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Willingness to Interact Increases When Opponents Offer Specific Evidence

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Abstract

In polarized political climates, debate is ubiquitous but minds rarely change. This raises a question: what causes people to update their views? Recent work has shown that people are persuaded more by experienced-based explanations rather than factual ones. Yet, facts surely play (or ought to play) an important role in political discourse. Is it possible to leverage the persuasive power of personal experiences without sacrificing factual information? In Experiments 1 and 2, we replicate and build on previous findings showing that people who offer experienced-based (vs. fact-based) explanations are perceived as more rational and worthy of respect. In Experiment 3, we show that more complex explanations combining factual information with personal examples reveal more nuanced results. Collectively, this work sheds new light on how experienced-based and fact-based evidence can be used to persuade.

Keywords: political disagreement; perspective taking;

The top 1% of Americans have 16 times the wealth of the bottom 50%. The sea level in 2020 was 3.6 inches higher than it was in 1993. The national debt of the United States is \$28.9 trillion. People tend to think that facts like these should ground political discussions. Indeed, when asked to choose between facts and personal experiences, laypeople indicate that they would prefer to hear facts, rating opponents who provide factual evidence more respectable and rational (Kubin, Puryear, Schein & Gray, 2021). Yet despite their overtly-stated preferences, laypeople's *actual* reactions to evidence-based arguments are less favorable. People view political opponents as more rational and worthy of respect when they use experienced-based rather than fact-based explanations (Kubin et al., 2021). This raises a question: Why do people say they value facts but actually prefer experience-based explanations in practice? How might understanding this discrepancy help us to navigate political discourse?

Prior Work

In an era of increasing misinformation (Del Vicario, Bessi, Zollo, Petroni, Scala, Caldarelli, Stanley, & Quattrociocchi, 2016) and political polarization (Layman, Carsey, & Horowitz, 2006), a growing body of work has explored the causes and consequences of political polarization (Vargo, Guo, & Amazeen, 2018; Stewart et al, 2019). For example, in the 2016 election, partisan media outlets were more likely to spread fake news (Vargo et al., 2018). How can we reduce such misinformation and its downstream effects such as polarization? To date, only a few studies have examined ways to reduce political polarization (e.g., Kubin et al., 2021; Pennycook, Collins, & Rand., 2020; Yousif, Aboody, & Keil,

2020). Here, we briefly review work from different domains that may bear on how people navigate political discourse.

Political Polarization Research on political polarization has explored how engagement with traditional news media and social media influences falsehoods and debate. Recent research on the social network of information communication revealed that restricted information flow between competing media groups could result in polarized deadlock among different groups (Stewart, Mosleh, Diakonova, Arechar, Rand, & Plotkin, 2019). On an individual level, people across the political spectrum also become more susceptible to fake news if they are not actively engaged in analytical thinking (Pennycook, & Rand, 2019). Moreover, adults are more likely to engage in counterfactual reasoning to excuse rather than correct falsehoods that correspond with their shared political opinions (Efron, 2018).

Evaluating Other Social Actors How we interpret debate depends in part on how we evaluate the parties involved. For example, we may be more likely to believe people who look or sound like us (DeBruine, 2002), and who are members of shared coalitions (Burnham, McCabe, & Smith, 2000). Even personality traits may predict trustworthiness, with guilt-proneness as the best predictor (Burnham et al., 2000). How we perceive agents in debate may also depend on whether they appear to be 'reasonable' versus 'rational' and what we perceive their goals are. Grossmann, Eibach, Koyama, and Sahi (2020) showed that 'reasonable' actors were expected to be understanding of social contexts and flexible while 'rational' actors were thought of as preference maximizing — making decisions based on inferences about expected costs and rewards. Reasonable actors were also thought to care more about other's preferences than rational ones due to the 'dominance' of a rational strategy compared to a reasonable one (Grossmann et al, 2020; see also Rawls, 2005; Tobia, 2018).

