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# **Examining Real-World Legitimization of Cross-Party Violence Through Two Explanatory Frameworks: Affective Polarization and Low Group Efficacy**

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Supplementary Materials: Data, Materials [see Index of Supplementary Materials]





### Abstract

Cross-party violence - violence between opposing partisans - is a growing concern worldwide. Understanding the predictors of the legitimization of violence against political opponents is thus becoming a vital goal. In this work, we propose two potential explanatory frameworks: affective polarization and low non-violent group efficacy. The first reflects an affective motivation to harm the out-party, while the latter reflects an instrumental motivation to deploy violence. Furthermore, while the former is frequently suggested in scholarly work as a cause for such violence, it has so far been backed only by limited empirical support. On the other hand, the latter is hardly examined in the context of interactions between opposing partisans. We tested the relationship of the two explanatory frameworks with the legitimization of cross-party violence using public opinion surveys in two real-world contexts: in 2020, in Israel (N = 500) and in the US (N = 631). Results from a regression analysis provide support for the instrumental explanation but not for the affective one. We discuss the theoretical implications of our findings for the research of affective polarization, and potential practical implications for attempts to reduce cross-party violence.

# **Keywords**

cross-party violence, affective polarization, group efficacy, legitimization of violence, affective and instrumental motivations

Cross-party violence has taken center stage in many Western democratic countries as they entered the second decade of the twenty-first century. In October 2020, the New Yorker noted that, in the lead-up to the 2020 US election, political scientists were worried about the increasing justification of violence and "the potential for bad faith deriving from party tribalism" (Avishai, 2020, para. 4). In Israel, a large wave of protests against former Prime Minister Netanyahu aroused violent clashes between his rightist supporters and leftist opponents, leading Israeli reporters and politicians to warn that the violence could end in "murder" (Boxerman & Staff, 2020). Violence between partisans supporting opposite political parties has also erupted in Albania ("Deadly shooting in Albania", 2021), Northern Ireland (Morrison & Lawless, 2021), Spain (Cué, 2021), and other countries.

Cross-party violence can be described as a sub-construct of political violence that refers to violence employed between opposing partisans. As such, it can also be considered a particular form of intergroup violence within the political domain, that holds some unique characteristics, e.g., this is an intergroup context where the conflicting groups share a common (national) identity that has the potential to reduce animosity between the groups (Levendusky, 2018)



on the one hand, but on the other, also to increase negative attitudes resulting from internal disagreement (Marques, Yzerbyt, & Leyens, 1988). Furthermore, similar to the research on affective polarization – which suggests that the same patterns of general intergroup prejudice characterize prejudice between competing partisans (e.g., dislike, social distance, distrust, etc. – Iyengar et al., 2019) but that this specific social phenomenon has unique roots, characteristics and implications that deserve distinctive attention – cross-party violence also merits its distinctive research.

In the current research, we are referring to partisan violence in democratic societies, where the use of violence between ideological groups is considered a violation of accepted democratic norms (Karstedt, 2006) and, therefore, is usually condemned by a majority of society members and considered as a problem that should be resolved. However, it is important to note that at the same time, these same societies often legitimize and even promote the use of violence in other contexts within the political arena (e.g., when minority groups are being oppressed or denied political power – Schwarzmantel, 2010) or outside of it (e.g., the Israeli occupation of the west bank or the American invasion of Iraq). Importantly, in such contexts where the normative standards against violence are being violated, the use of political violence by civilians should be examined and discussed in a different normative framework, considering issues such as access to power, group-based institutionalized discrimination and violence, and self-defense (e.g., Shuman et al., 2022).

Cross-party violence has the potential for heavily destructive outcomes; for example, it can affect large portions of the population who become threatened by other ordinary citizens that happen to hold an opposing political ideology (Mernyk et al., 2022). This threat is even more salient for members of marginalized groups who are more subjected to political violence, to begin with, and are also often unable to seek redress from the state as victims of violence. Thus, it is important to understand what predicts the legitimization of such behavior (Armaly & Enders, 2022; Mernyk et al., 2022; Voelkel et al., 2022) among ordinary citizens. Generally, such legitimization can be explained by both affective and instrumental motivations (Bushman & Anderson, 2001). The former explanation suggests that violent behavior results from negative emotions toward the political outgroup and is a goal in and of itself; the latter implies that violence against the out-party is used to achieve some other goal.

