign participants to treatments anew. Note that the F12-0 control groups are not supposed to receive the respective manipulation check (but the confidence item!) coming right after each vignette.
Please, block-randomize order of experiments.]

[Introduction]
Next, we are interested in your views about various international organizations.

[Experiment#1 WHO]
[Participants randomly are assigned with equal probability to conditions F12-0/1/2/4 and F3-0/1/2, respectively. Conditions of F12 and F3 is shown on one page but in random order. The "forward" button is delayed by 10 seconds and placed at the bottom of the page.]

[E1_Intro]
The World Health Organization (WHO) is an international organization responsible for dealing with global health.

[E1_F12]
[Please, randomly assign participants to treatments E1_F12-1...4]
[E1_F12-0 Control: control group sees no information about other survey participants!]

We have asked people about their opinions of the WHO in previous rounds of this survey. The graph below shows their responses.

[E1_F12-1 positive/strong]
An overwhelming majority of other survey participants expressed high confidence in the WHO.

89,3%

10,7%

High Confidence   **Low Confidence**
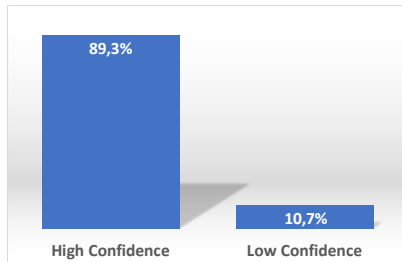
[E1_F12-2 positive/weak]
A majority of other survey participants expressed high confidence in the WHO.

61,3%

38,7%

High Confidence   **Low Confidence**
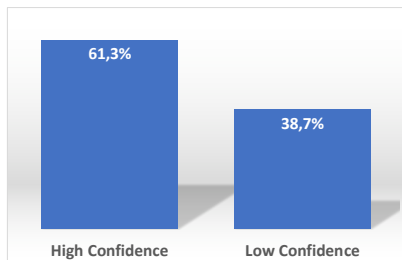
[E1_F12-3 negative/strong]
An overwhelming majority of other survey participants expressed low confidence in the WHO.

89,3%

10,7%

High Confidence   **Low Confidence**
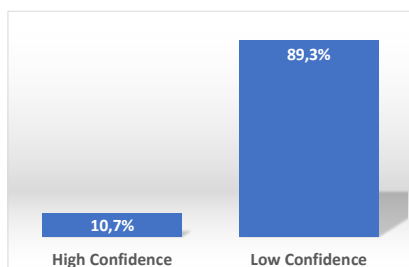
[E1_F12-4 negative/weak]
A majority of other survey participants expressed low confidence in the WHO.
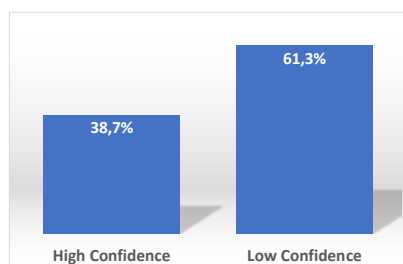
[E1_F3]

[E1_F3-0 control]
As you may know, the WHO runs health programs in many countries.

[E1_F3-1 positive]
As you may know, the US government has recently praised the WHO for the effectiveness of the health programs it runs in many countries.

[E1_F3-2 negative]
As you may know, the US government has recently criticized the WHO for the ineffectiveness of the health programs it runs in many countries.

[q18] *How much confidence do you personally have in the World Health Organization (WHO)?*

None at all	o	o	o	o	o	o	o	o	o	o	Complete confidence
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	

[Manipulation check #1, not shown in the E1_F12-0 control condition!]

[q19] *Which of the following statements best describes what you just read about the World Health Organization (WHO)?*
- *Most other survey participants expressed high confidence in the WHO*
- *About half of other survey participants expressed confidence in the WHO*
- *Most other survey participants expressed low confidence in the WHO*

[Experiment#2 IMF]
[Participants randomly are assigned with equal probability to conditions F12-0/1/2/4 and F3-0/1/2, respectively. Conditions of F12 and F3 is shown on one page but in random order. The "forward" button is delayed by 10 seconds and placed at the bottom of the page.]

[E2_Intro]
The International Monetary Fund (IMF) is an international organization responsible for dealing with financial stability and economic policy.

[E2_F12]
[E2_F12-0 Control: sees no information about polls!]

National polls have recently measured public opinion toward the IMF in the US. The graph below shows the average result of these polls.