Individuals vs. Masses Paradoxically, people are more persuaded by evidence of individual experiences rather than collective experiences. For example, we tend to prioritize 'an individual life' over 'statistical lives' in the context of giving to charity (Small, Loewenstein, & Slovic, 2007). When people are given a brochure that includes stories about a little girl in South Africa who is experiencing starvation and poverty, they are way more likely to donate to the charity, compared to a brochure with statistics. The strength of this prioritization is so strong that, in cases of mass murders and

genocide, people quickly move into action by a single story, or a photo depicting just one victim, when statistics have been readily available all along (Slovic, 2010). This tendency to be moved by stories of individuals rather than masses is known as the ‘Identifiable Victim Effect.’ Level of certainty and the proportion of the reference group seems crucial to giving the *individual* persuasive power over the *statistics* (Jenni & Lowenstein, 1997).

This prioritization of the individual’s experience even extends beyond charitable giving to the space of political debates. People find political opponents to be more rational, more respectable if these opponents base their positions on first person experiences rather than researched facts (Kubin et al., 2021). In the era of ‘fake news’ and political polarization, personal experiences might be seen as unlikely to be falsified and could be perceived as *truer* than facts. If this is the case, then how might incorporating details of individual experiences with facts affect the political debate?

Current Studies

Here we explore how *facts* can be employed in contrast to and in tandem with personal experiences during political disagreements. We presented participants with vignettes on three different topics (tax, coal and gun policy) that had dissenting opinions based on either people’s experiences (e.g. “Samantha supports reduced taxes for businesses because she had first-hand experience with business taxes and is facing bankruptcy due to recent tax increases to her business”) or based on facts (e.g. “Samantha has not had any experience with business taxes, but supports reducing taxes for businesses based on facts learned by reading extensively about taxes”; see Kubin et al., 2021).

In Experiment 1, we directly replicated the core study in Kubin et al. (2021). We used the three topics in Kubin et al. (2021) – coal regulation, gun control, and tax increase – and ask participants to read claims from their political opponents on these issues and evaluate them across three dimensions: their respect for the opponents, the perceived rationality of the opponents, and how willingness they are to interact with their opponents. In Experiment 2, we explored the possibility that fact-based vignettes were at a slight disadvantage in Exp. 1 due to framing differences (e.g., explicit mention of “Samantha has not had any experience” in the fact vignette but no mention of “Samantha has not read any facts” in the experience vignette). We examined how stable people’s preferences for personal experiences were with a new set of vignettes with matched structures. In Experiment 3, we asked whether these preferences for personal experiences over facts would persist in arguments with more complex evidence types. Specifically, we contrasted cases where political opponents supply facts that included a detailed personal example versus personal experiences that were accompanied by facts.

Experiment 1

Experiment 1 aimed to replicate the psychological model proposed by Kubin and colleagues (2021): political

opponents are perceived as more rational and are more respected when their beliefs are based on personal experiences rather than facts. If beliefs grounded in personal experiences are seen as more rational and more respected than beliefs supported by facts, participants would give higher ratings on both measures for opponents with a personal narrative. Furthermore, participants would also be more willing to interact with an opponent who has a personal experience rather than one who knows facts about a given topic (note that there was no direct effect of evidence type on people’s willingness to interact with their opponents in the original study). On the other hand, if there is no relation between the type of evidence and people’s judgments of respect, rationality, and willingness to interact with political opponents, we would expect to see no systematic preference for personal experiences over facts across all measures. This experiment is pre-registered ([link](#)).

Methods

Participants We recruited 214 U.S. participants from Prolific. 14 participants were excluded from further data analysis based on pre-registered inclusion criteria (final n = 200). Participants were asked ‘Which of the following topics did you read about in this survey?’ and were included if they correctly selected the three topics in the experiment from six choices.

Stimuli A total of 12 vignettes for three topics, coal regulation, gun control, business tax increases, were taken directly from Kubin et al. (2021) and used (see Table 1). For each topic, there are two facts vignettes, one for each political position, and two personal experience vignettes, and, similarly, one for each political position.

Procedure Participants were randomly assigned to either read three facts vignettes or three personal experiences vignettes. First, participants were asked about their own opinions about tax, coal and gun policy. They were then assigned to read vignettes that represented the opposing viewpoint to their own. After reading each vignette, participants first answered comprehension check questions. In the facts condition, the comprehension check questions include: “This person assessed data before coming to their viewpoint,” “This person read extensively about the topic before coming to this stance” and “A knowledge of relevant statistics helped this person come to this conclusion”. In the personal experience condition, participants were asked to rate “This person has personal involvement with the topic,” “This person has first-hand knowledge of this issue” and “This person has an authentic experience with this issue”.

