Can Social Networks Counter Support for Political

Violence? Evidence from a Network Dyad Experiment

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Contents

1 Introduction

Support for — and acts of — political violence are increasing in the United States (Kalmoe and Mason, 2022; Kleinfeld, 2021). On January 6, 2021 hundreds of people violently attacked the United States Capitol Building in Washington D.C., where approximately 140 police officers were assaulted at least seven deaths are connected to the attack (*24 Months Since the January 6 Attack on the Capitol*, 2023; Cameron, 2022). The threat of violence has not subsided, with the US Capitol Police reporting they investigated over 8,000 threats against members of Congress in 2023 (Winston, 2024). Beyond Congress, a survey of local and state elected officials found one in six experienced a threat due to their job and 30% knew a colleague who had left their job due to concerns about safety (Edlin, 2022). In 2023 and 2024, violence was also reported at numerous political protests related to the Israeli-Palestinian conflict (CBS News). These protests and the often incendiary rhetoric associated with them drew nationwide attention, as politicians and pundits debated the meaning of popular protest chants that some saw as inciting violence (NPR).

Critically, not only are acts of violence increasing, but the broader public's willingness to support violence is increasing, as well. A recent nationally-representative survey found that 36% of Americans agreed "the traditional American way of life is disappearing so fast that we may have to use force to save it" (Wintemute et al., 2023). While likely an overestimate due to vague descriptions of violence (Westwood et al., 2022), other measures show less than 10% supporting specific acts of violence toward political outgroup members, including vandalism (7.6%), assault (3.7%), and murder (2.1%) (Iyengar et al., 2024). These measures show that a majority of Americans reject violence toward political outgroup members. Nevertheless, even a small percentage of Americans still translates to millions of people who support these acts. Importantly, support for political violence is not a belief polarized along partisan lines. Republicans and Democrats report similar levels of support for these acts (Kalmoe and Mason, 2022). The support we see today — and any increase in this support that may occur — represents a growing danger to American democracy.

In this project, we seek to understand the effect interpersonal communications within social networks have on moderating dangerous beliefs in the network, in particular, moderating support for political violence. Social networks have been shown to be a powerful way to increase outcomes beneficial to a democracy, like voting (Bond et al., 2012; Nickerson, 2008; Sinclair, 2012). Networks wield this influence when members share political information, beliefs, and behaviors with other network members, and interpersonal communication is a key way this occurs. For example, Nickerson (2008) found the effect of a get-out-the-vote door-knocking campaign that spoke to one spouse increased the voting behavior of the non-contacted spouse. This finding suggests the contacted spouse influenced the non-contacted spouse, and the effect was likely transmitted during interpersonal communications.

In the context of support for political violence, we expect those who do *not* support political violence can dissuade others in their network who support political violence from this position through interpersonal communication. One important way network ties influence others through interpersonal communications is by unknowingly leveraging the power of being a trusted source cue and exerting ingroup social pressures. Moreover, we expect network members knowingly can make more effective persuasive appeals to their network connections by personalizing the communication in light of their relationship with

the network member, tailoring their message in a way that is most likely to resonate. This leads us to our primary hypothesis about the effect of in-network interpersonal communication on support for political violence:

> **Primary Hypothesis:** Among those who support political violence, conversation on the topic with an in-network source who does not support political violence will *decrease* their support for political violence, relative to no conversation.

To test this expectation, we propose an experiment involving real network dyads. We will recruit network dyads who disagree on their support for political violence, randomize whether the dyad has a conversation about political violence or not, and observe changes in support for political violence among the dyad members. [1] Our key expectation involves the dyad member who initially supported political violence. We expect that support for political violence - which we measure in several ways to enhance robustness - will decrease as a result of the conversation.

While we are primarily interested in the effects of conversation on the more extreme member of the dyad, we also expect that these conversations may shape the more moderate member's views. Specifically, we believe that advocating for non-violence in a conversation with their real-world network tie will further decrease the moderate's already low support for violence.

> **Secondary Hypothesis 1:** Among those who do not support political violence, conversation on the topic with an in-network source who disagrees will *decrease* their support for political violence, relative to no conversation.

Ceiling effects could be a potential problem here because the modal respondent reports the highest level of opposition to political violence. As a result, we will investigate this across several measures, including some extensions of general support for political violence, such as support for groups who engage in political violence and support for potentially violent political slogans.

Because persuasion relies to a large extent on source credibility, we theorize that there may be heterogeneous effects of conversation on persuasion, based on the degree to which the supporter of political violence finds the non-supporter credible. In this case, we argue that credibility will in large part be driven by perceptions of shared partisanship. Thus:

> **Secondary Hypothesis 2:** Among those who support political violence, the effect of conversation on decreasing support for political violence will be stronger if they perceive their in-network source to be a copartisan, relative to a non-copartisan.

2 Research Design

To rigorously test these hypotheses, this study contains three distinct survey waves. Wave 1 collects pre-treatment covariates for those who primarily do *not* support political violence ("egos"). Wave 2 collects pre-treatment covariates for those real-world social

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[1]This experiment is funded by the National Science Foundation and received IRB approval from both institutions that authors are affiliated with.

ties referred by egos whom the egos believe *do* support political violence ("alters"). The experimental portion of our study occurs in Wave 3 where the ego-alter dyad is randomly assigned to participate in a synchronous online conversation about political violence or not.

2.1   Sampling and Population of Interest

Before discussing the specifics of each survey wave, we note that we will use Cloud Research's *Connect for Researchers* Panel and platform to field the study. Connect is a crowdsourcing platform for online research that is well-regarded among survey researchers and has recently been demonstrated to contain high-quality respondents (Kay, 2024). The primary reason we chose Connect is because of its promise for us to use its panel participants who do not support political violence to recruit a real network dyad who does support political violence to participate in the study with them, as we will discuss next. We also chose Connect because it allows researchers to directly communicate with subjects (similar to platforms like MTurk) which is important for this multi-wave study to minimize attrition. We explored several other vendors, many of whom said the requirement to recruit real network dyads who disagreed on this topic was too complicated for their platform or panel and/or the cost was too high for our budget. Connect was the best fit for our design.

In this research, we are interested in a specific kind of network dyad in the American public. We are interested in people who support political violence who have someone in their life who disagrees on these views. As such, we are not interested in people who have entirely homogeneous networks on support for political violence. Moreover, among network dyads that *do* feature disagreement on this topic, our interest is among those who might reasonably have a conversation about these views. As such, we are not interested in people who have heterogeneous networks on support for political violence but would never be aware of this disagreement or the disagreement would never surface in interpersonal exchanges. It is a scope condition of this project that our results will have limited ability to generalize beyond those who have some willingness to engage in interpersonal communication on this issue. As such, our experiment does not test a hypothetical intervention to reduce support for political violence where the real-world implementation and scalability of it is unclear. Instead, our experiment estimates the causal effect of conversations that are actually happening in network dyads in our population. We believe our focusing on a narrower population of interest provides important external validity to our estimated treatment effects.

We believe our snowball sampling design will recruit dyads from this population. Even so, we are not seeking to estimate a PATE for this population. Our focus in this design is recruiting real network dyads, and we are not confident we can also design this study to do so in a way that ensures our sample is representative of this population. Therefore, our estimand of interest is a SATE—the effect of real-network dyads (of the type we describe above) conversing about political violence or not on their support for political violence.

2.2   Pre-Screening: Maximizing Sample Size & Statistical Power

There are key hurdles in each of the three waves of the study to recruiting a large enough sample size and being powered to detect effects. We discuss these hurdles and our ap-

proach to overcoming them in this section.

The first step to recruiting enough dyads to estimate our desired treatment effects is recruiting enough viable egos. We need enough egos who: (1) do not support political violence, (2) know someone who does, and (3) actually reach out to invite this person to the study. We conducted a pilot to assess how difficult it would be to achieve a sizable sample of egos that meet these criteria. However, we did not actually have these egos invite someone to the platform and survey. We only asked their willingness to do so, thus it is an overestimate of how many egos would actually do so.

We fielded the pilot survey on CloudResearch's Connect panel on April 18, 2024.[2] We gathered 502 responses. Including "leaners," we have 246 Democrats, 222 Republicans, and 34 pure Independents. We also have good representation across parties on gender, age, and race. Our question wording for support for political violence also differed in this pilot.[3]

We found that about 95% of Democrats and 81% of Republicans either strongly or somewhat disagreed with political violence in this pilot. However, only 37% of Democrats and 30% of Republicans do not support political violence **and** report probably or definitely knowing someone who does. And when also requiring that they would be willing to invite that person to a study, we find that these percentages decrease to 18% and 20%, respectively. As anticipated, it will be difficult, but not impossible, to recruit enough egos willing to engage in the snowball sampling procedure.

To maximize our chances of recruiting a large sample of egos that meet these criteria within our budget, we will field a screener question in partnership with Connect. Specifically, Connect asked its panel the following item:

> Some Americans deeply disagree with their government and with other people about politics. For example, they may see political officials or institutions as corrupt, they may view the actions of other members of the public as going against their core values, or they may believe government policies violate fundamental rights. In these disagreements, Americans sometimes try to change things through a variety of actions, including voting or protesting.
>
> Sometimes, however, Americans **also use violence**, including assaulting people with opposing views, harassing public officials, destroying or defacing property, taking up arms to fight the state, or harming police officers or soldiers.[4]
>
> Do you personally know anyone who you think would ever approve of Americans using violence to achieve political goals?
>
> - I know someone who definitely approves of Americans using violence to achieve political goals
> - I know someone who probably approves of Americans using violence to achieve political goals
> - I do not know anyone who approves of Americans using violence to achieve political goals

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[2]The survey was approximately 10 minutes and paid respondents $1.50.