While both explanations are conceivable, the rising scholarly interest in affective polarization has made the first a primary suspect suggested in recent scientific work discussing reasons for the support for cross-party violence (Voelkel et al., 2022). Scholars are increasingly raising concerns that affective polarization – the heightened hostility between opposing political groups (Iyengar et al., 2012; Iyengar et al., 2019) – can potentially drive the legitimization of cross-party violence (e.g., Kalmoe & Mason, 2019; Martherus et al., 2021; Moore-Berg et al., 2020). According to this approach, negative emotions and attitudes toward members of the political outgroup might have severe behavioral implications, such as endorsing the use of violence.

On the other hand, cross-party violence can also be explained by a more instrumental approach, though examples of studies examining this line of explanation in this specific context are hard to trace. We suggest that according to this approach, cross-party violence can be legitimized as a means to achieve external political goals, different from the harm caused to the political opponent who is the direct target of the violent act. However, since the use of political violence in democratic societies is generally considered taboo, such instrumental justifications occur mainly when individuals perceive violence as the only possible way to achieve the ingroup's political goals. Such a perception is often driven by a lack of non-violent group efficacy (e.g., Muller, 1972; Ransford, 1968; Saab et al., 2016; Tausch et al., 2011).

These two approaches can easily coexist; individuals can simultaneously have both affective and instrumental motivations to endorse and use violence (Bushman & Anderson, 2001). However, each of these approaches points to a different psychological mechanism involved in cross-party violence, and, consequently, different potential interventions for reducing the legitimization of this violence. In the current research, we aim to disentangle these two possible predicting factors and understand the unique contribution of each of them in explaining the legitimization of violence against the political outgroup. We do so while implementing our study within two settings of real-world partisan violence – in Israel and in the US – thus strengthening the contextual relevance of our work.

### Affective Polarization and the Legitimization of Cross-Party Political Violence

Affective polarization is tearing apart Western liberal societies around the globe (Finkel et al., 2020; Reiljan, 2020). The mutual dislike between opposing partisans and their lack of willingness to interact with each other (Druckman &



Levendusky, 2019) have become two of the leading socio-political challenges faced by democratic countries. While some scholars argue that concern about the prevalence of polarization is exaggerated, especially in terms of the ideological divide within the US (e.g., Fiorina et al., 2005), others increasingly warn about affective polarization's destructive implications. In the political arena, affective polarization has been found, for example, to be associated with lower satisfaction with democracy (Ridge, 2020), decreased political trust (Hetherington & Rudolph, 2015), and a higher likelihood of perceiving politics as a high-stakes competition (Ward & Tavits, 2019); in the social sphere, scholars have demonstrated that affective polarization leads, among other things, to bias in hiring processes (Gift & Gift, 2015), decreased willingness to date people who support the rival party (Huber & Malhotra, 2017), and to a reduced desire to interact with family members who hold opposing political views (Chen & Rohla, 2018).

Aside from the distressing consequences mentioned above, scholars have implied that affective polarization might also lead individuals to even more severe behavior in the context of cross-party interaction – that is, to accept, support, and actively use violence against individuals and elected officials who identify with the opposing political group (e.g., Cassese, 2021; Martherus et al., 2021; Moore-Berg et al., 2020; Warner & Villamil, 2017). A study that examined the prevalence of such 'lethal partisanship' (Kalmoe & Mason, 2019) in the US found that currently, the legitimization of violence against political opponents is not very high – only 3% to 24% of Americans, depending on the specific question and the party of the respondent, viewed such behavior as acceptable. The study did not examine the direct relationship between affective polarization and the legitimization of cross-party violence, but still, the authors concluded with concern: "As more Americans embrace strong partisanship, the prevalence of lethal partisanship is likely to grow" (Kalmoe & Mason, 2019, p. 37).