Participants were then asked to rate their political opponents based on statements that measured three dimensions: rationality, respect, and willingness to interact. To measure rationality, participants evaluated the following statements: “This individual is rational for holding their stance,” “This individual has a stance that makes sense,” “This individual is logical for having their stance”. To meas

Personal experience (Exp. 1 & 2)	Bill supports [less /more] restrictions on coal mining because he has first-hand experience with [mining and lost his job to new coal regulations /the mining industry after it left his water supply unsafe to drink].
Fact (Exp. 1)	Bill has not had any experience with coal mining, but he supports [less restrictions on coal mining /more restrictions on the coal industry] based on facts he learned while reading extensively about the topic.
Fact (Exp. 2)	Bill supports [less /more] restrictions on coal mining /the coal industry] based on facts he learned while reading about people who [lost their jobs to new coal regulations /had the mining industry leave their water supply unsafe to drink].
Personal experience + Fact (Exp. 3)	Bill supports [less /more] restrictions on coal mining based on first-hand experience with [losing his job to new coal regulations /the mining industry leaving his water supply unsafe to drink] and facts he learned while reading about parents who [have worked as miners for over two decades and whose families lost their only source of income to new coal regulations /had to take their children to the emergency room after they had some contaminated water due to mining].
Fact + Third-person personal details (Exp. 3)	Bill supports [less /more] restrictions on [coal mining /the coal industry] based on facts he learned while reading about people who [lost their jobs to new coal regulations /had the mining industry leave their water supply unsafe to drink], including a father who [has worked as a miner for over two decades and whose family lost their only source of income /had to take his son to the emergency room after he had some contaminated water].

Table 1: Example vignettes used in Exp. 1, 2, & 3.

-ure respect, they were provided with “How willing would you be to respect this person’s viewpoint?”, “How willing would you be to be considerate of this person’s stances?”, “How willing would you be to take this person’s point of view?”. To gauge participants’ willingness to interact with their political opponents, they were asked “How willing would you be to have a general discussion with this person?”, “How willing would you be to interact with this person?”, “How willing would you be to exchange ideas with this person?”. Participants recorded their answers on a 7-point scale from ‘strongly disagree’ to ‘strongly agree’ (for comprehension check and rationality) and from ‘very unwilling’ to ‘very willing’ (for respect and willingness to interact).

Results & Discussion

People perceived political opponents as more respected and more rational when their policy positions are grounded in personal experiences than in facts. Participants’ responses on three dimensions – *respect*, *rationality*, and *willingness to interact* – were separately examined below. First, a three-way ANOVA probing the effects of evidence type, policy topic, and specific questions asked on people’s *respect* responses revealed three main effects but no significant interactions. There was a significant effect of evidence type, $F(1, 1782) = 37.39, p < .001$. People had more respect for opponents who provided personal experiences ($M = 4.89, SD = 1.63$) compared to facts ($M = 4.43, SD = 1.77$), $t(1750.2) = 5.73, p < .001$, Cohen’s $d = 0.27$. We also found a significant effect of topic on *respect* responses, $F(2,1782) = 16.37, p < .001$. Post hoc paired t-tests with Bonferroni correction revealed that participants are more likely to respect their opponents

when the topic was tax increase ($M = 4.97, SD = 1.53$) compared to gun control ($M = 4.47, SD = 1.86; t(599) = 6.75, p < .001$, Cohen’s $d = .29$) or coal regulation ($M = 4.58, SD = 1.69; t(599) = 5.92, p < .001$, Cohen’s $d = .24$). Furthermore, there was a main effect of the specific questions asked on the *respect* responses, $F(2,1782) = 104.84, p < .001$. Post hoc paired t-test found that people are much less willing to take someone’s view ($M = 3.91, SD = 1.81$) than to be considerate of their stances ($M = 5.16, SD = 1.49; t(599) = -20.18, p < .001$, Cohen’s $d = -.74$) or to respect their view ($M = 4.95, SD = 1.56; t(599) = -18.58, p < .001$, Cohen’s $d = -.61$). People are also more willing to be considerate of opponents’ stances than to respect their view ($t(599) = 5.73, p < .001$, Cohen’s $d = .13$).