[3]We asked the following: "People have different opinions about the present state of the United States government and its successes or failures. Next we will ask you a few questions about the following statement: Because things have gotten so far off track, true American patriots may have to resort to violence in order to save our country."

[4]Note: this paragraph was presented as hover text next to the main question.

The primary reason for the qualifier question is to conserve resources on Wave 1. Most people disapprove of political violence, but from our piloting, we know that only a small proportion of those people report knowing someone who approves of political violence, and an even smaller proportion is willing to invite them to a study on the topic. Therefore, we use this qualifier question to better target our recruitment to our population of interest in this wave.[5] Specifically, we will invite anyone who reports "probably" or "definitely" knows someone who approves of political violence to take the Wave 1 survey.

We hope to survey at least 5000 of these respondents for Wave 1; however, this qualifier is only a single item in our screening criteria for egos. This group will still include participants who will not qualify as egos for the study for two reasons. First, the screener does not screen out people who *support* political violence themselves. Our pilot data and prior research suggests this will be a small proportion of respondents. Second, while many respondents report knowing someone who supports political violence, only a proportion of these respondents will be willing to then invite the person to the study and will take the time and effort to do so. We will incentivize participation in this component of the study with a $10 bonus if their recruited network tie signs up for Connect and completes the Wave 2 study.

Based on (1) our pilot results, (2) the pre-Wave 1 screener, and (3) the incentive, we estimate that 20% of pre-screened Wave 1 participants will *attempt* to recruit an alter for Wave 2, leading to 1000 Wave 2 *invitations*. But, we speculate that one-third of the invited alters will complete Wave 2, leading to about 330 complete dyads. We hope for this high of a snowball sampling success rate because the invitation is coming from a network source and includes an incentive ($10).

After Wave 2, the alter-ego dyad will be invited to the synchronous Wave 3. We expect to have lower attrition between Waves 2 and 3 since the participants have already demonstrated their willingness to engage with each other and the research study. Thus, on the high end we expect to have around 300 dyads (600 respondents). On the low end, if 50% of subjects attrit between Waves 2 and 3, we would still be sufficiently powered with 165 dyads (330 respondents) in Wave 3.

2.3   Wave 1: Ego Recruitment Survey and Alter Invitations

The Wave 1 survey serves many purposes in our design. First, it collects pre-treatment covariates, including demographics, psychological attributes, political predispositions and political views, for those who primarily do *not* support political violence ("egos"). In Wave 1, egos begin by answering questions pertaining to demographic information and potential pre-treatment moderators.

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[5]Notably, this means we will not be able to report descriptive statistics about how many moderates know someone who is an extremist (since we are pre-selecting for that). However, our pilot testing on both Connect and YouGov samples can give us leverage on these descriptives. Also, our descriptive statistics of moderates will not be of *all* moderates but rather only of moderates who also know someone who is an extremist. This external validity limitation is reasonable given our goal of evaluating the power of interpersonal relationships to deradicalize.

2.3.1 Demographics

We will collect the following demographic information, in addition to what Connect already provides[6] in either Wave 1 (ego) or Wave 2 (alter) of the survey:

- Zip code
- Residence type (urban, rural, suburban)
- Political interest
- Partisanship
- Religion
- Evangelical
- 2020 vote choice
- 2024 vote choice
- Ideology
- Military service
- Social media use

2.3.2 Moderators

We include several potential moderators of treatment effects, both to study potential heterogeneous effects of interpersonal conversation and to descriptively characterize differences across our ego and alter sample pools. We collect this information in either Wave 1 (ego) or Wave 2 (alter) of the survey. This includes:

- **Interpersonal aggression**: The Bus-Perry Aggression Questionnaire, short-form scale from Bryant and Smith (2001). We shortened further to 1 question for each dimension.
- **Moral Foundations**: We use the first half of the classic Moral Foundations scale and shorten to 1 question per dimension. Note that for the "harm" question we reversed it from being about "care" to being about "harm" so its directionality matched the other questions we used here.
- **Interpersonal Trust**: Two items used in Forscher and Kteily (2020), asking how many people one trusts on matters of deep personal importance and whether those people share political views.
- **Feeling Thermometers:** Feeling thermometers about partisan groups (Democrats and Republicans), drawn from the ANES.
- **Belief in Great Replacement:** Two items adapted from the Southern Poverty Law Center.
- **Conspiratorial Thinking**: The 5-item Conspiracy mentality questionnaire from Bruder et al. (2013).
- **Racial Attitudes**: 4-item FIRE racial attitudes scale (DeSante and Smith, 2020).
- **Election Mistrust**: One question regarding beliefs that Joe Biden was not the winner of the 2020 election
- **Gun Control**: One question regarding beliefs that gun are necessary to protect oneself from the government
- **Economics**: Two questions about economics issues, the minimum wage and tax policy (relevant for control condition), drawn from the ANES.

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[6]Connect provides the following demographics: age, sex, race, ethnicity, education, occupation field, household income, marital status, gender, partisanship, and employment status.

2.3.3 Pre-Treatment DV Measurement

After the moderator section, respondents will then be asked about their support for political violence. This measure serves multiple purposes. First, it is a pre-treatment measure of our primary outcome of interest. Second, it begins our screening process for egos. We are only interested in participants that do *not* support political violence at this stage. The question wording is as follows:

> Some Americans deeply disagree with their government and with other people about politics. For example, they may see political officials or institutions as corrupt, they may view the actions of other members of the public as going against their core values, or they may believe government policies violate fundamental rights. In these disagreements, Americans sometimes try to change things through a variety of actions, including voting or protesting.
>
> Sometimes, however, Americans **also use violence**, including assaulting people with opposing views, harassing public officials, destroying or defacing property, taking up arms to fight the state, or harming police officers or soldiers.
>
> What do you think? Do you approve or disapprove of Americans using violence to achieve political goals?

We also ask a secondary question about potential support for political violence: "When it comes to using violence to achieve political goals, how often do you think the ends justify the means?" While this is not our primary measure, we include it to reduce potential social desirability effects associated with "approving" of political violence.

2.3.4 Recruiting In-Network Ties

Participants who answer that they "somewhat" or "strongly" disapprove of political violence will then be asked if they know someone who *does*. If they do, they will be asked several questions about the relationship with the real network dyad, both for descriptive purposes and to test potential heterogeneous effects based on relationship type. This includes:

- Frequency of discussion, of political discussion, and of political violence discussion
- Nature of relationship (e.g. family member, friend)
- Contentiousness of the relationship
- Perceived similarity of the pair demographically

These respondents who know someone who they believe supports political violence constitute our pool of "egos." We then ask these respondents a critical question to the snowball sampling element of our design—are they willing to invite their real social contact who supports political violence to participate in the study? Regardless of their answer to this question, the final element of the Wave 1 survey asks a battery of items about the social network tie (e.g., type of relationship, history of political discussion, etc.).

Specifically, we ask the ego to reach out to their friend[7] to join the study by sharing a link via email, text or direct message. We also provide suggested text to use when

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[7]We use the term "friend" in this pre-analysis plan in some places, but the person could be a family member, coworker, acquaintance, or have any other relationship with the ego.

contacting their friend. We have egos involved in the invitation process, rather than an alternative design that requests emails that the researcher then uses to recruit alters, for several reasons. The main benefit of this approach is the likelihood of recruiting many more dyads through a more natural invitation process. If we ask participants to provide an email address, it may limit the number of alters we recruit. Many people may not have the email address of their network contacts. Moreover, they may worry about what researchers will say in the email or what we will do with the contact information.

One may be worried about opening the door to communication between egos and alters at this stage of the study. However, we note that Wave 3 requires dyads to communicate in order to begin the survey at the same time, so pre-treatment communication between the dyad is already a necessary component of the study design (we discuss this more in the Wave 3 section of this PAP). With this concern in mind, we ask questions in Waves 2-3 about the type of communication egos and alters have had about the topic of political violence between the survey waves. In sum, we believe the benefits for maximizing sample size via the more natural recruitment process outweigh the cons of dyads potentially discussing the topic pre-treatment.

Another empirical downside of this plan to recruit dyads via the more natural process of egos reaching out to their contacts is that we will not know all *attempts* made to recruit the alters. Therefore, we will not be able to estimate the proportion of attempts that were successful to conceptualize this step in the political discussion process. However, we will do our best to measure attempts to recruit by asking participants to self-report if they invited a friend.

2.3.5 Logistics

Our instructions to the ego will explain that their network contact will need to complete two steps. First, they will need to sign up as a participant with Connect. The ego is supplied a personalized link (allowing us to track which alter is recruited by which ego) to share with their recruited network tie. Connect has customized their survey sign-up page so that respondents with this link can do an expedited sign-up for Connect, getting day-of approval to create an account and becoming auto-qualified to take Wave 2 of our survey. Second, they will need to complete a very similar survey as the one the ego just completed. To incentivize egos to invite alters, we will pay the ego a $10 bonus if the recruited alter does both of these steps. The alter is also paid $10 for signing up and completing Wave 2 of the study.