[E2_F12-1 positive/strong]
According to these polls an overwhelming majority of [nationals] have high confidence in the IMF.
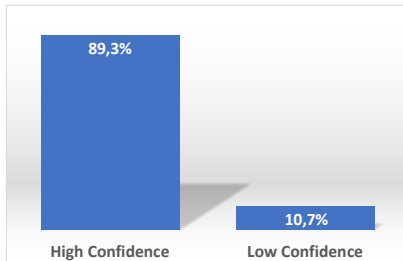
[E2_F12-2 positive/weak]
According to these polls a majority of Americans have high confidence in the IMF.
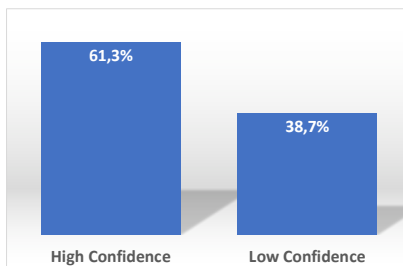
[E2_F12-3 negative/strong]
According to these polls an overwhelming majority of Americans expressed low confidence in the IMF.
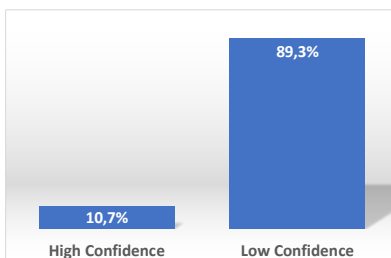
[E2_F12-4 negative/weak]
According to these polls a majority of Americans expressed low confidence in the IMF.
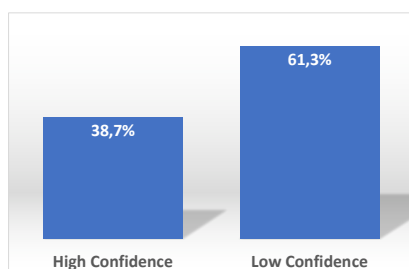
[E2_F3]

[E2_F3-1 control]
As you may have heard, the International Monetary Fund (IMF) gives loans to countries facing financial problems.
[E2_F3-1 positive]
As you may have heard, the US government recently praised the International Monetary Fund (IMF) for giving loans to countries facing financial problems.
[E2_F3-2 negative]
As you may have heard, the US government recently criticized the International Monetary Fund (IMF) for not giving loans to countries facing financial problems.

[q20] *How much confidence do you have in the International Monetary Fund (IMF)?*

None at all	o	o	o	o	o	o	o	o	o	o	Complete confidence
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	

[Manipulation check #2, not shown in the F12-0 control condition!]
[q21] *Which of the following statements best describes what you just read about the International Monetary Fund (IMF)?*
- *Most [nationals] recently expressed high confidence in the IMF*
- *About half of [nationals] recently expressed confidence in the IMF*
- *Most [nationals] recently expressed low confidence in the IMF*

[Experiment#3]   UN]

[Participants randomly are assigned with equal probability to conditions F12-0/1/2/4 and F3-0/1/2, respectively. Conditions of F12 and F3 is shown on one page but in random order. The "forward" button is delayed by 30 seconds and placed at the bottom of the page.]

[E3_Intro]
The United Nations (UN) is an international organization responsible for dealing with a variety of transboundary issues. We now show you a couple of social media posts about the UN. Please take your time to carefully read all of these posts.

[E3_F12 Valence of Peer Opinion/Peer Consensus]
[E3_F12-0 control – respondents see UN-tweet without comments!]
[E3_F12-1 positive/strong – UN-tweet with 9 positive/1 negative com's in random order]
[E3_F12-2 positive/weak – UN-tweet with 6 positive/4 negative com's in random order]
[E3_F12-3 negative/strong – UN-tweet with 1 positive/9 negative com's in random order]
[E3_F12-4 negative/weak – UN-tweet with 4 positive/6 negative com's in random order]
[The selection of either positive or negative comments in F12-1/2/3/4 is supposed to be random across the 10 pairs as well as the order in which selected comments are shown!]

[UN-Tweet – always shown!]

United Nations ✔
@UN

The 77th session of the United Nations General Assembly #UNGA is ongoing. Delegates from 193 member states of the @UN meet to debate global issues such as violent conflicts, human rights, international law and climate change.