The second dimension is people’s responses of political opponents’ *rationality*. A three-way ANOVA revealed a main effect of evidence type on people’s ratings, $F(1,1782) = 39.22, p < .001$, and a main effect of topic, $F(2,1782) = 6.17, p < .005$, on *rationality* responses. Similar to the finding for the *respect* dimension, post hoc independent-sample t-test showed that people perceived opponents as more rational when their position was supported by personal experiences ($M = 4.77, SD = 1.52$) compared to facts ($M = 4.32, SD = 1.54$), $t(1782.5) = 6.24, p < .001$, Cohen’s $d = .29$. Furthermore, people were slightly more willing to perceive an opponent as rational for tax increase ($M = 4.73, SD = 1.42$) than for gun control ($M = 4.46, SD = 1.57; t(599) = 3.95$, Bonferroni-corrected $p < .001$, Cohen’s $d = .18$) or coal regulation ($M = 4.47, SD = 1.62; t(599) = 3.98$, Bonferroni-corrected $p < .001$, Cohen’s $d = .17$). We also found a significant interaction between evidence type and topic, $F(2,1782) = 6.23, p < .005$. Post hoc t-test with Bonferroni

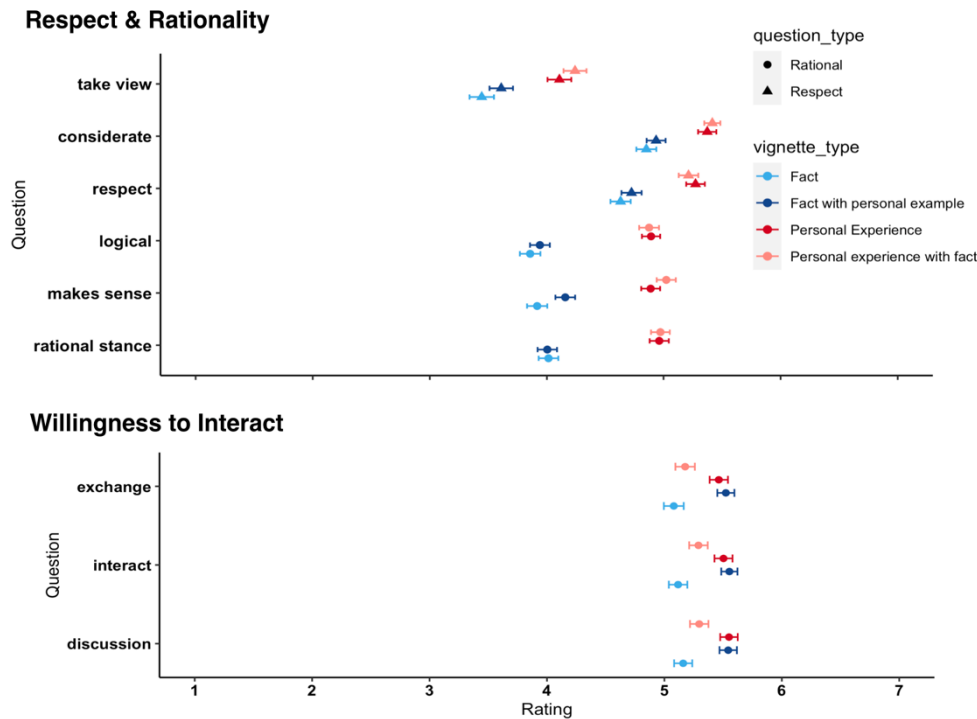


Figure 1: (a) Mean ratings by question for the *respect* and the *rationality* dimensions in Exp. 2 & 3. (b) Mean ratings by question for the *willingness to interact* dimension in Exp. 2 & 3. The error bars indicate 1 standard errors.

correction showed that, when people evaluate opponents who rely on facts, they perceived opponents as more rational for the topic of tax increase ($M = 4.67$, $SD = 1.36$) than for gun control ($M = 4.18$, $SD = 1.61$; $t(287) = 4.89$, $p < .001$, Cohen's $d = .33$) or coal regulation ($M = 4.10$, $SD = 1.57$; $t(287) = 6.21$, $p < .001$, Cohen's $d = .39$).