Connect will share a daily a list of participant identifiers for alters who signed up for Connect and the ego who invited them, which is key for our coordination of randomized conversation element of the study in Wave 3. We will send periodic reminders to egos who indicated a willingness to share the survey, but whose partner has yet to sign up with Connect.

2.3.6 Other design elements

For the minority of respondents who indicate that they *do* support political violence at Wave 1, we will ask them if they know someone who *does not*. We will not, however, ask them to actually reach out to this person. We will ask them the same follow-up questions regarding the nature of their relationship, as this will provide important descriptive information about the real-world network ties of individuals that do and do not support political violence. We will start the section with a "willingness to reach out" self-report

question, so while this is an imperfect comparison to those who are actually asked to invite a person to the survey, we can describe willingness to reach out for this group as well.

2.4 Wave 2: Alter Recruitment Survey

2.4.1 Survey Questions

Wave 2 surveys the snowball-sampled alters. This survey will be identical to Wave 1 in the questions asked, including the same demographics, psychological attributes, political predispositions, and political views. These participants will also be asked the same question about their support for violence.

We will also ask one additional follow-up question: whether the alter and the ego discussed the details of the survey before Wave 2 and, if so, what they discussed. This will allow us to assess potential spillover effects between Waves 1 and 2.

Wave 2 will finish with the alter answering the same questions about their relationship with the ego as the ego did in Wave 1. They will also be informed that we will be following up shortly about the synchronous Wave 3 portion of the study.

2.4.2 Logistics

Wave 2 will be opened at the same time as Wave 1 to accommodate alters who complete the recruitment step quickly, potentially signing up for Connect in the same day as their invitation.

2.4.3 Other design elements

When a participant completes Wave 2, we will have a full dyad that is qualified for Wave 3. After paying both the ego (Wave 1 participant) and the alter (Wave 2 participant), we will then invite both members of the dyad to Wave 3 using nearly identical message text. The message will include a Qualtrics link to Wave 3. Importantly, dyads will not be aware at this time of their treatment assignment (i.e. they will not be told *what* political topic they will be talking about in the study, only that they will be discussing politics with their partner. This helps avoid concerns about differential attrition between treatment and control groups.

Note that the completion of each Wave occurs on a rolling basis at the individual-level. For example, an ego can refer an alter on the first day Wave 1 is open, the alter can sign up and take the Wave 2 survey the next day, and that dyad can have their conversation in Wave 3 the next day.

2.5 Wave 3: Logistics Overview

Wave 3 contains the randomized experiment. Participants will coordinate a time to begin Wave 3 together. Since this is atypical of online survey studies, to avoid confusion, we make it clear in Waves 1-2 and the subsequent messages we send that this is a requirement of Wave 3. Moreover, when participants click on the Qualtrics link to open the survey, they will be reminded another time not to begin unless they have coordinated with their study partner.

Dyads will be referred to Wave 3 of the study using messages sent directly to their Connect accounts. Upon entering the survey, respondents will be asked for their Connect ID, in order to know which member of the dyad they are (i.e., the ego or the alter), and importantly, who their study partner is. This information is used for correct branching and chatroom assignment throughout Wave 3.

After entering their ID, Wave 3 starts with a few questions about the contact the dyad members had between previous Waves 1, 2 and 3. Dyads are then randomly assigned to treatment or control. In either case, at some point during the survey, the dyads will engage in a synchronous online discussion using an online chat software called Chatter. This app has an interface for participants like iMessage or WhatsApp. It facilitates text-only communication. It is a good fit for our experiment because researchers can pre-specify which participants are members of each chatroom. In our context, we need a chat app that allows for the dyad members to be in a chatroom together.

Daily, we will send payments to those pairs who have completed Wave 3. If the pair hasn't completed Wave 3, they will get pushed reminder messages through the connect messaging feature. This will be repeat, likely every 5 days, until the study is closed.

We provide more details about this wave, including treatment, measurement of dependent variables, and analysis strategy in the remaining sections of this pre-analysis plan.

3 Treatment and Control Conditions

In Wave 3, dyads will be randomized to treatment or control conditions. We describe the randomization procedure and the two experimental conditions next.

3.1 Randomization

As we discuss above, Wave 2 recruitment occurs on a rolling basis. To optimize participants' likelihood of engaging in Wave 3, we will also have treatment assignment and treatment administration occur as full dyads are recruited to the study.

A downside of the rolling nature of treatment randomization is that dyads will have variation in the date treatment is administered. External contextual factors may be a source of variation in the conversations. This feature of our design makes it similar to any lab-based conversation experiment that recruits participants over the course of a semester, for example.

To improve balance and power in our small-n study, we are implementing block randomization. Specifically, we will randomize dyads as they are recruited to the study to treatment or control depending on within copartisan or non-copartisan blocks. Copartisan blocks are defined by dyads where both participants are (1) a Democrat or lean toward being a Democrat, (2) a Republican or lean toward being a Republican, or (3) are both true Independents. Otherwise, dyads are categorized as cross-partisan. Because treatment and control must be assigned on a rolling nature, we generated randomization sequences according to our block randomization procedure. We used the `randomizr` R package and the `pbrPar` and `genSeq` functions to do so. We generated balanced treatment assignment sequences per block assuming 166 dyads per block.[8] We generated the

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[8]We anticipate 330 dyads, but in order to generate balanced treatment assignment sequences with 50% of participants assigned to treatment and control per block, we generated assignments for an even

random assignment sequences on August 26, 2024, prior to data collection.

3.2   Control Condition

If assigned to the **control condition**, we immediately collect respondents' answers on our primary outcome of interest — support for political violence, *before the control dyad interacts.* We also collect all secondary outcomes that do not pertain to the conversation itself at this point. **Thus, the control condition is a no-conversation control.** However, we still want the real network dyad to interact at some point during the study, even if assigned to control. Therefore, *after they answer the main outcome questions*, we ask the control dyads to complete the same filler task as extremists in the treatment do, before then having a conversation about an alternative topic: the state of the U.S. economy. After the conversation, the dyad will answer questions about the interpersonal experience during the chat, which will allow us to assess differences in the social experience of these two types of conversations.

Thus, in the control, after answering the initial DV section, both the alter and the ego receive a filler task that asks them to clear their mind by focusing on several different potential aspects of their daily life. We include this filler task for the control group because those assigned to the treatment group are required to complete a task of a similar length. We intend for the inclusion of this design element to minimize some effort-based differential attrition across arms - keeping the control and treatment surveys the same overall length. The filler task that all control respondents (both egos and alters) read is as follows:

> In a few moments, we will ask you to talk to your study partner about something that may be difficult to talk about—**the state of the economy in the United States.**
>
> It can be hard to disagree with others on issues that build on our world views, values, and political beliefs, even if we agree on many other things. Before you begin your conversation, we'd like you to clear your mind by focusing on regular aspects of your day-to-day life. People spend their time doing a variety of things. To help you get started thinking about your day, we wanted to share some ideas of what you might reflect on:
>
> **Work or School.** Work or school often occupies a significant portion of most people's days. For many adults, this involves heading to an office, a job site, or working remotely from home. Daily tasks can include attending meetings, collaborating with colleagues, managing projects, and completing specific job duties. For students, the day may be filled with attending classes, participating in discussions, completing assignments, and studying for exams. You could describe some of these work or school tasks you engaged in today.
>
> **Leisure.** Leisure activities are another important aspect of daily life. People engage in a variety of leisure pursuits such as reading, watching movies or TV shows, playing video games, or exploring hobbies like painting, knitting, or playing a musical instrument. These activities offer relaxation and enjoyment, helping individuals to unwind and recharge. Socializing with friends and family, whether in person or through digital platforms, also falls into this

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number of units per block (166).

category. You could describe some of these leisure or social activities you engaged in today.

Wellness. Exercise and wellness activities are essential for maintaining physical and mental health. Many people incorporate fitness routines into their daily schedules, such as going to the gym, playing sports, running, cycling, or practicing yoga. In addition to physical exercise, many people find that their days include other aspects of physical and mental self-care, including doctor visits, or wellness practices like meditation. For others, wellness tasks may involve taking care of family members and ensuring their physical and mental wellbeing. You could describe some of these wellness tasks you engaged in today.

Errands. Errands and household tasks are another significant part of daily life. These include grocery shopping, cooking, cleaning, laundry, yard work, and other chores necessary to keep a household running smoothly. Managing finances, paying bills, and handling maintenance or repair tasks also fall into this category. You could describe some of these household tasks you engaged in today.

After the filler task, control respondents then receive the following instructions for their conversation before they enter the chatroom:

In this chatroom, we ask that you discuss the following topic with your conversation partner: **the state of the economy in the United States.**

Some Americans deeply disagree with their government and with other people about politics. For example, they may disagree about how much they should be taxed, they may have different views about minimum wage increases, thinking that this could help working class employees but perhaps also hurt small businesses. Americans may also have differing views about competition from abroad, with some preferring open trade policies to help consumer get affordable goods and other concerned about how cheaper imports might affect US jobs. In these disagreements, Americans sometimes try to change things through a variety of actions, including voting, advocacy or getting involved in political campaigns.