8:23 AM · Feb 24, 2023

2.2K Retweets   **147** Quote Tweets   **278** Likes

#	Positive Comments	Negative Comments
1	**susapark** @susapark · Feb 24, 2023 Heroes! @unitednations is doing so much to stop all the nonsense going on #SupportTheUN 💬 1 🔁 1 ♡ ⬆	**susapark** @susapark · Feb 24, 2023 Losers! @unitednations is doing nothing to stop all the nonsense going on #StopTheUN 💬 1 🔁 1 ♡ ⬆
2	**GiveYouAHum** @KittenJason · Feb 24, 2023 This is such an important meeting of LEADERS! #champs #bosses 💬 🔁 1 ♡ 1 ⬆	**GiveYouAHum** @KittenJason · Feb 24, 2023 This is an absolutely pointless meeting of LOSERS! #incompetence #endit 💬 🔁 1 ♡ 1 ⬆
3	**7thfolder** @7thfolder · Feb 24, 2023 This is great! Ongoing dialogue in the @UN General Assembly is #MUCH_NEEDED! 💬 1 🔁 ♡ 1 ⬆	**7thfolder** @7thfolder · Feb 24, 2023 Awful! Endless bickering in the @UN General Assembly is a #WASTE_OF_TIME! 💬 1 🔁 ♡ 1 ⬆
4	**KalNausea** @C4Andro · Feb 24, 2023 Sounds like a determined search for real solutions, I like it 👍 #STRONG_GLOBAL_ACTION 💬 1 🔁 1 ♡ ⬆	**KalNausea** @C4Andro · Feb 24, 2023 To me this just means endless talking and no real solutions 👎 #FORGET_GLOBAL_ACTION 💬 1 🔁 1 ♡ ⬆
5	**ReaMon1815** @VlstpsTony · Feb 24, 2023 Commitment, accountability, impact… @UN – #PraisePraise! 💬 🔁 1 ♡ 1 ⬆	**ReaMon1815** @VlstpsTony · Feb 24, 2023 Scandals, corruption, failure… @UN – #ShameOnYou! 💬 🔁 1 ♡ 1 ⬆
6	**StephP** @StephPapstone · Feb 24, 2023 UN leaders are HONORABLE, always persevering! 😇 #rolemodels 💬 1 🔁 ♡ 1 ⬆	**StephP** @StephPapstone · Feb 24, 2023 UN leaders are a DISGRACE, wasting our time! 💀 #gotohell 💬 1 🔁 ♡ 1 ⬆
7	**Jane** @steenmessenger1 · Feb 24, 2023 INSPIRING to see all these powerful leaders in one room, gives HOPE for all this trouble we are currently in! 💬 2 🔁 ♡ ⬆	**Jane** @steenmessenger1 · Feb 24, 2023 TROUBLING to see all these powerful leaders in one room, raises DOUBTS toward all this trouble we are currently in! 💬 2 🔁 ♡ ⬆
8	**StewartRo** @StuRoboffice · Feb 24, 2023 Welcome back @UnitedNations! Never needed you more! 🤩 #yougotthis 💬 🔁 2 ♡ ⬆	**StewartRo** @StuRoboffice · Feb 24, 2023 Get Lost @UnitedNations! Never needed you less! 💀 #disband 💬 🔁 2 ♡ ⬆
9	**B_M_T** @boro_dan · Feb 24, 2023 Bunch of #professionals, effective and diligent. @unitednations really #YOU_ROCK! 💬 🔁 ♡ 2 ⬆	**B_M_T** @boro_dan · Feb 24, 2023 Bunch of #amateurs, useless and lazy. @unitednations really #YOU_SUCK! 💬 🔁 ♡ 2 ⬆
10	**SNoel** @Sam13Noel · Feb 24, 2023 #UN in action 👍 Preventing the world going up in 🔥 flames… 💬 🔁 1 ♡ 1 ⬆	**SNoel** @Sam13Noel · Feb 24, 2023 #UN inaction 👎 Letting the world go up in 🔥 flames… 💬 🔁 1 ♡ 1 ⬆

[E3_F3: Congruence of Elite Cues]

[E3_F3-0 control]
[sees no government tweet!]

[E3_F3-1 positive]

U.S. Mission to the UN
@USUN

In her remarks at the 77th session of the United Nations General Assembly #UNGA, the U.S. representative yesterday #praised the #UN for alleviating many violent conflicts.

8:31 AM · Feb 24, 2023

1.1K Retweets   86 Quote Tweets   103 Likes

[E3_F3-2 negative]

U.S. Mission to the UN
@USUN

In her remarks at the 77th session of the United Nations General Assembly #UNGA, the U.S. representative yesterday #criticized the #UN for failing to alleviate many violent conflicts.

8:31 AM · Feb 24, 2023

1.1K Retweets   86 Quote Tweets   103 Likes

[q22] *How much confidence do you have in the United Nations (UN)?*

None at all	o	o	o	o	o	o	o	o	o	o	Complete confidence
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	

[Manipulation check #3, not shown in the E3_F12-0 control condition!**]**
[q23] *Regarding the comments by other social media users shown on a previous page before, which of the following statements best describes what you just read?*

Overall, these comments have been...
[1] more positive than negative about the UN
[2] equally positive or negative about the UN
[3] more negative than positive about the UN

[Additional items/post-treatment]

[Attention Check]
[q24] *To demonstrate that you've read this much, just go ahead and select both organizations mentioned below, no matter what you think or know about these organizations. Yes, ignore the question below and select both of those options.*

What is your favorite international organization?
[multiple selections possible]
1 United Nations Development Bank
2 Human Rights Protection Fund

[Knowledge Checks]
Here are some more questions about international organizations. Many people don't know the answers to these questions, but if you do, please indicate the correct answer.

[q25] *Five countries have permanent seats on the Security Council of the United Nations (UN). Which one of the following is <u>not</u> a member?*
1 France
2 China
3 India
4 I don't know

[q26] *Where are the headquarters of the International Monetary Fund (IMF) located?*
1 Washington DC
2 London
3 Geneva
4 I don't know

[q27] *Who is currently serving as Director-General of the World Health Organization (WHO)?*
1 Tedros Ghebreyesus
2 Tina Britton
3 Francois Dejohnette
4 I don't know

[q28] *Which of the following problems does the organization Amnesty International deal with?*
1 Climate change
2 Human rights
3 Destruction of historic monuments
4 I don't know

[q29] [status of employment]
Which of the following describes your work status?