However, we found no significant effect of the type of evidence, whether it is personal experience ($M = 5.37$, $SD = 1.42$) or facts ($M = 5.32$, $SD = 1.40$), on people's *willingness to interact* with their opponents, $F(1,1782) = .49$, $p = .49$. There was only a main effect of topic, $F(2,1782) = 23.39$, $p < .001$. People perceived an opponent as more rational for tax increase ($M = 5.63$, $SD = 1.23$) than for gun control ($M = 5.08$, $SD = 1.59$; $t(599) = 10.31$, Bonferroni-corrected $p < .001$, Cohen's $d = .38$) or coal regulation ($M = 5.32$, $SD = 1.34$; $t(599) = 7.18$, Bonferroni-corrected $p < .001$, Cohen's $d = .24$). People are also rated opponents as less rational for gun control compared to coal regulation ($t(599) = -5.16$, Bonferroni-corrected $p < .001$, Cohen's $d = -.16$).

Collectively, these results revealed a main effect of evidence type on the *respect* and *rationality* dimensions but not *willingness to interact*. Thus, we replicate Kubin et al. (2021)'s finding that personal experiences lead people to have more respect and perceived rationality for political opponents but do not have a direct effect on people's willingness to interact with their opponents.

Experiment 2

Exp. 1, based on the original prompts from Kubin et al. (2021), revealed that people preferred personal experiences over facts when evaluating their political opponents. Yet, one possibility is that the vignette in the *facts* condition also highlighted opponents' lack of experience (e.g., "Bill has not had any experience") whereas the vignettes in the *personal experiences* condition did not emphasize opponents' lack of factual knowledge. This difference in the vignettes could potentially enlarge the differences in people's evidence type preferences. Experiment 2 thus sought to replicate the findings of Exp. 1 with maximally matched vignettes for both evidence types. This experiment is pre-registered ([link](#)).

Methods

Participants We recruited 210 U.S. participants from Prolific. 10 participants were excluded from further data analysis based on the same pre-registered inclusion criteria as Exp. 1 (final $n = 200$).

Stimuli A total of 12 vignettes for three topics, coal regulation, gun control, business tax increases, were taken from Kubin et al. (2021) and edited (see Table 1). The *personal experience* vignettes were kept to be identical to Exp. 1. However, for the *facts* vignettes, the phrase "has not had any experience with" was removed. As a result, the two vignettes were maximally identical and the wording minimally varied based on the specific evidence type. The stimuli were otherwise remained the same as Exp. 1.

Procedure The method in Exp. 2 is identical to Exp. 1 except topic order is randomized.

Results & Discussion

Consistent with results from Exp. 1, people had a higher regard toward political opponents – having more respect and perceiving them as more rational – when their opponents’ views were supported by personal experiences rather than facts. Focusing on the effects of evidence type, we reported the primary findings on the three dimensions, *respect*, *rationality*, and *willingness to interact*, below. There was a main effect of evidence type on *respect* responses, where people had more respect for opponents with personal experiences ($M = 4.92$, $SD = 1.61$) compared to those with facts ($M = 4.31$, $SD = 1.71$), $t(1791.2) = 7.75$, $p < .001$, Cohen’s $d = .37$. People also perceived opponents as being more rational ($M = 4.92$, $SD = 1.39$) when they had personal experiences than when they had facts ($M = 3.93$, $SD = 1.49$; $t(1789) = 14.55$), $p < .001$, Cohen’s $d = .69$. Surprisingly, a main effect of evidence types on people’s *willingness to interact* responses was also revealed. People were more willing to interact with their political opponents if their views were supported by personal experiences ($M = 5.51$, $SD = 1.32$) than by facts ($M = 5.12$, $SD = 1.39$), $t(1793.7) = 6.04$, $p < .001$, Cohen’s $d = .28$.