Some recent examples in the United States regarding this issue that you might discuss include, but are not limited to *[randomize order]*:

- The so-called US "trade war" with China over tariffs (taxes on American/Chinese imports)
- Proposed tax plans by politicians to increase income tax for Americans making more than $1 million a year.
- The "Fight for $15" movement to push the federal government to establish a nationwide $15 minimum wage.
- The choice by the US Federal Reserve beginning in 2022 to start raising interest rates, making it more expensive to borrow money.
- The rise of inflation in the United States over the past few years and its effects for everyday Americans.

We would like you to have a conversation about the state of the US economy today. For example, you might talk about the following topics:

- What are the potential pros of policies like those listed above?
- What are the potential cons of policies like those listed above?
- What should politicians be doing instead? How can politicians achieve economic progress on issues that US voters they care deeply about?

3.2.1 Justification of Control Condition

We carefully considered the best control condition for this experiment. We are interested in the persuasive, deradicalizing effect of conversation with a real network contact who does not support political violence on the views of those who do. Our desired baseline is observing support for political violence when the network dyad did not have that conversation. The question then becomes—should they have no conversation or a different kind of conversation? If our control condition had the dyads talk, but about another topic (whether political or nonpolitical), there might still be persuasion on support for political violence because the participants know that is why they are included in the study. It was impossible to recruit network dyads with our snowball sampling approach who differ in attitudes on support for political violence without participants knowing that is why they were recruited. Therefore, the source cue and/or the act of interpersonal communication alone—even without discussing political violence—with someone who disagrees on support for political violence could lead extremists to moderate their views on the topic.

Therefore, as we will discuss next, our treatment is a bundled treatment of (1) conversation with a network dyad who has known disagreement on the topic of interest and (2) talking about the topic of interest. While future research could include additional experimental conditions to tease out how these different elements of a conversation affect the outcome, we could not include more than two experimental arms in our study for power reasons. Recruiting real network dyads with differing attitudes on support for political violence is a steep hurdle, so to maximize power, we opted for two conditions.

3.3 Treatment Condition

In the treatment condition, the network dyad will have a conversation about political violence prior to answering questions about support for political violence. Before the conversation, the *ego* will see text that shares several conversational tools they could use to have a productive, persuasive conversation with their social tie regarding political violence, equipping them with conversational strategies to more effectively communicate the negative consequences of political violence to their partner. The full text reads as follows:

> In a few moments, we will ask you to talk to your invited friend about something that may be difficult to talk about—**the use of political violence in the United States today**.
>
> It can be hard to disagree with others on issues that build on our world views, values, and political beliefs, even if we agree on many other things. Before you begin your conversation, we would like you to imagine how you might open this conversation. This might be a tough conversation to start, so we wanted to share some ideas that others have found helpful. *[Randomized order of the prompts]*

Personal Experiences. You could open this conversation by describing personal experiences you have had with political violence, such as witnessing or participating in a protest where there was violence, facing challenges explaining news coverage of violence to others, such as children, or living in areas where violent or threatening political actions have taken place. Even if you have not been directly exposed to political violence, you could reflect on your personal emotional reactions to learning about violent incidents on the news. Whether you explain your personal direct or indirect experiences, you could try highlighting the emotional experience of how it made you feel.

Powerful Stories. You could open this conversation by sharing stories about others' experiences with political violence that you have heard about in the news, such as politicians being physically harmed, voters being threatened outside of polling stations, or people suffering from injury or even death during political protests. Even without direct personal experiences, these stories can powerfully resonate with people and some of these might come to mind. You might think about specific examples from the news that help clarify your personal views on when (if ever) political violence is justified. You might try to use these stories to foster empathy towards those experiencing the negative effects of political violence.

Effects of Political Violence. You could open this conversation by sticking to the facts and thinking about political violence in terms of the data available and its effect on other societal outcomes. For example, some people disapprove of political violence because it is one of the metrics used to rank democracies around the world, noting that the United States has recently declined in its ranking as a top democracy in part due to a recent rise in political violence against journalists, people of color, and people participating in protests. For example, a 2024 survey found that one in six election officials have experienced threats because of their job, including death threats that reference their children by name, and 30% know other election workers who have resigned due to safety concerns.

Social Norms. You could open this conversation by reminding others that the majority of Americans do not support political violence. For example, recent survey data suggests that over 96% of Americans do not support acts of political violence, such as assault, arson, assault with a deadly weapon, or murder. Even less extreme forms of political violence such as vandalism (92.4%) or protesting without a permit (68.2%) were opposed by the majority of Americans. These rates of opposition to political violence are consistent for both Republicans and Democrats and over time since at least 2022. Prominent political leaders across the political aisle have called on Americans to engage peacefully, rather than with violence. Furthermore, 78% of Americans view political violence as a problem, with only 2% viewing it as "no problem at all." Supporting political violence is uncommon and violates social norms across virtually all political and social groups in the United States.

This text is important substantively – as we can then analyze the actual conversation text to see if different conversational tools utilized by the ego were more or less effective in persuading alters to not support political violence – and ethically, as it provides the

egos (who do not support violence) with tools to steer the conversation *against* political violence. Briefly put, by preparing the ego for the conversation, we are giving the ego a persuasive "advantage." They will be prepared to start the conversation, they will have elaborated on their views beforehand, and they will have several discussion points at their disposal during the conversation.

The *alter* instead receives a filler task that asks them to clear their mind by focusing on several different potential aspects of their daily life—the same filler task the control receives. As we describe above with the control condition, the filler task the treated alter completes is designed to be completely unrelated to politics, but to give the alter in the pair a reading task of similar length prior to conversation. This is important substantively (e.g. that both participants are entering the conversation with a similar level of survey effort and fatigue), but also technically, as it ensures respondents reach the chatroom at a similar time.

Both dyad members are then both provided with instructions on how to engage in the chat portion of the study. They then proceed to a 15-minute text-based conversation. The full instructions read as follows:

> In this chatroom, we ask that you discuss the following topic with your conversation partner: the use of political violence in the United States today.
>
> Some Americans deeply disagree with their government and with other people about politics. For example, they may see political officials or institutions as corrupt, they may view the actions of other members of the public as going against their core values, or they may believe government policies violate fundamental rights. In these disagreements, Americans sometimes try to change things through a variety of actions, including voting or protesting.
>
> Sometimes, however, Americans also use violence, including assaulting people with opposing views, harassing public officials, destroying or defacing property, taking up arms to fight the state, or harming police officers or soldiers.
>
> Some recent events in the United States related to political violence include, but are not limited to *[randomize order]*:
>
> - Violence that occurred on January 6, 2021, at the US Capitol
> - Assault or assassination attempts against politicians, including former President Donald Trump (July 13, 2024), Michigan Governor Gretchen Whitmer (October 8, 2020), Congressman Steve Scalise (June 14, 2017), former House Speaker Nancy Pelosi's spouse Paul Pelosi (October 28, 2022)
> - Violent protests and riots surrounding issues such as the Israeli-Palestinian Conflict or the Black Lives Matter Movement, both of which have included arson, destruction of property, and injuries and death for protestors, counter-protestors, law enforcement officers, and civilian bystanders
> - Violence against government employees and their families including police officers, election officials, judges, public health officials and teachers.
>
> We would like you to have a conversation about the use of political violence in general to achieve political goals. For example, you might talk about the following topics:
>
> - How often do you think the ends justify the means of political violence?

- What are some potential costs or problems that result from people resorting to political violence?
- What should people do instead of using violence? How can people advocate for or achieve political goals without violence?

This prompt is designed to do a few important things. First, it provides respondents with specific examples that can provide a jumping-off point for the conversation, encouraging a more robust, substantive discussion. Second, the examples are purposefully designed to include violence across party lines, including prominent instances of political violence by both Democrats and Republicans. The prompt is also designed to minimize social desirability concerns regarding the discussion of political violence by including languages about justice, core values, and fundamental rights. By encouraging respondents to think broadly about what political violence means and what it is used for, we hope respondents will have a more nuanced discussion about this difficult topic. Finally, ending the prompt with specific questions they might address in the conversation is also designed to provide structure, giving respondents key questions they might try to answer in the course of their conversation.

Unlike the no-conversation control where participants answer the outcomes *prior* to their conversation, the treatment group will answer all outcome measures *after* their conversation.

4 Support for Political Violence Measurement

The outcome we seek to estimate is the effect of conversation on our single primary and two secondary hypotheses is support for political violence. Our conceptualization of support for political violence follows Baum et al. (2024) who describe the concept as "support for and acceptance of actors who engage in violence against the government (as opposed to personally engage in violence)" (pg. 576). This concept is broader than support for *partisan* violence (Kalmoe and Mason, 2022; Westwood et al., 2022), which focuses on violence as a means to pursing partisan goals.

We will be careful in our measurement of support for political violence following best practices outlined by Westwood et al. (2022). Because support for political violence is a low-prevalence preference, Westwood et al. (2022) explain how to reduce concerns about measurement error in the measurement of this concept. In particular, we will be cautious of disengaged survey respondents and consider *specific* forms of violence so responses are comparable across participants. We do not want participants bringing to mind considerably different conceptions of political violence when answering the question.

In what follows, we describe how we measure support for political violence in a variety of ways, making clear which we are preregistering as our primary approach.

4.1 Primary Measurement Approach

Our primary measurement of support for political violence re-asks respondents the question they received in Waves 1 or 2 of the study, immediately after their conversation about political violence (treatment), or *prior* to any conversation about the economy (control). We include descriptive text with this item, including examples of political violence in the United States, to address the concerns identified by Westwood et al. (2022) when measuring this concept.