Scientific work that tries to explain the slippery slope on which affective polarization leads to the endorsement of cross-party violence mainly suggests an indirect relationship: mutual animosity between opposing partisans leads to more extreme perceptions and attitudes toward the outgroup (for example, attribution of malevolent intentions – Warner & Villamil, 2017, or dehumanization – Cassese, 2021; Martherus et al., 2021), which in turn may increase the support for violence. The first part of the model has received empirical support in studies showing that affective polarization affects negative cross-party attitudes; for example, Martherus and colleagues (2021) demonstrated that affective polarization was closely related to dehumanization. The second part of the model has also been established in studies that have looked into other (non-partisan) intergroup contexts and shown that extreme inter-group attitudes lead to aggressiveness (for example, for review on dehumanization and violence, see Haslam & Loughnan, 2014). However, only limited empirical attention has been given to examining the full hypothesized indirect model, within the current context (e.g., Warner & Villamil, 2017).

Furthermore, a few experimental studies provide contradictory findings regarding the impact of affective polarization on the support for cross-party violence. Two recent studies (Broockman et al., 2022; Voelkel et al., 2022) have indicated that manipulating affective polarization, either by increasing or decreasing it, does not influence the legitimization of violence. Additionally, examining this relationship in the opposite direction, Mernyk and colleagues (2022) found that intervention that reduces support for partisan violence does not affect the affective polarization measure.

While the affective explanation for the legitimization of cross-party violence is appealing and convincing, as also demonstrated in abundant work showing the connection between negative intergroup emotions and support for violence (e.g., Halperin, 2011; Matsumoto et al., 2015), the findings described above cast some doubt on the common assumption regarding the impact of affective polarization on the support for cross-party violence. Taken together with findings from a previous study that showed a limited effect of affective polarization on harmful behavior toward the out-party (specifically, that individuals higher on affective polarization are not more likely to discriminate against political opponents, see Lelkes and Westwood, 2017), these studies further highlight the need for a more systematic examination of the relationship between the two.

# Instrumental Approach to Cross-Party Violence: Lack of Non-Violent Group Efficacy

In light of the contradictory findings about the impact of affective polarization on the legitimization of cross-party violence, it could be beneficial to examine additional explanations for this severe behavior. One such alternative explanation we wish to offer is based on the instrumental approach, which suggests that violence is legitimized as



a means to achieve some external goals other than the harm caused by the violence itself (Rai et al., 2017). In the political arena, a prominent predictor of such instrumental violence is the lack of group efficacy (Tausch et al., 2011). Group efficacy is defined as "beliefs that the group can achieve group goals through joint effort" (van Zomeren et al., 2013, p. 621), and its role as a predictor of collective action is well-established (e.g., van Zomeren et al., 2010). Accordingly, a lack of group efficacy suggests that individuals perceive their group as incapable of achieving its goals. Within this broad definition, there is a differentiation between two types of collective actions that can be employed to advance goals and that group members can perceive their group to have efficacy to employ: normative (non-violent) and non-normative (violent) (Tausch et al., 2011); when individuals perceive their group as having a low normative efficacy, the violent option becomes more attractive and acceptable. Specifically, when non-violent collective actions that are considered the normative way to produce a change in the political arena (e.g., demonstrations, petitions, sit-ins, and voting in elections) are seen as ineffective, individuals adopt the perception that they have nothing more to lose by trying more extreme means (Saab et al., 2016). Consequently, they are willing to employ aggressive behaviors, even though such behaviors are considered an acute violation of democratic norms (Karstedt, 2006).

Studies have shown that low group efficacy has led to support for aggressive and non-normative behavior – such as breaking the law, attacks on property, attacks on the police, attacks on the political elite, and a general inclination to approve violence – in various contexts (e.g., Becker & Tausch, 2015; Dyrstad & Hillesund, 2020; Heering et al., 2020; Thomas et al., 2019). However, as far as we know, the role of group efficacy in promoting violence has not been tested in the specific context of support for or engagement in cross-party violence, where the aggressive behavior is directed toward a particular target – one's political opponents. As such, this sort of violence is directed toward a specific social group and not targets necessarily associated with political power or authority. In that sense, this violence is more similar, for example, to violence against derogated minority groups and less resembles other acts of violence aiming to advance political goals. However, we suggest that individuals who think that their group's normative collective actions are failing to impact the political sphere may be more prone to legitimize acts of harm against the political out-party, maybe out of the expectation that attacks against their opponents will help them to achieve their desired goals. Nevertheless, this hypothesized association requires an empirical test.