These findings showed that people had more respect for their political opponents, perceived them as more rational, and were more willing to interact with them when the opponents’ views were based on personal experience rather than facts. Surprisingly, the change in stimuli in Exp. 2 did not reveal a preference for facts over personal experiences or mediate the gap between people’s preferences. Instead, we saw that people’s preferences for personal experiences over facts when evaluating political opponents persisted across both experiments. The matched stimuli used in Exp. 2 further revealed a significant effect of evidence type on the dimension of *willingness to interact*, which was not observed in Exp. 1. The results here provide strengthened evidence for Kubin et al. (2021)’s theoretical framework, which proposed that differences in political opponents’ choice of evidence have downstream consequences for people’s *respect* for them, perceived *rationality* of their opponents, and their *willingness to interact* with others who hold different opinions than them.

Experiment 3

In Experiment 3, we asked how personal details combined with facts could affect people’s evaluations of political opponents. So far, Exp. 1 and 2 have put *personal experiences* and *facts* directly against each other when probing people’s preferences. People revealed a preference for opponents with first-person personal experiences than those with facts. A natural extension to the current findings was to ask how this gap might be bridged. In reality, it could be challenging to expect people to possess first-person personal experiences for each policy position they hold. Based on prior work showing that people are more sensitive to details and stories from individuals compared to the statistics from the mass (Small et al., 2007), here we aimed to

test the effectiveness of personal details on people’s evaluations of opponents, even when these details are described from a third-person perspective. To examine this question, we provided participants with two new types of political opponents: an opponent who had personal experiences with a policy position but also knew facts supporting this position. In contrast, we created another opponent who knew facts supporting their policy position but also knew of someone else’s specific personal experiences. This experiment is pre-registered ([link](#)).

Methods

Participants We recruited 207 U.S. participants from Prolific. 7 participants were excluded from further data analysis based on the same pre-registered inclusion criteria as Exp. 1 and Exp. 2 (final $n = 200$).

Stimuli A total of 12 vignettes for three topics, coal regulation, gun control, business tax increases, were taken and edited based on Exp. 1 and 2 (see Table 1). Our stimuli combined facts and personal experiences to create two new, hybrid evidence types. In one evidence type, the fact vignette served as the base with an additional third-person personal detail. In another, the personal experience vignette acted as the base with additional facts.

Procedure The method in Exp. 3 is identical to Exp. 2 except participants are asked both sets of comprehension checks.

Results & Discussion

People evaluated their political opponents higher on the dimensions of *respect* and *rationality* when these opponents had personal experiences and knew facts compared to when the opponents had facts and third-person personal details, yet they were more willing to interact with the latter. We found that participants respected political opponents more when their views were supported by personal experiences with facts ($M = 4.96$, $SD = 1.54$) compared to by facts with third-person personal details ($M = 4.42$, $SD = 1.65$), $t(1789.7) = 7.05$, $p < .001$, Cohen’s $d = .33$. Furthermore, people were much more likely to perceive their opponents as more rational when they had personal experience with facts ($M = 4.96$, $SD = 1.42$) than facts with third-person personal details ($M = 4.03$, $SD = 1.46$), $t(1797) = 13.63$, $p < .001$, Cohen’s $d = .64$. However, people were less willing to interact with opponents with personal experiences and facts ($M = 5.54$, $SD = 1.25$) than those with facts and third-person personal details ($M = 5.25$, $SD = 1.39$), $t(1776.9) = -4.59$, $p < .001$, Cohen’s $d = -.22$.

When comparing the new evidence types in Exp. 3 against the original evidence types in Exp. 2, further analyses did not reveal any significant differences between people’s ratings on *respect* and *rationality* dimensions for opponents who knew only facts and opponents who knew facts with third-person personal detail. For *respect*, $t(1795.7) = 1.44$, $p = .15$, and for *rationality*, $t(1797.1) = 1.51$, $p = .13$. Similarly, we found no effects of whether opponents have personal

experiences (from Exp. 2) or personal experiences with facts on people's *respect* and *rationality* ratings: for *respect*, $t(1794.8) = .52, p = .60$, and for *rationality*, $t(1796.8) = .64, p = .52$. However, there was a main effect of evidence type on people's *willingness to interact*, where people were more willing to engage with opponents if their views were supported by facts with third-person personal details compared to only facts, $t(1776.7) = 6.77, p < .001$, Cohen's $d = .32$. We also found that people were slightly less willing to engage with opponents who had personal experiences with facts than opponents who only had personal experiences, $t(1793.8) = -3.93, p < .001$, Cohen's $d = -.19$.