Some Americans deeply disagree with their government and with other people about politics. For example, they may see political officials or institutions as corrupt, they may view the actions of other members of the public as going against their core values, or they may believe government policies violate fundamental rights. In these disagreements, Americans sometimes try to change things through a variety of actions, including voting or protesting.

Sometimes, however, Americans **also use violence**, including assaulting people with opposing views, harassing public officials, destroying or defacing property, taking up arms to fight the state, or harming police officers or soldiers.

Do you approve or disapprove of Americans using violence to achieve political goals?

- Approve
- Somewhat approve
- Neither approve nor disapprove
- Somewhat disapprove
- Disapprove

4.2 Additional Measurement Approaches

We measure support for political violence three additional ways. First, we ask an additional follow-up question pertaining to the descriptive text above. This question assesses support through the frequency with which political violence may be justified. This phrasing may reduce the social desirability effects associated with supporting political violence, where people may be more willing to say violence is justified under certain circumstances rather than saying that the agree in general with the use of political violence.

When it comes to using violence to achieve political goals, how often do you think the ends justify the means?

- Always justified
- Often justified
- Sometimes justified
- Rarely justified
- Never justified

Then, for additional robustness, we also ask respondents a 4-item agree-disagree scale of support for violence, adapted from Nivette et al. (2017). We will operationalize support creating an additive index from this scale, which reduces measurement noise compared to a single item measure.

- It's sometimes necessary to use violence to fight against things that are very unjust
- Sometimes people have to resort to violence to defend their values, convictions, or religious beliefs
- It's OK to support groups that use violence to fight injustices
- It's sometimes necessary to use violence to commit attacks, or kidnap people to fight for a better world

Finally, we also include the support for violence scale from Westwood et al. (2022), asking about support for specific acts of political violence. We adapt this scale in two ways. First, this scale originally includes specific, randomized male names. For simplicity, we use the term "a man," throughout. Second, this scale asks specifically about *partisan* violence. We altered items to be violence against those with opposing political beliefs, instead.

- A man was convicted of protesting without a permit. He was arrested by police after leading a protest against political beliefs he doesn't agree with on the grounds of the county courthouse. He made no effort to acquire the necessary permit for the protest and refused to leave when asked by police. Do you support or oppose his actions?
- A man was convicted of vandalism. He was arrested by police after he vandalized several large signs expressing support for governmental policies he doesn't agree with. Do you support or oppose his actions?
- A man was convicted of assault. He was arrested by police for throwing rocks at peaceful protesters. Although no one was seriously injured, paramedics bandaged a man with a head wound. Do you support or oppose his actions?
- A man was convicted of arson. He was arrested by police as he attempted to run from a fire he started his local Board of Elections office. Although he waited for the building to close for the night, several adjacent buildings were still occupied. Do you support or oppose his actions?
- A man was convicted of assault with a deadly weapon. He was arrested by police after driving his car into a crowd of protesters. Although no one was killed, several individuals were seriously injured and one spent a month in the hospital. Do you support or oppose his actions?
- A man was convicted of murder. He was arrested by police after surveillance footage was found showing him stabbing a prominent local Board of Election Commissioner to death. He targeted the victim because he believed the victim had prevented him from voting in the last election as part of a conspiracy to stop voters like him. Do you support or oppose his actions?

Though our primary interest is the attitudinal measures described in this section, in Section 6.3 below, we also describe additional measures closely related to support for political violence. First, we include two behavioral measures of support for non-violence. Second, we include potentially downstream outcomes from support for political violence—support for violent political slogans, support for violent groups, and support for democratic norms.

5   Analysis Strategy

5.1   Estimation Approach for our Primary Hypothesis

To test our primary hypothesis, we focus on **alters** in the dyad recruited via the snowball sampling procedure. We have two inclusion criteria. First, the alter's dyad must have completed Wave 3—including randomization to treatment and control, completion of their assigned experimental condition, and measurement of the primary outcome. Second, the alter must have answered the pre-treatment support for political violence item

(described in Section 4.1) stating they either "Approve," "Somewhat approve," or "Neither approve nor disapprove" of political violence. This is because it may be that egos have *incorrect* perceptions about the alters in their network and invite someone to the study who actually *disapproves* of political violence. We anticipate this will occur. However, we will not preemptively exclude these dyads from taking the full study and will conduct analyses that include these dyads in additional exploratory analyses. It is important that including these dyads (where the alter actually also disapproves of political violence) in Wave 3 does not jeopardize estimation of our primary treatment effects of interest. This is because we will omit alters from estimation based on a *pre-treatment* measure and omitted alters will be balanced across treatment and control groups.

We have one main estimation approach, illustrated below. We will regress alters' post-treatment support for political violence (Y_i) (the five-point scale described in 4.1) on their treatment status (X_i), and the pre-treatment measure of the outcome P_i (which is a three-point subset of the five-point scale for included alters) to increase precision (Clifford et al., 2021).

$$Y_i = \beta_1 X_i + \beta_2 P_i + \epsilon_i \tag{1}$$

5.2   Estimation Approach for our Secondary Hypotheses

Secondary Hypothesis 1

We will estimate Secondary Hypothesis 1 (treatment effects of conversation among the egos) using the same model as with the alters. Our first inclusion criteria is the same—egos are only included in treatment effect estimation if they completed Wave 3 (randomized to treatment, engaged in treatment, and answered political violence outcome). Our second inclusion criteria is that egos do not support political violence, but we are already screening egos in Wave 1 for this criteria, so any ego that completes Wave 3 will be included in treatment effect estimation. We will present results from the same estimation approach as described in Section 5.1.

$$Y_i = \beta_1 X_i + \beta_2 P_i + \epsilon_i \tag{2}$$

Note that we are *not* preregistering an interest in detecting *different* treatment effect sizes for egos and alters, as we do not expect to be powered to detect a difference.

Secondary Hypothesis 2

Secondary Hypothesis 2 expects that treatment effects will be stronger for alters in co-partisan dyads. To estimate this treatment effect, we will include alters that meet the inclusion criteria outlined in Section 5.1, namely, that snowball sampled alters indeed display pre-treatment support for political violence. Our main interest is β_3—the coefficient on the interaction between the treatment indicator (X_i) and the indicator for whether the alter perceives the ego to be a copartisan or not (C_i). To operationalize copartisanship, we will use the perceived partisan similarity between the ego and alter, according to the alter as they answered in Wave 2 of the survey. This means that if an alter reports they are a Republican and that they perceive that their friend who recruited them shares their partisanship, this dyad will be labeled as co-partisan, even if the ego actually self-reports their partisanship as Democrat. We will include the pre-treatment measure of the outcome to increase precision.

$$Y_i = \beta_1 X_i + \beta_2 C_i + \beta_3 (X_i * C_i) + \beta_4 P_i + \epsilon_i \tag{3}$$

5.3 Robustness Checks for Primary Hypothesis

We preregister several robustness checks we will conduct for our estimated treatment effects for our primary hypothesis.

- We have three additional ways we are measuring attitudes toward political violence (See Section 4.2). These serve as robustness checks for our primary measurement approach. We will re-estimate treatment effects with each of these measures as the outcome.

- We will assess balance between our treatment and control groups for all collected pre-treatment covariates. We will do so separately for the included samples used in the estimation for Primary Hypothesis 1 (alters) and Secondary Hypothesis 1 (egos).

- We will also explore the inclusion of additional control variables in the interest of increasing precision.

- We will assess if there is any differential attrition after treatment assignment that could bias estimation of treatment effects.[9]

- We are estimating intent-to-treat effects. As a robustness check, we will assess if we had any issues with compliance in the study. This is a particular concern in the treatment group where we want to ensure participants indeed talk about their support for political violence. We will consult the conversation transcript to assess whether participants stayed on topic and whether there were any issues with treatment administration. Recall the control group is a no-conversation condition, and the balance tests will check to make sure treatment and control groups were balanced in how much the dyad discussed the topic of political violence between Waves 1-2 and Wave 3.

6 Exploratory Analyses

6.1 Heterogeneous Treatment Effects

Our primary hypothesis is interested in the main effect of conversation on views toward political violence among the alters. However, it is reasonable to assume that persuasion may be more or less effective depending on attributes of the alter. We plan to assess this potential heterogeneity in an exploratory fashion. Specifically, we have the following exploratory hypotheses:

- **Aggression:** Alters with higher *interpersonal aggression* will be less likely to reduce their support for political violence following conversation than alters with lower interpersonal aggression.

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[9]Pre-treatment selection into the study is a separate consideration we discuss in Section 7 as it would not bias treatment effect estimation.

- **Conspiratorial Thinking:** Alters with higher *conspiratorial thinking* will be less likely to reduce their support for political violence following conversation than alters with lower conspiratorial thinking.
- **Interpersonal Trust:** Alters with lower *interpersonal trust* will be less likely to reduce their support for political violence following conversation than alters with higher interpersonal trust.
- **Racial Attitudes:** Alters with more racially conservative attitudes – belief in the *great replacement* or high scores on the *FIRE racial attitudes battery* – will be less likely to reduce their support for political violence following conversation than alters with less conservation attitudes.
- **Ideology:** Ideologically *conservative* alters will be less likely to reduce their support for political violence following conversation than liberal alters.
- **Gender:** *Female* alters will be more likely to reduce their support for political violence following conversation than male alters.