### **Overview of Current Studies**

The current studies aim to examine whether affective polarization, low non-violent group efficacy, or both, explain the legitimization of violence against the political outgroup. Even though researchers studying affective polarization have implied that such polarization might lead to cross-party violence (e.g., Martherus et al., 2021; Moore-Berg et al., 2020), the empirical support for this assumption, as presented above, is limited (e.g., Broockman et al., 2022; Voelkel et al., 2022). At the same time, instrumental considerations, and specifically low non-violent group efficacy, provide a potentially compelling explanation that, to the best of our knowledge, has not yet been examined in studies focusing on the use of violence against political opponents. Our purpose was to address both gaps by conducting a thorough analysis of survey data, while simultaneously testing both theoretical explanations described above.

Legitimization of political violence is often examined hypothetically: Participants are asked to consider whether they perceive a fictional violence scenario as legitimate or not. However, the events of the past two years have provided us with opportunities to examine the legitimization of political violence in two "real world" contexts in which cross-party violence reached a peak: in Israel (Study 1) – during a period of protests against Prime Minister Netanyahu that were characterized by heated and violent clashes between rightists and leftists, and in the US (Study 2) – a week after the riots in the Capitol during which a group of President Trump's supporters stormed the Capitol in an attempt to overturn the results of the 2020 elections. This realistic setting enhances the relevance of the survey for the life experiences of participants and thus potentially also promotes greater authenticity in their responses.

It is important to note that while our focus is on political violence between supporters of the two main competing ideological blocks in each case study, it would be wrong to disentangle this type of violence from the broader context of power relations, political ideology, and violence, in each society we are studying. Specifically, since both in Israel and the US, the use of violence (either civic or institutionalized) against low-power social groups is a key issue that differentiates the two ideological groups and right-leaning groups tend to adopt more permissive attitudes toward



this violence (e.g., the oppression of Palestinian and Palestinian citizens of Israel in the Israeli context – Mustafa & Ghanem, 2010, racism and xenophobia against minorities in the US – Piazza & Van Doren, 2023), it is possible that the lack of normative restrains regarding violence in one context will permeate other intergroup contexts as well, especially intergroup contexts that are directly affected by this normative shift. Accordingly, legitimizing violence towards marginalized groups would probably ease the process of legitimizing violence toward one's political opponent. However, this suggestion has not been thoroughly studied and deserves further research.

Since previous studies have suggested other relevant predictors for the legitimization of cross-party violence, we tested whether affective polarization and non-violent group efficacy predict it, over and above those variables. The research discussing support for and legitimization of intergroup political violence often mentions two other common psychological predictors: social dominance orientation (i.e., SDO) and right-wing authoritarianism (i.e., RWA); both have been tested and found to have a positive relationship with support for intergroup political aggression (Henry et al., 2005; Lamberty & Leiser, 2019). Furthermore, in the specific context of cross-party violence, Kalmoe and Mason (2019) found two constructs that predicted greater explicit support for partisan violence: trait aggression and party identity strength. The first is considered in previous work as a motivator of the use of violence (Kalmoe, 2014), and the second was previously discussed as a distinct predictor of affective polarization (Mason, 2015). Accordingly, in our study, we controlled for these four predictors.

# Study 1

To examine our research question, we conducted a survey in Israel in October 2020 amid the protests against the Israeli Prime Minister, Benjamin Netanyahu, initiated by Netanyahu's opposers from the left-wing who objected to his remaining in office due to the legal accusations against him. The protests included weekly demonstrations across the country that lasted for almost a year and aroused violent clashes (verbal and physical) between rightist and leftist citizens (as well as between the police and leftist protesters). Notably, the study was conducted a month after elections in Israel, the third round of election within a year, and the political arena was unstable and in turmoil. Against this background, a questionnaire that focused on legitimizing political violence across ideological groups was relevant to individuals' actual experiences of ongoing events. We collected data from self-identified rightists and leftists, asking them about their perceived non-violent group efficacy, affective polarization, and legitimization of physical violence against citizens and elected officials from the political outgroup.