1	*Work full-time (30+ hours per week)*
2	*Work part-time (up to 29 hours per week)*
3	*Apprenticeship, Internship*
4	*School*
5	*Student*
6	*Re-training*
7	*Currently unemployed*
8	*Pensioner/retired, formerly in full-time work*
9	*Not working (housewife/house husband)*
10	*Maternity leave, Parental leave, Sabbatical*

[q30] [party vote] *Which party would you vote for if there were a national election tomorrow?*

1	*Democratic Party*
2	*Republican Party*
3	*Libertarian Party (LP)*
4	*Green Party of the United States (GPUS)*
5	*Constitution Party*
6	*Not allowed to vote*
7	*Would not vote any of the listed parties*
8	*I don't know*

[Debrief]
These are all the questions. This survey was part of an academic study that included experiments. The statements about other participants' opinions, national poll results and social media users' comments were fictional. Thank you very much for your contribution to this research project.

Appendix B Sample Properties

Table B1 Sample size by country

	Freq.	Percent
Brazil	3203	33
Germany	3211	33
United States	3203	33
Total	9617	100

Table B2a: Age by country (sample)

	Brazil	Germany	United States	Total
18-24	15	9	12	12
25-34	20	15	18	18
35-44	21	16	17	18
45-54	17	17	16	17
55-64	14	19	17	17
65+	12	24	20	19
Total	100	100	100	100

Table B2b: Age by country (population statistics)

	Brazil	Germany	United States	Total
18-24	15	9	12	13
25-34	21	15	19	20
35-44	21	16	17	19
45-54	17	17	16	17
55-64	14	19	17	15
65-	13	24	20	17
Total	100	100	100	100

Source: https://www.census.gov

Table B3a: Gender by country (sample)

	Brazil	Germany	United States	Total
Male	47	50	49	49
Female	53	50	51	51
Total	100	100	100	100

Table B3b: Gender by country (population statistics)

	Brazil	Germany	United States	Total
Male	49	50	49	49
Female	51	50	51	51
Total	100	100	100	100

Source: https://www.census.gov

Table B4a Education by country (sample)

	Brazil	Germany	United States	Total
Low (no to lower secondary)	39	13	10	21
Middle (upper secondary)	45	59	43	49
High (tertiary)	16	28	47	30
Total	100	100	100	100

Table B4b Education by country (population statistics)

	Brazil	Germany	United States	Total
Low (no to lower secondary)	41	13	10	22
Middle (upper secondary)	44	58	44	48
High (tertiary)	15	28	46	29
Total	100	100	100	100

Source: OECD (2021)

Table B5 Descriptives

Variable	Min	Mean	Max	SD	N
Confidence in WHO	1	5.586	10	2.584	9617
Confidence in IMF	1	5.01	10	2.347	9617
Confidence in UN	1	5.352	10	2.488	9617
Confidence in Government	1	2.714	6	1.503	9617
Financial satisfaction	1	3.356	6	1.433	9617
Political satisfaction	1	2.627	6	1.428	9617
National identification	1	2.729	4	.8161	9617
Global identification	1	2.406	4	.8654	9617
Age	18	46.500	98	17	9617
Male (1/0)	0	.4868	1	.4999	9617
Education (recoded to tertiary=1 vs. rest=0)	1	2.098	3	.7075	9617
Knowledge (1/0)	0	.4924	1	.5	9617
Round of Experiment#1 (WHO/other resp)	1	1.989	3	.8223	9617
Round of Experiment#2 (IM/national poll)	1	2.005	3	.8132	9617
Round of Experiment#3 (UN/social media)	1	2.006	3	.8139	9617
Manipulation check Exp#1 mastered (1/0)	0	.8484	1	.3587	9617
Manipulation check Exp#2 mastered (1/0)	0	.8340	1	.3721	9617
Manipulation check Exp#3 mastered (1/0)	0	.8103	1	.3921	9617

Note: unweighted data pooled across the three country samples

Table B6 Assignment across treatment groups (pooled dataset)

Experiment "Participants/WHO"	Control croup	Positive elite	Negative Elite	Total
Control croup	644	638	637	1919
Strong positive peer consensus	640	639	647	1926
Weak positive peer consensus	642	636	639	1917
Strong negative peer consensus	642	642	638	1922
Weak negative peer consensus	643	647	643	1933
Total	3211	3202	3204	9617

Experiment "Polls/IMF"	Control croup	Positive elite	Negative Elite	Total
Control croup	639	639	644	1922
Strong positive peer consensus	643	644	635	1922
Weak positive peer consensus	641	642	646	1929
Strong negative peer consensus	638	641	637	1916
Weak negative peer consensus	646	636	646	1928
Total	3207	3202	3208	9617

Experiment "Social Media/UN"	Control croup	Positive elite	Negative Elite	Total
Control croup	639	643	639	1921
Strong positive peer consensus	641	644	641	1926
Weak positive peer consensus	641	637	642	1920
Strong negative peer consensus	643	636	643	1922
Weak negative peer consensus	645	642	641	1928
Total	3209	3202	3206	9617