A second source of potential treatment effect heterogeneity are the attributes of the dyad. These exploratory hypotheses are as follows:

- **Gender Similarity:** Dyads where each member is the *same gender*, will be more likely to reduce the alter's support for political violence than cross-gender dyads.
- **Racial Similarity:** Dyads where each member is the *same race*, will be more likely to reduce the alter's support for political violence than cross-racial dyads.
- **Positive Relationships:** Dyads that have historically had less contentious discussions about politics – *fewer arguments*, *positive tone* – will be more likely to reduce the alter's support for political violence than dyads with more contentious relationships (history of more arguments, less positive discussions).
- **Friends:** Dyads that contain *close friends* will be more likely to reduce the alter's support for political violence than dyads of other relationship types.
- **Gender Dynamics:** Dyads that contain *a female ego and a male alter* will be less likely to reduce the alter's support for political violence than dyads with a male ego and female alter.

To account for the large number of heterogeneous effects hypotheses, we will correct for multiple testing using Anderson's sharpened q-values (Anderson, 2008), improving robustness.

6.2   Mechanisms

We will also probe potential mechanisms underlying persuasion after interpersonal conversation. We plan to explore these mechanisms in three ways. First, we ask respondents about aspects of the conversation that they found important. Specifically, we ask:

> To what extent were the following important parts of the conversation you just had? [Important/not important/didn't occur]
>
> - I trusted my study partner's views on the issue
> - The issue resonated with me on an emotional level
> - My study partner shared personal experiences with the issue
> - My study partner shared experiences that others have had with the issue
> - My study partner shared factual information about the issue

- My study partner made me realize where most people stand on the issue

These questions each probe a different potential mechanism of persuasion that has been theorized to be important in the persuasion literature, including: source credibility (Pornpitakpan, 2004), emotion-laden communication (Dillard and Seo, 2013; Petty et al., 2015), personal narratives (Broockman and Kalla, 2016), empathy (Kalla and Broockman, 2023), information transmission (Petty et al., 1986), and meta-perceptions (Lees, 2022).

Second, we also ask about the social experience during the chat. These questions can be used to assess the correlations between self-reported positive/negative conversational experiences and attitude change. Specifically, we ask the following:

A few moments ago, you finished a task where we asked you to have a conversation:

- How would you describe your experience completing this task? (negative/positive)
- How would you describe the conversation? Check all that apply (Constructive; Engaging; Informative; Friendly; Tense; Disrespectful; Frustrating; Pointless)
- To what extent did you experience these feelings? Check all that apply (Awkward; Enthusiastic; Angry; Threatened; Disgusted; Anxious; Hopeful; Depressed; Bored)

Finally, we plan to conduct a content analysis of the chat transcripts themselves, using e.g. a software such as LIWC to measure overall tone and specific emotional elements (anger, anxiety) in the conversation.

6.3 Additional Dependent Variables of Interest

Our primary outcome of interest is support for political violence. Beyond this primary attitudinal interest, we next discuss four additional sets of outcomes we are interested in.

Behavioral actions *against* political violence

First, we will also ask two behavioral questions to examine how conversations with peers who are less supportive of political violence might also result in actual political actions. The behavioral tasks ask respondents to engage with a bipartisan non-profit organization that, in large part, works for every election to be safe from political violence. While behavioral manifestations of active support *against* political violence will likely be a rare occurrence in our study, these outcomes are useful for several reasons. First, they avoid a potential ceiling effect that may be a feature of attitudinal measures, especially for the egos who already do not support political violence pre-treatment. Second, they help avoid biases common in survey items, such as social desirability bias, by asking participants to engage in costly behaviors. Third, they assess how participants might engage with and stay involved with the issue beyond interpersonal communications. The behavioral tasks start with the following information:

States United Democracy Center is a bipartisan nonprofit organization. Their mission is to make sure every election is safe from political violence so that

every vote is counted and every voice is heard in American elections. Their website is at this link `<https://statesuniteddemocracy.org/>` (it will open in a new tab in your browser).

They connect state and local officials, law enforcement leaders, and pro-democracy partners across America with the tools and expertise they need to safeguard democracy. They are guided by a bipartisan Advisory Board of former state and federal officials, issue-area experts, and law enforcement leaders from both major political parties.

Next, we are going to ask about two ways you could get involved with States United Democracy Center: staying informed from the organization via email and donating to the organization.

After reading the information, the two tasks are randomized. For one of the behavioral outcomes, we ask respondents if they would like to sign up for the email listserv of this organization:

Would you like to join the States United Democracy Center email list to stay informed on the work they are doing? If so, you can click on this link `<https://statesuniteddemocracy.org/>` (it will open in a new tab in your browser) and scroll to the bottom of the page where you will find the following graphic, which you can click on to sign up.

[insert graphic]

If you signed up for the email list, please provide a screenshot of the confirmation screen. It will say "Your subscription to our list has been confirmed."

For the other behavioral outcome, we ask respondents to allocate potential funds between themselves and a charitable organization. We are interested in how they divide a potential (nonhypothetical) bonus between the organization and themselves. Respondents are given the following instructions:

We will conduct a drawing among everyone who completes this survey to pick one winner of an additional $50 bonus.

If you win the $50 bonus, you may:
a) Keep the money for yourself;
b) Donate the money to States United Democracy Center; or
c) Keep some of the money for yourself and donate some of the money to States United Democracy Center.

If you win, we will send you the amount you list for yourself as a bonus, and we will donate the amount you list as a donation to States United Democracy Center.

Please indicate now how much money you would like us to give to each beneficiary if you win. The two amounts you list should add up to $50.

Amount of money to keep for yourself:

Amount of money to donate to States United Democracy Center:

Total: $50

Downstream attitudinal outcomes

We ask three sets of questions that assess attitudes that may be downstream of support for political violence. We also want our study to be able to speak to politically-relevant and salient groups and rhetoric that people encounter in their everyday lives to understand how our primary interest in assessing attitudinal support for political violence may (or may not) translate to more tangible groups and rhetoric that may be more common topics of conversation.

First, we ask about support for violent groups. We ask about specific political groups that have been in the news recently due to their explicit or implicit support for or use of violence. These include four organizations on the political left and four on the political right. To operationalize these items, we will create an additive index measuring support for the four groups that align with the respondent's pre-treatment partisan self-placement. While we expect to find a decrease in support for violence groups overall, the harder and more difficult test will be if political conversation about political violence with a network tie can decrease support for those groups aligned more closely with one's political leanings.[10] Specifically, we ask respondents the following:

> How warm or cold do you feel toward each of the following groups? Please use the following scale where 0 means very unfavorable and cold and 100 means very favorable and warm. *[Slider response option from 0 to 100. We also include an option for "I've never heard of this group." Groups are presented in a randomized order.]*
>
> - Proud Boys
> - Patriot Front
> - Three Percenters
> - Oath Keepers
> - Antifa
> - Pacific Northwest Youth Liberation Front
> - Within our Lifetime
> - Nation of Islam

Second, we will ask about support for violent rhetoric. One of the reasons that support for violence is such a pernicious political attitude in society is that norms against violence can erode slowly over time, often through the use of inflammatory rhetoric that has violent undertones, even if it is not explicitly violent. To get at this potentially "slippery slope" towards support for political violence, we also explore the effect of these conversations on support for inflammatory political slogans and rhetoric. Specifically, we ask respondents:

> The following slogans have been used at various protests and rallies in the United States. To what extent do you consider these slogans to encourage or not encourage the use of political violence? *[Five-point likert scale response options from "Definitely does not encourage violence" to "Definitely does encourage violence." Slogans are presented in a randomized order.]*
>
> - White lives matter

---

[10]We note that we are not sure if the left-wing groups will form a scale with good properties, so we will conduct reliability analysis and exploratory factor analysis to assess the internal consistency and dimensionality of the index.

- You will not replace us
- Lock her up
- Don't tread on me
- Globalize the intifada
- By any means necessary
- No justice, no peace
- Fuck the police

We plan to examine these items individually as well as in an aggregate index similar to the organizations measures, averaging perceptions of the four "right-wing" slogans and the four "left-wing" slogans into two indices.

Third, we ask about support for democratic norms. While the majority of Americans do not support anti-democratic norms, support for political violence and a broader set of anti-democratic norms are likely correlated. It is possible that these conversations could thus have broader effects on support for the following norms. We also ask these items to help provide evidence about the scope of our treatment's effects. It may be that interpersonal conversation with network ties can reduce support for the topic of conversation, but not closely related ideas. We will aggregate scores on these questions into an index:

> For the next few items, we would like to know how important you think each one is to the United states maintaining a strong democracy. *[Five-point likert scale from "Extremely important" to "Not important at all." Questions are presented in a randomized order.]*
>
> - How important is it that news organizations are free to criticize political leaders?
>
> - How important is it that the executive, legislative, and judicial branches of government keep one another from having too much power
>
> - How important is it that elected officials face serious consequences if they engage in misconduct?

Willingness to Engage in More Discussions

A distinct feature of our experimental design is the recruitment and (randomized) interpersonal communication between real network dyads. Therefore, we are interested in any effects discussing politics has on future interpersonal communications, and particular, their willingness to engage in more political discussion with their real network tie.