### Method

### **Participants and Procedure**

All the materials, including the data file, analysis code, and the codebook, can be found in the Supplementary Materials.

Participants were recruited through Ipanel, an Israeli survey company offering monetary compensation for participation in online surveys. Participants who failed two attention checks ("If you read this question, please select options 5 and 6 as your response") were filtered out by the survey company and did not complete the survey. The sample comprised 500 Israeli-Jews ( $M_{age}$  = 41.4, 51% female). The study was not pre-registered.

After completing basic demographic questions, participants were asked about their ideological identification, using a seven-point ideological self-placement scale ranging from extremely rightist to extremely leftist. Since Israel has a multiparty political system with parties frequently forming and dissolving and voters moving between them, we consider ideological identification as the primary and relevant social identity for Israelis within the political realm (Oshri et al., 2022). Those who identified as rightists (choosing extreme right, right or moderate right, n = 253) saw the term "right-wing supporters" wherever the ingroup was mentioned and "left-wing supporters/elected officials" wherever the outgroup was mentioned. Those who identified as leftists (extreme left, left, or moderate left, n = 247) completed an identical survey, only with the opposite ingroup and outgroup. Those who identified as centrists were excluded from the study (see Bassan-Nygate & Weiss, 2022) at this point and did not complete it (n = 59, no data was collected for those participants).



Participants were asked about the two hypothesized main predictors: affective polarization and non-violent group efficacy. We also measured covariates that might predict the legitimization of political violence, including relevant personality traits and strength of ideological identity. As for the dependent variable, we asked participants whether they legitimize the use of violence by members of their political ingroup against the political outgroup. Besides these measures that are relevant for the current paper, we used the opportunity of conducting a survey in the context of the protest also to collect data on other exploratory measures, including: how participants evaluate the probability that members of their political ingroup will use violence against the political outgroup and what they think other members in their ideological group think about the legitimization of such violent acts. Participants were also asked the same questions about their political outgroup. To avoid order bias, we counter-balanced the order of questions, such that half of the participants answered first about their ingroup, and half started with the outgroup. For the current study, we were only interested in the measure of legitimization of physical violence by the ingroup, so the other variables were not further analyzed. All measures are presented in full in Supplementary Information, Section B.

#### Measures

Affective Polarization — Affective polarization was measured using the "feeling thermometer", the most common measure in use today in the research of affective polarization (Iyengar et al., 2019). Participants were asked to answer the following question: "Please rate how you feel towards leftists/rightists (*outgroup*) on a scale of 0 to 100. Ratings between 0 and 49 degrees mean that you feel unfavorable and cold (with 0 being the most unfavorable/coldest). Ratings between 51 and 100 degrees mean that you feel favorable and warm (with 100 being the most favorable/warmest). A rating of 50 means you have no feelings one way or the other. How would you rate your feelings toward this group?".¹ Since we are using this to capture affective polarization, we wanted higher scores to indicate *higher* levels of affective polarization. Currently, higher raw scores indicate warmer feelings towards the political outgroup (i.e., less affective polarization); therefore, we reverse coded this variable.

Non-Violent Group Efficacy — Three items, composed for the purpose of the current study, were used to measure participants' perceptions about their group's non-violent group efficacy. Items referred to the perception that the ideological ingroup could achieve its goals through non-violent actions: "rightists/leftists (ingroup) working together can gain significant political achievements through 1) voting in elections, 2) public campaigns, 3) non-violent protest" ( $\alpha = .77$ ).