Table B7 Sample Balance across treatment groups

Tested variable	Experiment #1 (WHO)			Experiment #2 (IMF)			Experiment #3 (UN)		
	Age	Male	Edu	Age	Male	Edu	Age	Male	Edu
Strong positive	0.10	-0.00	-0.00	-0.16	0.00	-0.00	0.05	-0.00	0.01
	(0.55)	(0.02)	(0.02)	(0.55)	(0.02)	(0.02)	(0.55)	(0.02)	(0.02)
Weak positive	0.12	0.00	0.00	-0.04	0.00	0.00	0.03	-0.00	0.01
	(0.55)	(0.02)	(0.02)	(0.55)	(0.02)	(0.02)	(0.55)	(0.02)	(0.02)
Strong negative	0.13	-0.01	0.00	0.12	-0.00	0.00	0.17	0.00	-0.00
	(0.55)	(0.02)	(0.02)	(0.55)	(0.02)	(0.02)	(0.55)	(0.02)	(0.02)
Weak negative	0.10	-0.01	-0.00	-0.05	-0.00	-0.00	-0.09	-0.00	0.00
	(0.55)	(0.02)	(0.02)	(0.55)	(0.02)	(0.02)	(0.55)	(0.02)	(0.02)
Control	46.41	0.49	2.10	46.53	0.49	2.10	46.47	0.49	2.10
	(0.39)	(0.01)	(0.02)	(0.39)	(0.01)	(0.02)	(0.39)	(0.01)	(0.02)
N	9617	9617	9617	9617	9617	9617	9617	9617	9617
F	0.02	0.08	0.03	0.06	0.06	0.03	0.06	0.01	0.04
p	1.00	0.99	1.00	0.99	0.99	1.00	0.99	1.00	1.00

Note: One-way ANOVA, shown are differences from control group mean with standard errors in parentheses, unweighted data of the pooled data set, * $p < 0.05$

Table B8 Manipulation checks

% Mastering the manipulation check	Brazil	Germany	United States	Total
Participants/WHO	87.26	85.05	82.20	84.84
Polls/IMF	86.98	82.06	81.17	83.40
Social Media/UN	81.99	81.22	79.89	81.03
Total	100.00	100.00	100.00	100.00

Appendix C Additional Results

Table C1 Regression results visualized in Figure 1

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Negative peer consensus (pooled)	0.559*** (0.071)	0.938*** (0.065)	0.422*** (0.070)
Positive peer consensus (pooled)	-0.965*** (0.072)	-0.650*** (0.064)	-0.846*** (0.069)
Constant	5.804*** (0.056)	4.990*** (0.050)	5.620*** (0.054)
N	8159	8021	7793
R2	0.069	0.090	0.053

*Note: OLS-Regression, standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001*

Table C2 Regression results visualized in Figure 2

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Strong positive peer consensus	0.597*** (0.084)	1.027*** (0.076)	0.486*** (0.081)
Weak positive peer consensus	0.521*** (0.083)	0.849*** (0.076)	0.345*** (0.085)
Weak negative peer consensus	-0.836*** (0.084)	-0.577*** (0.075)	-0.708*** (0.082)
Strong negative peer consensus	-1.095*** (0.084)	-0.724*** (0.075)	-0.972*** (0.080)
Constant	5.804*** (0.056)	4.990*** (0.050)	5.620*** (0.054)
N	8159	8021	7793
R2	0.070	0.091	0.054

*Note: OLS-Regression, standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001*

Table C3 Testing difference of "strong" vs. "weak" treatment effects

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Strong (vs. weak) pos. consensus	0.076 (0.088)	0.179* (0.081)	0.141 (0.090)
Weak positive peer consensus	0.521*** (0.083)	0.849*** (0.076)	0.345*** (0.085)
Weak negative peer consensus	-0.836*** (0.084)	-0.577*** (0.075)	-0.708*** (0.082)
Strong (vs. weak) neg. consensus	-0.259** (0.089)	-0.147 (0.079)	-0.263** (0.085)
Constant	5.804*** (0.056)	4.990*** (0.050)	5.620*** (0.054)
N	8159	8021	7793
R2	0.070	0.091	0.054

*Note: OLS-Regression, standard errors in parentheses, using contrast coding for testing effect of strong consensus conditions w/ respective weak conditions as baseline; * p<0.05, ** p<0.01, *** p<0.001*

Table C4 Regression results on ATE of elite cues

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Positive elite cue	0.264*** (0.055)	0.182*** (0.050)	0.152** (0.054)
Negative elite cue	-0.189*** (0.012)	-0.184*** (0.011)	-0.115*** (0.012)
Constant	5.876*** (0.040)	5.318*** (0.037)	5.532*** (0.039)
N	9617	9617	9617
R2	0.026	0.028	0.010

*Note: OLS-Regression, standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001*

Table C5 Regression results visualized in Figure 3

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Negative peer consensus (pooled)	-0.623*** (0.123)	-0.501*** (0.109)	-0.582*** (0.118)
Positive peer consensus (pooled)	0.844*** (0.123)	0.951*** (0.111)	0.501*** (0.122)
Positive (vs. negative) elite	0.667*** (0.137)	0.397** (0.122)	0.338** (0.131)
Interactions			
Negative peer cons # positive elite	-0.332 (0.174)	-0.164 (0.155)	-0.343* (0.168)
Positive peer cons # positive elite	-0.321 (0.173)	-0.006 (0.157)	-0.101 (0.171)
Constant	5.308*** (0.097)	4.741*** (0.086)	5.405*** (0.093)
N	5464	5351	5152
R2	0.073	0.091	0.050