Compared to results in Exp. 2, we found that the two hybrid evidence types did not alter people's preferences for personal experiences over facts when evaluating how much they respected their political opponents or the perceived rationality of these opponents. Yet, unlike the previous findings where people's ratings for *respect*, *rationality*, and *willingness to interact* were across the board higher for personal experiences over facts, results from Exp. 3 revealed an intriguing dissociation between people's *respect* and *rationality* ratings for political opponents and their *willingness to interact* with them. People were more willing to interact with political opponents whose views were supported by facts with third-person personal details than opponents with other evidence types.

General Discussion

We found that personal experiences are preferred over factual evidence as a justification for dissenting political opinions. Furthermore, combining personal experiences and factual evidence revealed a dissociation between people's respect and perceived rationality for political opponents and their willingness to interact with them.

Exp. 1 replicated the prior finding that political views that were based on personal experience increased people's respect and perceptions of rationality toward political opponents but not their willingness to interact with their opponents (Kubin et al., 2021). However, we were unsure if the preference for personal experiences over facts could be partially enlarged by the specific features in the vignettes. In our first extension to this work, we asked whether people's preferences would persist after the vignettes for opponents with personal experiences and opponents with facts were maximally identical. We replicated results from Exp. 1, showing that people respected their political opponents more and perceived them as more rational when their views were supported by personal experiences than by facts. Moreover, Exp. 2 revealed a new result that personal experience increased willingness to interact with opponents compared to facts. Collectively, these findings provided support for Kubin and colleagues (2021)'s theoretical model that personal experiences could lead to increases in people's respect for their political opponents, perceived rationality for these opponents, and willingness to interact with them.

Our second and final extension explored the interaction between personal experience and fact-based evidence. We

find that combining evidence types does not result in shifts in people's respect or perceived rationality for their opponents. However, we found a surprising dissociation between people's evaluations of respect and rationality for their political opponents and their willingness to interact with them. While people still held more respect and perceived their opponents as more rational when their views were supported by personal experience with facts, people were more willing to interact with opponents whose views were supported by facts and a third-person personal detail.

As shown in our results, when it comes to considering people who hold different political opinions than oneself, it is possible for people to separate evaluations of respect and rationality from judgments of their willingness to interact with their opponents. While people might still hold opponents with personal experiences as more respectable and more rational, we found that integrating detailed personal information (even when it is from a third-person perspective) into factual evidence started to mitigate the differences between people's preferences. One possibility is that people's judgments on willingness to interact with their opponents could allow them to build common ground with their political opponents and later increase their respect for these opponents and the perceived rationality for them (e.g., after more exchanges or conversations).

Our work proposes a potential method for systematically investigating the effects of different evidence types on their persuasiveness. Future research should explore how the effect of evidence type vary when we change the specificity and quality of different evidence. Perhaps people do not necessarily find opponents with facts less respectable, less rational, or want to interact with them less, but that people have different criteria for evaluating what counts as a fact. Our finding in Exp. 3 suggests that more specific facts, such as one that includes personal details of an individual, could be evaluated more highly than one that included vague, general facts.

Political disagreement is a key part of democratic societies. Disagreement in general is an unavoidable part of human life. Our work reveals how people in situations of disagreements might evaluate each other based on what supporting evidence their opponent uses. We replicated and strengthened prior findings (Kubin et al., 2021) that people tend to respect their political opponents more, perceive them as more rational, and are more willing to interact with them, when these opponents' views were supported by personal experiences rather than facts. Importantly, we found that people's evaluations of their opponents could still be flexible beyond the simple divide of personal experience versus factual evidence. When people are provided with factual evidence with more specific details about individual's experiences, their evaluations of their opponents started to be shifted. Thus, this work opens up new possibilities as to how factual evidence can be used during political debates and disagreements when first person experiences are not available.