**Legitimization of Cross-Party Violence** — We measured participants' legitimization of political violence against civilians and elected officials from the political outgroup using the following three items: "People take various actions to advance their ideology and to achieve political goals. To what extent do you find it legitimate (i.e., you think it is ok) for rightist/leftist (ingroup) citizens to take any of the following acts as part of a protest or a struggle to achieve their political goals (1- not at all, 6- to a large extent)? (a) Threaten to hurt leftist/rightist (outgroup) elected officials; (b) Physically hurt leftist/rightist (outgroup) civilians; (c) Plan a physical attack against leftist/rightist (outgroup) elected officials" ( $\alpha = .95$ ). As can be seen, the context of cross-party hostility and the current political tension was mentioned, but the questions about the legitimization of violence were worded in general without focusing on a specific event. As our intention was to capture a generic inclination to legitimize cross-party violence, we hoped to take advantage of the heated political atmosphere that could lessen the impact of norms against the legitimization of violence and thus reduce

<sup>2)</sup> We examined the regression analysis also with item B (actual physical violence) as the DV and with the mean of items A and C (threat and intention to use violence, in Israel: r(498) = .86, p < .001; in the US: r(596) = .74, p < .001) as the DV and found that in Israel and in the US, the results stay the same even when breaking the DV into items, meaning that low non-violent group efficacy is a significant predictor and affective polarization is not. Analyses can be found in Supplementary Information, Section A, Tables 8-11.



<sup>1)</sup> We also performed all analyses using the difference score between ingroup and outgroup ratings in the feeling thermometer, which is another common measure of affective polarization. Since both analyses yielded similar results, in the paper, we present only the analyses that included outgroup's ratings (for analyses based on difference score, see Supplementary Information, Section A, Tables 2, 6, and 7).

social desirability bias among respondents, but to avoid the possible interference of personal attitudes about the specific protest.

#### Covariates:

**Personality Traits** – *SDO* was measured using three items adapted from the Short SDO scale (Pratto et al., 2013). One of these items was a reversed item, which decreased the reliability coefficient of the scale to  $\alpha = .54$ . This item was excluded from the scale, leaving it with only two items, r(498) = .65, p < .001.

*RWA*. We measured RWA using the VSA questionnaire (Bizumic & Duckitt, 2018). Out of the six items, we used the four related to conservatism and authoritarianism ( $\alpha = .78$ )<sup>3</sup>.

*Trait aggression.* We measured trait aggression using the physical aggression subscale of the BPAQ-SF (for a full discussion about the relevance of this measure, see Kalmoe, 2014), which includes three items ( $\alpha = .79$ ).

**Strength of Ideological Identity** — We measured the strength of ideological identity using three items adapted from the partisan identity scale (Huddy et al., 2015) ( $\alpha$  = .78).

**Demographic Questionnaire** — Participants also completed a brief demographic questionnaire about gender, age, level of education, and level of religiosity.

### **Analysis Strategy**

To examine our question of whether the legitimization of violence against the political outgroup is predicted by affective polarization and non-violent group efficacy, we tested a regression model with the legitimization of political violence as the dependent variable. In the model, we entered as predictors the measures of non-violent group efficacy and affective polarization, and controlled for personality traits (SDO, RWA, trait aggression), political characteristics (Strength of ideological identity), and demographic variables.

Before we tested our regression model, we first checked the distribution of the dependent variable – legitimization of political violence across ideological groups – as there was a good reason to expect it would be skewed to the right (i.e., relatively few people would highly legitimize violence). OLS regression models can be used for outcome variables that violate normality as long as the distribution of error residuals remains normal; therefore, our analysis plan was as follows: if legitimization of political violence was skewed, we would first examine the residual distribution, and if there was a strong violation of normality we would convert legitimization of political violence into a binary variable and then conduct a logistic regression.

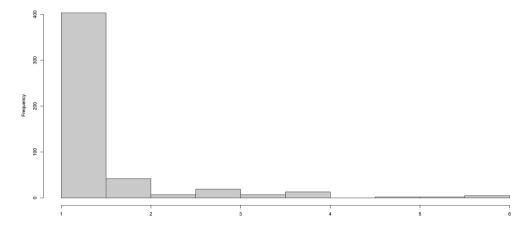
### Results

All analyses were conducted in R version 4.0.4 (R Core Team, 2021). We present descriptive statistics and correlations between the main variables in the Supplementary Information (Section A, Table 1). We first checked the distribution of legitimization of political violence (M = 1.38, SD = 0.9). Overall, 74% of participants in our sample rated their level of legitimization of the use of physical violence against the political outgroup with a score of one (the lowest possible point on the scale). As a result, our main dependent variable is positively skewed: skew = 2.97 (Figure 1).