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C6 Regression results visualized in Figure 4

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Negative peer consensus (pooled)	-1.186*** (0.160)	-0.692*** (0.142)	-1.046*** (0.152)
Positive peer consensus (pooled)	0.880*** (0.157)	1.268*** (0.142)	0.467** (0.155)
Education (medium/high) (vs. low education)	0.278* (0.139)	0.435*** (0.124)	0.227 (0.133)
Interactions			
Negative peer cons # education	0.268 (0.179)	0.043 (0.160)	0.246 (0.171)
Positive peer cons # education	-0.404* (0.177)	-0.415** (0.160)	-0.059 (0.174)
Constant	5.583*** (0.124)	4.645*** (0.110)	5.440*** (0.118)
N	8159	8021	7793
R2	0.074	0.099	0.059

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C7 Regression results visualized in Figure 5

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Negative peer consensus (pooled)	-0.869*** (0.101)	-0.575*** (0.090)	-0.852*** (0.098)
Positive peer consensus (pooled)	0.711*** (0.101)	1.127*** (0.091)	0.395*** (0.100)
Knowledge (vs. no knowledge)	0.488*** (0.112)	0.549*** (0.101)	0.231* (0.108)
Interactions Negative peer cons # knowledge	-0.205 (0.143)	-0.190 (0.128)	0.014 (0.138)
Positive peer cons # knowledge	-0.321* (0.142)	-0.414** (0.129)	0.048 (0.140)
Constant	5.564*** (0.079)	4.729*** (0.069)	5.503*** (0.077)
N	8159	8021	7793
R2	0.073	0.096	0.056

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C8 Treatment effect of peer opinion (H1, H2) with weighted data

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Negative peer consensus (pooled)	0.562*** (0.073)	0.943*** (0.067)	0.429*** (0.072)
Positive peer consensus (pooled)	-0.962*** (0.074)	-0.650*** (0.065)	-0.843*** (0.070)
Constant	5.796*** (0.059)	4.985*** (0.053)	5.610*** (0.056)
N	8159	8021	7793
R2	0.069	0.090	0.053

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C9 Treatment effect of peer opinion (H1, H2) with additional control variables

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Negative peer consensus (pooled)	0.495*** (0.059)	0.747*** (0.054)	0.222*** (0.058)
Positive peer consensus (pooled)	-0.842*** (0.059)	-0.645*** (0.054)	-0.817*** (0.057)
Confidence in Government	0.657*** (0.025)	0.420*** (0.023)	0.589*** (0.024)
Financial satisfaction	0.092*** (0.018)	0.191*** (0.017)	0.098*** (0.018)
Political satisfaction	0.182*** (0.027)	0.235*** (0.025)	0.212*** (0.026)
National identification	0.069* (0.032)	0.106*** (0.029)	0.074* (0.031)
Global identification	0.321*** (0.030)	0.318*** (0.027)	0.372*** (0.029)
Age	-0.004** (0.001)	-0.005*** (0.001)	-0.004* (0.001)
Male	-0.113* (0.046)	0.040 (0.042)	-0.136** (0.045)
Education (low, middle, high)	0.085* (0.036)	0.119*** (0.033)	0.134*** (0.035)
German Sample (ref: BR)	-0.771*** (0.058)	-0.751*** (0.054)	-0.781*** (0.057)
US Sample (ref: BR)	-0.815*** (0.059)	-0.561*** (0.055)	-0.609*** (0.058)
Round#2 (ref: Round#1)	-0.229*** (0.055)	-0.026 (0.051)	0.162** (0.054)
Round#3 (ref: Round#1)	-0.217*** (0.055)	-0.012 (0.051)	-0.050 (0.054)
Constant	2.971*** (0.127)	2.001*** (0.115)	2.460*** (0.124)
N	8159	8021	7793
R2	0.368	0.360	0.361

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
$* p<0.05$, $** p<0.01$, $*** p<0.001$

Table C10 Treatment effect of peer opinion (H1, H2) including all respondents

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Negative peer consensus (pooled)	0.187** (0.071)	0.536*** (0.064)	-0.098 (0.069)
Positive peer consensus (pooled)	-0.732*** (0.071)	-0.488*** (0.064)	-0.571*** (0.069)
Constant	5.804*** (0.058)	4.990*** (0.053)	5.620*** (0.056)
N	9617	9617	9617
R2	0.027	0.038	0.010

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C11 Effect of peer opinion (H1, H2) across country samples

	Confidence in WHO ('Other respondents' scenario)			Confidence in IMF ('National polls' scenario)			Confidence in UN ('Social media' scenario)		
	BR	GE	US	BR	GE	US	BR	GE	US
positive Peers	0.601*** (0.127)	0.549*** (0.115)	0.486*** (0.126)	0.881*** (0.112)	0.845*** (0.110)	1.067*** (0.113)	0.354** (0.125)	0.316** (0.116)	0.590*** (0.121)
negative peers	-1.098*** (0.128)	-0.727*** (0.115)	-1.104*** (0.126)	-0.898*** (0.111)	-0.570*** (0.108)	-0.494*** (0.113)	-1.215*** (0.123)	-0.737*** (0.113)	-0.599*** (0.120)
Constant	6.153*** (0.101)	5.791*** (0.091)	5.473*** (0.098)	5.330*** (0.088)	4.984*** (0.085)	4.654*** (0.088)	6.044*** (0.096)	5.633*** (0.089)	5.183*** (0.093)
N	2795	2731	2633	2786	2635	2600	2626	2608	2559
R2	0.081	0.056	0.074	0.110	0.075	0.088	0.078	0.042	0.045