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References

- Burnham, T., McCabe, K., & Smith, V. (2000). Friend-or-foe intentionality priming in an extensive form trust game, *Journal of Economic Behavior & Organization*, 43(1), 57-73.
- Chalnick, A., & Billman, D. (1988). Unsupervised learning of correlational structure. In *Proceedings of the tenth annual conference of the cognitive science society* (pp. 510-516).
- Effron, D. A. (2018). It could have been true: How counterfactual thoughts reduce condemnation of falsehoods and increase political polarization. *Personality and Social Psychology Bulletin*, 44(5), 729-745.
- DeBruine, L. M. (2002). Facial resemblance enhances trust. *Proceedings of the Royal Society of London B: Series B: Biological Sciences*, 269(1498), 1307-1312.
- Del Vicario, M., Bessi, A., Zollo, F., Petroni, F., Scala, A., Caldarelli, G., Stanley, H. E., & Quattrocioni, W. (2016). The spreading of misinformation online. *Proceedings of the National Academy of Sciences*, 113(3), 554-559.
- Domberg, A., Köymen, B., & Tomasello, M. (2017). Children's reasoning with peers in cooperative and competitive contexts. *British Journal of Developmental Psychology*, 36(1), 64-77.
- Jenni, K. E., & Lowenstein, G. (1997). Explaining the Identifiable Victim Effect. *Journal of Risk and Uncertainty*, 14(3), 235-257.
- Kalla, J.L. and Broockman, D.E. (2020), Which Narrative Strategies Durably Reduce Prejudice? Evidence from Field and Survey Experiments Supporting the Efficacy of Perspective-Getting. *Preprint. Open Science Framework*. <https://doi.org/10.31219/osf.io/z2awt>.
- Kubin, E., Puryear, C., Schein, C., & Gray, K. (2021). Personal experiences bridge moral and political divides better than facts. *Proceedings of the National Academy of Sciences*, 118(6).
- Grossmann, I., Eibach, R. P., Koyama, J., & Sahi, Q. B. (2020). Folk standards of sound judgment: Rationality Versus Reasonableness. *Science advances*, 6(2), eaaz0289.
- Layman, G., Carsey, T., Horowitz, J. (2006). Party Polarization in American Politics: Characteristics, Causes, and Consequences. *Annu. Rev. Polit. Sci.*, 9, 83-110.
- Levine, E. E., Bitterly, T. B., Cohen, T. R., & Schweitzer, M. E. (2018). Who is trustworthy? Predicting trustworthy intentions and behavior. *Journal of personality and social psychology*, 115(3), 468.
- Pennycook, G., Bear, A., Collins, E. T., & Rand, D. G. (2020). The Implied Truth Effect: Attaching Warnings to a Subset of Fake News Headlines Increases Perceived Accuracy of Headlines Without Warnings. *Management Science*, 66(11), 4944-4957.
- Pennycook, G., Rand, G. (2019), Lazy, not biased: Susceptibility to partisan fake news is better explained by lack of reasoning than by motivated reasoning, *Cognition*, 188, 39-50.
- Rawls, J. (2005). *Political liberalism*. Columbia University Press.
- Slovic P. (2010) If I Look at the Mass I Will Never Act: Psychic Numbing and Genocide. In *Emotions and risky technologies* (pp. 37-59). Springer, Dordrecht
- Small, D. A., Loewenstein, G., & Slovic, P. (2007). Sympathy and callousness: The impact of deliberative thought on donations to identifiable and statistical victims. *Organizational Behavior and Human Decision Processes*, 102(2), 143-153.
- Stewart, A. J., Mosleh, M., Diakonova, M., Arechar, A. A., Rand, D. G., & Plotkin, J. B. (2019). Information gerrymandering and undemocratic decisions. *Nature*.
- Tobia, K. P. (2018). How people judge what is reasonable. *Ala. L. Rev.*, 70, 293.
- Vargo, C. J., Guo, L., & Amazeen, M. A. (2018). The agenda-setting power of fake news: A big data analysis of the online media landscape from 2014 to 2016. *New media & society*, 20(5), 2028-2049.
- Yousif, S. R., Aboody, R., & Keil, F. C. (2019). The Illusion of Consensus: A Failure to Distinguish Between True and False Consensus. *Psychological Science*, 30(8), 1195-1204.