> The next few questions ask about conversations you might have with your study partner **over the next few months**. *[All four-point Likert scales from "Very open" to "Very closed"]*
>
> - Over the next few months, how open are you to talking about **non-political topics** (like sports or pop culture) with this person?
> - Over the next few months, how open are you to talking about **politics in general** with this person?
> - Over the next few months, how open are you to talking about **political violence** with this person?

Affective polarization

Finally, we ask the standard affective polarization, or outparty animosity, feeling thermometers. We include these outcomes to ensure we can understand the effects, if any, on this worrying trend. It is our only outcome that directly assess partisan attitudes. Again, these items will help assess the limit of our treatment's effects, allowing us to understand if the interpersonal communication can have downstream effects on how people feel about opposing partisans.

> Please rate the following groups using the following thermometer. Ratings between 50 and 100 degrees mean that you feel favorable and warm toward the group. Ratings between 0 and 50 degrees mean that you don't feel favorable toward and don't care too much for that group. You would rate a group at the 50 degree mark if you don't feel particularly warm or cold toward the group.
>
> Please note that we are asking you to rate ordinary people and not elected officials or candidates. [*randomize order*]
>
> - Democrats across the country
> - Republicans across the country

6.4 Possible Assessment of Treatment Effect Durability

If sample size and budget allow, we will field a follow-up wave (Wave 4) to all dyads who completed the experimental portion of the study (Wave 3). This wave will re-ask key outcome variables where we find evidence of treatment effects to assess durability. This wave will also ask questions about the participants' social and political discussion relationship since the study.

7 Additional Descriptive Analyses

In this section, we outline a partial list of several descriptive quantities we will estimate with our design. Though our study is not a nationally representative sample, it does reflect a unique population of interest: a) individuals who do not support political violence who may (or may not) know someone who does, and b) individuals who support political violence but know someone who does not. We thus view this survey as, additionally, an opportunity to gather rich descriptive data on these populations. These data may or may not be associated with the publication of the primary treatment effects pre-registered in this document. As such, they may constitute their own academic publication(s).

7.1 Dyads

First, this study affords us the opportunity to learn a great deal about real network dyads that feature political disagreement.

- **What kind of dyads exist?** We will use data on the ego's perceptions of the network member they attempted to recruit in order to quantify in what ways the members of the network dyads are similar or different (e.g., race, gender, overall

political views), how much they discuss politics, and the type of social relationship they have (e.g., friend vs. family member, distance between where they live).

- **What kinds of dyads select into the study?** We can quantify this in two ways. First, what kinds of dyads feature successful recruitment to Wave 2 and what kinds do not feature successful recruitment (using the Wave 1 ego perception data)? Second, what kinds of dyads who complete Waves 1 and 2 self-select into the conversation portion of the study at Wave 3 vs. do not (using the Wave 1 and 2 survey responses rather than just the ego perceptions)?

7.2 Egos

- **What types of egos have an in-network tie that they believe supports political violence?** Our rich pre-treatment battery of items will allow us to describe the differences in demographics, political beliefs, and psychological traits of people who do vs. do not have an in-network tie whom they believe supports political violence. Though, we note that given that we pre-selected based on having a tie that supports political violence, we will not be able to report on the frequency of these ties in the general population.

- **What types of egos try and/or are successful in recruiting their network tie to the study?** Since we will have information on all egos in Wave 1, we can see if certain attributes of the ego increase the likelihood of successful recruitment to the study.

- **How often, and under what conditions, are ego's perceptions of their alter's support for political violence correct?** Using our pre-treatment outcome measure asked of recruited alters in Wave 2, we can assess if the egos correctly perceived their network tie to support political violence, once the alter has self-reported their own degree of support for political violence.

- **How often, and under what conditions, are egos' perceptions of their alters' political beliefs correct?** We also ask questions about if the ego thinks they have the following things in common with their alter: political party, vote choice in the 2020 election, and planned vote choice in the 2024 election. Since we ask these items of the alter in Wave 2, we can assess if the ego's perceptions were correct.

- **What kinds of strategies do egos engage in discussing political violence with alters?** Using the rich qualitative chat data from Wave 3 of our study, we can examine which strategies are employed most frequently by egos, including, e.g. personal narratives, empathic appeals, information dissemination, etc. We can also use these chat data to examine how the alter responds in the conversation itself.

7.3 Alters

- **How are people who report supporting political violence on Connect different than those recruited in the snowball sampling procedure?** Though we assume the vast majority of respondents in Wave 1 will not support political violence, some may. We can compare these individuals to those recruited in Wave

2. Indeed, a key feature of our experimental design is the recruitment of people who are not already participants on an online survey platform. Moreover, these people are members of a small and hard-to-reach population of Americans who support political violence. It will be beneficial for future research to understand how the people with these attitudes who are available to survey on an online platform are different from those who are not.

- **What are the correlates of support for political violence?** Again, our rich Wave 2 pre-treatment battery will allow us to estimate what demographics, political beliefs, and psychological traits correlate with support for political violence.

- **What kinds of alters self-select into the study?** Using the ego's perceptions of their alter, we can assess if there are patterns in the kinds of people who are successfully recruited in Wave 2 (and 3) or not.

8   Ethical Considerations

We carefully considered protections for human subjects in this experimental design. In particular, having someone who does not support political violence interact with someone who does presents the risk that the person who does not support political violence shifts their attitudes on this topic (and potentially others) in a more extreme direction. We address this concern in two main ways in our design.

First, we chose to recruit real network dyads. By definition, the participants interacting in our experiment already know each other. Therefore, the potential for political talk on these topics and others already exists in their everyday lives. Moreover, in order to be recruited into the study, the moderate member of the dyad had to have already suspected their network contact's extreme views on this topic. This suggests that they have either discussed political violence, or at least have shared their views somehow, before recruitment into our study. In other words, the moderate's exposure to the alters' views (whether via conversation or some other way) is *already* happening. Our experiment facilitates a way to observe it.

Second, we are preparing the moderate for the conversation to aid their discussion of this difficult topic with their network contact. Specifically, we are preparing them for how to open the conversation. In doing so, we are giving the moderate a persuasive "advantage" in the conversation. They will be prepared to start the conversation, they will have elaborated on their views beforehand, and they will have several discussion points at their disposal during the conversation. Preparing the moderate for the conversation actually reverses how these conversations most often arise in real life. Typically, the person with the more extreme views on the topic brings it up, potentially catching the person with the more moderate views off guard. Instead, we are intentionally preparing the moderate for the conversation ahead of time.

9   Implications & Discussion

This project addresses a question of critical importance: how can known social ties help reduce support for political violence among their family and friends? As support for political violence – and acts of political violence – have spiked in recent years, there is growing concern that social acceptance around the use of political violence is contributing

to its potential normalization, creating an environment that fails to sanction—and even supports—the few people who choose to act on these beliefs. As more individuals within a network endorse acts of political violence, those who oppose such actions may feel their voice diminish, potentially leading to self-censorship when other network members support political violence. With increasing tacit approval of political violence, a new norm favoring it may emerge. Support for political violence is an important phenomenon to explain and thwart. Even if supporters would never commit violent acts themselves, it is dangerous in and of itself to normalize violence for the few who then commit these acts.

However, this normalization process may be reversed if trusted individuals from real-world personal networks can effectively leverage their source credibility and exert ingroup social pressures to reinforce norms of non-violence and dissuade network ties away from political violence. Indeed, as Kleinfeld (2021) writes, "...people committing far-right violence — particularly planned violence rather than spontaneous hate crimes — are older and more established than typical terrorists and violent criminals. They often hold jobs, are married, and have children. Those who attend church or belong to community groups are more likely to hold violent, conspiratorial beliefs (Pape et al., 2022). These are not isolated 'lone wolves'; they are part of a broad community that echoes their ideas" (p. 161). Exposing these individuals to members of their community who *disagree* with them about political violence may thus be a crucial intervention for changing views.

Our project thus offers four primary contributions. First, we explore the impact of discussions within real social networks on attitudes towards political violence. In doing so, we expand upon existing literature concerning support for political violence in the United States by incorporating how social relationships can abate political violence. Tested interventions to reduce political violence are often non-social, like correcting meta-perceptions with information (e.g., Mernyk et al., 2022). However, in the mega-study on interventions to reduce outparty animosity, support for undemocratic norms, and support for partisan political violence, the interventions that reduced support for partisan political violence the *most* involved observing an indirect or mock social experience (Voelkel et al., 2022). For example, the best performing intervention to reduce support for partisan violence corrected outparty misperceptions, but did so by showing a video of other people thinking through their answers and their reactions to learning they overestimated outpartisan responses (Voelkel et al., 2022). Our experiment advances this literature by estimating the effects of an intervention that is *social* and thus is likely *stronger* and more durable, given the pattern of evidence suggesting social interventions are stronger than non-social interventions (Bond et al., 2012; Gerber et al., 2008; Voelkel et al., 2022). The intervention we test is likely more *scalable* as well, as it uses existing network dyads and conversations that happen within them (Edsall, 2024).