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C12 Effect of degree of peer consensus (H3) across country samples

	Confidence in WHO ('Other respondents' scenario)			Confidence in IMF ('National polls' scenario)			Confidence in UN ('Social media' scenario)		
	BR	GE	US	BR	GE	US	BR	GE	US
Peers ++	0.597*** (0.148)	0.598*** (0.136)	0.553*** (0.149)	0.968*** (0.131)	0.938*** (0.131)	1.152*** (0.133)	0.416** (0.144)	0.269* (0.135)	0.759*** (0.140)
Peers +	0.605*** (0.148)	0.503*** (0.135)	0.420** (0.147)	0.792*** (0.131)	0.755*** (0.130)	0.979*** (0.134)	0.279 (0.153)	0.371** (0.141)	0.389** (0.147)
Peers -	-0.973*** (0.150)	-0.599*** (0.135)	-0.964*** (0.149)	-0.870*** (0.128)	-0.415** (0.127)	-0.461*** (0.133)	-1.048*** (0.147)	-0.639*** (0.134)	-0.447** (0.143)
Peers --	-1.225*** (0.150)	-0.853*** (0.135)	-1.249*** (0.150)	-0.928*** (0.131)	-0.722*** (0.127)	-0.526*** (0.132)	-1.364*** (0.142)	-0.827*** (0.131)	-0.740*** (0.140)
Constant	6.153*** (0.101)	5.791*** (0.091)	5.473*** (0.098)	5.330*** (0.088)	4.984*** (0.085)	4.654*** (0.088)	6.044*** (0.096)	5.633*** (0.089)	5.183*** (0.093)
N	2795	2731	2633	2786	2635	2600	2626	2608	2559
R2	0.082	0.058	0.075	0.110	0.078	0.089	0.080	0.042	0.049

Note: OLS-Regression, standard errors in parentheses, * p<0.05, ** p<0.01, *** p<0.001

Table C13 Effect of congruence with elite cues (H4) across country samples

	Confidence in WHO ('Other respondents' scenario)			Confidence in IMF ('National polls' scenario)			Confidence in UN ('Social media' scenario)		
	BR	GE	US	BR	GE	US	BR	GE	US
Peers -	-1.512***	-1.021***	-1.412***	-1.076***	-0.697***	-0.614**	-1.434***	-0.771***	-0.893***
	(0.221)	(0.199)	(0.218)	(0.192)	(0.186)	(0.197)	(0.213)	(0.195)	(0.205)
Peers +	0.185	0.466*	0.233	0.896***	0.724***	1.064***	0.297	0.327	0.462*
	(0.218)	(0.198)	(0.218)	(0.192)	(0.192)	(0.196)	(0.217)	(0.200)	(0.208)
elite -	-1.207***	-0.601**	-0.646**	-0.513*	-0.397	-0.155	-0.417	-0.258	-0.242
	(0.246)	(0.221)	(0.240)	(0.214)	(0.209)	(0.215)	(0.237)	(0.219)	(0.228)
elite +	-0.253	0.042	-0.239	0.139	-0.168	0.159	-0.057	0.157	-0.007
	(0.245)	(0.221)	(0.240)	(0.215)	(0.209)	(0.215)	(0.236)	(0.219)	(0.228)
peers - # elite -	1.028***	0.631*	0.382	0.496	0.193	0.187	0.514	0.204	0.628*
	(0.312)	(0.281)	(0.307)	(0.270)	(0.264)	(0.276)	(0.300)	(0.277)	(0.292)
Peers- # elite +	0.228	0.251	0.562	0.030	0.193	0.164	0.145	-0.101	0.267
	(0.311)	(0.282)	(0.309)	(0.271)	(0.266)	(0.276)	(0.302)	(0.276)	(0.293)
Peers + # elite -	0.945**	0.307	0.361	0.068	0.149	-0.049	0.270	-0.014	0.141
	(0.309)	(0.281)	(0.308)	(0.273)	(0.270)	(0.277)	(0.308)	(0.285)	(0.297)
Peers + # elite +	0.308	-0.055	0.395	-0.147	0.218	0.054	-0.094	-0.024	0.231
	(0.308)	(0.282)	(0.307)	(0.272)	(0.270)	(0.277)	(0.305)	(0.284)	(0.294)
Constant	6.636***	5.977***	5.767***	5.458***	5.173***	4.653***	6.201***	5.667***	5.265***
	(0.173)	(0.156)	(0.169)	(0.152)	(0.147)	(0.152)	(0.167)	(0.155)	(0.161)
N	2795	2731	2633	2786	2635	2600	2626	2608	2559
R2	0.091	0.062	0.082	0.116	0.079	0.092	0.080	0.045	0.049

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C14 Effect of congruence with elite cues (H4) for government supporters only

Dependent Variable Scenario	(1) Confidence in WHO Other respondents	(2) Confidence in IMF National polls	(3) Confidence in UN Social Media
Negative peer consensus	-0.520***	-0.568***	-0.495***
	(0.137)	(0.138)	(0.140)
Positive peer consensus	0.682***	0.915***	0.400**
	(0.134)	(0.139)	(0.141)
Positive (vs. negative) elite (0/1)	0.945***	0.606***	0.288
	(0.152)	(0.156)	(0.153)
Interactions			
Negative peer cons # positive elite	-0.575**	-0.275	-0.242
	(0.195)	(0.196)	(0.196)
Positive peer cons # positive elite	-0.617**	-0.237	-0.191
	(0.190)	(0.195)	(0.195)
Constant	6.361***	5.606***	6.455***
	(0.106)	(0.109)	(0.111)
N	2773	2695	2606
R2	0.085	0.118	0.045

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C14 Moderation effect of education (H5) across countries

	Confidence in WHO ('Other respondents' scenario)			Confidence in IMF ('National polls' scenario)			Confidence in UN ('Social media' scenario)		
	BR	GE	US	BR	GE	US	BR	GE	US
Negative peers	-1.266***	-0.907**	-1.354***	-0.929***	-0.127	-0.554	-1.326***	-0.661*	-0.452
	(0.207)	(0.324)	(0.401)	(0.178)	(0.305)	(0.365)	(0.197)	(0.315)	(0.383)
Positive peers	0.713***	1.554***	0.522	1.244***	1.377***	0.993**	0.352	0.542	0.685
	(0.203)	(0.324)	(0.400)	(0.177)	(0.313)	(0.360)	(0.199)	(0.330)	(0.389)
Education	0.408*	0.939***	0.338	0.684***	0.909***	0.505	0.405*	0.796**	0.563
	(0.206)	(0.265)	(0.325)	(0.179)	(0.253)	(0.290)	(0.197)	(0.267)	(0.308)
Negative peers # Education	0.244	0.178	0.273	0.021	-0.515	0.054	0.167	-0.090	-0.168
	(0.263)	(0.348)	(0.424)	(0.227)	(0.328)	(0.386)	(0.251)	(0.340)	(0.405)
Positive peers # Education	-0.182	-1.153***	-0.043	-0.593**	-0.617	0.075	0.002	-0.267	-0.112
	(0.259)	(0.348)	(0.422)	(0.227)	(0.336)	(0.381)	(0.255)	(0.355)	(0.411)
Constant	5.902***	4.976***	5.169***	4.912***	4.193***	4.200***	5.798***	4.938***	4.677***
	(0.162)	(0.246)	(0.307)	(0.140)	(0.235)	(0.273)	(0.153)	(0.247)	(0.291)
N	2795	2731	2633	2786	2635	2600	2626	2608	2559
R2	0.088	0.080	0.085	0.125	0.096	0.104	0.087	0.068	0.057

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001

Table C15 Moderation effect of knowledge (H6) across countries

	Confidence in WHO ('Other respondents' scenario)			Confidence in IMF ('National polls' scenario)			Confidence in UN ('Social media' scenario)		
	BR	GE	US	BR	GE	US	BR	GE	US
negative peers	-0.808***	-0.693***	-1.037***	-1.036***	-0.394*	-0.405**	-1.170***	-0.852***	-0.660***
	(0.202)	(0.169)	(0.158)	(0.170)	(0.158)	(0.140)	(0.196)	(0.166)	(0.151)
positive peers	1.075***	0.491**	0.579***	0.854***	1.084***	1.329***	0.357	0.302	0.471**
	(0.198)	(0.169)	(0.160)	(0.173)	(0.163)	(0.143)	(0.199)	(0.174)	(0.153)
know much	0.864***	0.245	0.073	0.303	0.513**	0.589**	0.433*	0.161	-0.335
	(0.205)	(0.181)	(0.205)	(0.177)	(0.170)	(0.185)	(0.198)	(0.179)	(0.194)
negative peers # know much	-0.485	-0.081	-0.190	0.211	-0.350	-0.297	-0.063	0.222	0.171
	(0.260)	(0.231)	(0.264)	(0.223)	(0.217)	(0.235)	(0.251)	(0.226)	(0.249)
positive peers # know much	-0.781**	0.081	-0.234	0.019	-0.466*	-0.733**	0.009	0.018	0.327
	(0.257)	(0.231)	(0.259)	(0.226)	(0.221)	(0.234)	(0.255)	(0.234)	(0.250)
Constant	5.631***	5.665***	5.447***	5.158***	4.718***	4.452***	5.777***	5.546***	5.305***
	(0.160)	(0.130)	(0.123)	(0.133)	(0.123)	(0.108)	(0.155)	(0.131)	(0.117)
N	2795	2731	2633	2786	2635	2600	2626	2608	2559
R2	0.088	0.059	0.074	0.117	0.079	0.093	0.084	0.045	0.047

Note: OLS-Regression, standard errors in parentheses, pooling weak and positive peer opinion conditions
* p<0.05, ** p<0.01, *** p<0.001