A second key contribution is our focus on existing relationships. For example, research by Rossiter and Carlson (2024) has shown the efficacy of interpersonal conversation in changing important attitudes such as affective polarization, however did not examine whether preexisting social ties enhance this effect. Similarly, research by Wayne (2022; 2024) has demonstrated the impact of group discussion on how individuals make political choices, but not with individuals with real-world network ties, a key limitation. While our main focus is on network dyads as an avenue to reduce political violence, we will also shed light on how relationships are being affected by dissent on democracy-threatening beliefs. Some people feel as though they are losing family members to extreme, usually conspiratorial, political beliefs. It appears many people in this situation wish to discuss

their concerns with their family member in an effort to combat the harmful beliefs and the potential that those beliefs continue to spiral into other harmful attitudes and behaviors (e.g., Faye, 2023; Muncaster, 2022). Our results, coming from real network ties, will shed light on one strategy concerned family members may consider taking in these situations.

A final contribution of this research is to understand the role concerned citizens can play in thwarting rising levels of political violence and strengthening their democracy. Concerned citizens can vote for elected officials who are against political violence and uphold democratic norms (Graham and Svolik, 2020), citizens can continue to pressure elected official once in office, and citizens can also support the free press who hold the powerful to account. In this project, we look beyond these larger-scale actions of voting and advocacy, and we shed light on a more grassroots approach of citizens playing a role within their own networks to address the issue of growing support for political violence.

References

24 Months Since the January 6 Attack on the Capitol. 2023. United States Attorney's Office District of Columbia https://www.justice.gov/usao-dc/24-months-january-6-attack-capitol.

Anderson, Michael L. 2008. "Multiple inference and gender differences in the effects of early intervention: A reevaluation of the Abecedarian, Perry Preschool, and Early Training Projects." *Journal of the American statistical Association* 103(484): 1481–1495.

Baum, Matthew A, James N Druckman, Matthew D Simonson, Jennifer Lin, and Roy H Perlis. 2024. "The political consequences of depression: how conspiracy beliefs, participatory inclinations, and depression affect support for political violence." *American journal of political science* 68(2): 575–594.

Bond, Robert M, Christopher J Fariss, Jason J Jones, Adam DI Kramer, Cameron Marlow, Jaime E Settle, and James H Fowler. 2012. "A 61-million-person experiment in social influence and political mobilization." *Nature* 489(7415): 295–298.

Broockman, David, and Joshua Kalla. 2016. "Durably reducing transphobia: A field experiment on door-to-door canvassing." *Science* 352(6282): 220–224.

Bruder, Martin, Peter Haffke, Nick Neave, Nina Nouripanah, and Roland Imhoff. 2013. "Measuring individual differences in generic beliefs in conspiracy theories across cultures: Conspiracy Mentality Questionnaire." *Frontiers in psychology* 4: 225.

Bryant, Fred B, and Bruce D Smith. 2001. "Refining the architecture of aggression: A measurement model for the Buss–Perry Aggression Questionnaire." *Journal of Research in Personality* 35(2): 138–167.

Cameron, Chris. 2022. "These Are the People Who Died in Connection With the Capitol Riot." *The New York Times* https://www.nytimes.com/2022/01/05/us/politics/jan-6-capitol-deaths.html.

Clifford, Scott, Geoffrey Sheagley, and Spencer Piston. 2021. "Increasing precision without altering treatment effects: Repeated measures designs in survey experiments." *American Political Science Review* 115(3): 1048–1065.

DeSante, Christopher D, and Candis Watts Smith. 2020. "Fear, institutionalized racism, and empathy: the underlying dimensions of whites' racial attitudes." *PS: Political Science & Politics* 53(4): 639–645.

Dillard, James Price, and Kiwon Seo. 2013. "Affect and persuasion." *The SAGE handbook of persuasion: Developments in theory and practice* pp. 150–166.

Edlin, Ruby, Turquoise Baker. 2022. "Poll of Local Election Officials Finds Safety Fears for Colleagues — and Themselves." *Brennan Center for Justice* https://www.brennancenter.org/our-work/analysis-opinion/poll-local-election-officials-finds-safety-fears-colleagues-and.

Edsall, Thomas. 2024. "Why Losing Political Power Now Feels Like 'Losing Your Country'." https://www.nytimes.com/2024/04/24/opinion/partisan-polarization-republicans-democrats.html?smid=tw-share.

Faye, Shon. 2023. "I'm Worried About Losing Touch With My Conspiracy Theorist Parents." https://www.vogue.com/article/conspiracy-theorist-parents.

Forscher, Patrick S, and Nour S Kteily. 2020. "A psychological profile of the alt-right." *Perspectives on Psychological Science* 15(1): 90–116.

Gerber, Alan S, Donald P Green, and Christopher W Larimer. 2008. "Social pressure and voter turnout: Evidence from a large-scale field experiment." *American political Science review* 102(1): 33–48.

Graham, Matthew H, and Milan W Svolik. 2020. "Democracy in America? Partisanship, polarization, and the robustness of support for democracy in the United States." *American Political Science Review* 114(2): 392–409.

Iyengar, Shanto, Yphtach Lelkes, and Sean Westwood. 2024. "America's Political Pulse April 2024 Dashboard." https://polarizationresearchlab.org/americas-political-pulse/.

Kalla, Joshua L, and David E Broockman. 2023. "Which narrative strategies durably reduce prejudice? Evidence from field and survey experiments supporting the efficacy of perspective-getting." *American Journal of Political Science* 67(1): 185–204.

Kalmoe, Nathan P, and Lilliana Mason. 2022. *Radical American partisanship: Mapping violent hostility, its causes, and the consequences for democracy.* University of Chicago Press.

Kay, Cameron Stuart. 2024. "Extraverted introverts, cautious risk-takers, and selfless narcissists: A demonstration of why you can't trust data collected on MTurk.".

Kertzer, Joshua D, Marcus Holmes, Brad L LeVeck, and Carly Wayne. 2022. "Hawkish biases and group decision making." *International Organization* 76(3): 513–548.

Kleinfeld, Rachel. 2021. "The rise of political violence in the United States." *J. Democracy* 32: 160.

Lees, Jeffrey. 2022. "Political violence and inaccurate metaperceptions." *Proceedings of the National Academy of Sciences* 119(19): e2204045119.

Mernyk, Joseph S, Sophia L Pink, James N Druckman, and Robb Willer. 2022. "Correcting inaccurate metaperceptions reduces Americans' support for partisan violence." *Proceedings of the National Academy of Sciences* 119(16): e2116851119.

Muncaster, Sue. 2022. "My Gentle, Intelligent Brother Is Now A Conspiracy Theorist And His Beliefs Are Shocking." https://www.huffpost.com/entry/brother-conspiracy-theory.

Nickerson, David W. 2008. "Is voting contagious? Evidence from two field experiments." *American political Science review* 102(1): 49–57.

Nivette, Amy, Manuel Eisner, and Denis Ribeaud. 2017. "Developmental predictors of violent extremist attitudes: A test of general strain theory." *Journal of research in crime and delinquency* 54(6): 755–790.

Pape, Robert, the Chicago Project on Security, and Threats. 2022. "UNDERSTANDING AMERICAN DOMESTIC TERRORISM: Mobilization Potential and Risk Factors of a New Threat Trajectory." https://d3qi0qp55mx5f5.cloudfront.net/cpost/i/docs/americas_insurrectionists_online_2021_04_06.pdf?m.

Petty, Richard E, John T Cacioppo, and Jeff A Kasmer. 2015. "The role of affect in the elaboration likelihood model of persuasion." In *Communication, social cognition, and affect (PLE: Emotion)*. Psychology Press pp. 117–146.

Petty, Richard E, John T Cacioppo, Richard E Petty, and John T Cacioppo. 1986. *The elaboration likelihood model of persuasion*. Springer.

Pornpitakpan, Chanthika. 2004. "The persuasiveness of source credibility: A critical review of five decades' evidence." *Journal of applied social psychology* 34(2): 243–281.

Rossiter, Erin L, and Taylor N Carlson. 2024. "Cross-partisan conversation reduced affective polarization for republicans and democrats even after the contentious 2020 election." *The Journal of Politics* 86(4): 000–000.

Sinclair, Betsy. 2012. *The social citizen: Peer networks and political behavior*. University of Chicago Press.

Voelkel, Jan G, Michael Stagnaro, James Chu, Sophia Pink, Joseph Mernyk, C Redekopp, M Cashman, Q Submitters, J Druckman, D Rand et al. 2022. "Megastudy identifying successful interventions to strengthen Americans' democratic attitudes." *Northwestern University: Evanston, IL, USA* .

Wayne, Carly, Mitsuru Mukaigawara, Joshua D Kertzer, and Marcus Holmes. 2024. "Diplomacy by committee: Assessing resolve and costly signals in group settings." *American Journal of Political Science* .

Westwood, Sean J, Justin Grimmer, Matthew Tyler, and Clayton Nall. 2022. "Current research overstates American support for political violence." *Proceedings of the National Academy of Sciences* 119(12): e2116870119.

Winston, Adrienne, Rashard Rose. 2024. "US Capitol Police investigated more than 8,000 threats against lawmakers in 2023, up from the previous year." *CNN* https://www.cnn.com/2024/01/19/politics/uscp-threat-assessment-lawmakers-2023/index.html.

Wintemute, Garen J, Sonia L Robinson, Andrew Crawford, Daniel Tancredi, Julia P Schleimer, Elizabeth A Tomsich, Paul M Reeping, Aaron B Shev, and Veronica A Pear. 2023. "Views of democracy and society and support for political violence in the USA: findings from a nationally representative survey." *Injury epidemiology* 10(1): 45.