<sup>3)</sup> Traditionalism, the third component of the VSA scale, was not included in this study, because of length constraints and as it was tested previously in Israel and found to have lower reliability (Duckitt et al., 2010).



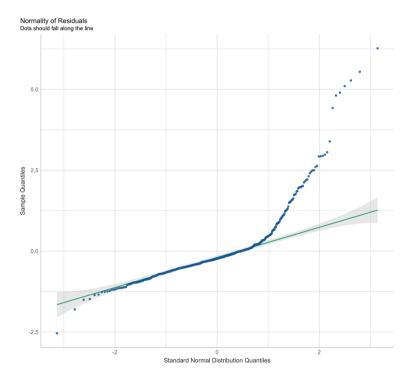
Figure 1
Study 1 – Distribution of the Legitimization of Cross-Party Violence



Next, we checked the normality of the error residuals of the legitimization of political violence in a regression analysis. All predictors added to the regression model were first standardized.<sup>4</sup> We found that the error residuals of the dependent variable were not normally distributed, violating one of the necessary assumptions for linear regression (Figure 2).

Figure 2

Study 1 – Residual Distribution



<sup>4)</sup> We found in a preliminary analysis that the level of the legitimization of political violence was marginally significant different based on the order in which questions about the legitimization of violence were presented (ingroup first vs. outgroup first), t(498) = -1.8, p = .059. Thus, to avoid bias of the results based on this criterion, we control for the order in the following analysis. Additionally, when removing the order from the regression, the significant predictors remain the same.



Since the normality of residuals was seriously violated and the variable was extremely skewed, we transformed the dependent variable into a binary variable.<sup>5</sup> For all participants who rated the legitimization of political violence with the score 1, the lowest possible score of the scale in the original data (i.e., no legitimization for political violence at all), the new variable was coded as 0, and for all other participants who originally rated their level of legitimization as higher than 1 (i.e., legitimized political violence to some extent), the new variable was coded as 1. Then, we conducted a logistic regression with the new binary variable as the dependent variable. All predictors in the model were standardized before the analysis of the regression. Three participants did not answer the feeling thermometer question, so they were excluded from the regression analysis.

Table 1 shows that, as expected, the personality traits of aggressiveness, SDO, and RWA, are all significant and positive predictors of the legitimization of violence against the political outgroup. The table also shows that, besides personality traits, the only other significant predictor is non-violent group efficacy, while affective polarization does not predict the legitimization of political violence. It is also clear from the results that non-violent group efficacy is negatively associated with the legitimization of political violence, meaning that when non-violent group efficacy is higher, the legitimization of violence against the political outgroup is lower.

**Table 1**Study 1 – Legitimization of Cross-Party Violence in Israel

Predictor	Legitimization of cross-party violence						
	OR	SE	CI				
			LL	UL	р		
(Intercept)	0.16	.04	0.10	0.24	< .001		
Sex	1.35	.33	0.84	2.17	.210		
Age	0.98	.12	0.77	1.25	.860		
Education	0.80	.10	0.62	1.01	.061		
Religiosity level	0.84	.10	0.65	1.06	.153		
SDO	1.58	.18	1.26	1.97	< .001		
RWA	1.30	.16	1.03	1.66	.030		
Trait Aggression	1.35	.15	1.08	1.69	.008		
Strength of ideological identity	0.90	.11	0.71	1.15	.406		
Affective Polarization	0.95	.12	0.75	1.21	.695		
Non-violent Group Efficacy	0.70	.08	0.56	0.87	.002		
Order	2.44	.56	1.57	3.85	< .001		
Observations			497				
R <sup>2</sup> Tjur			.146				

While not part of our initial question, we did test whether these results were moderated by political ideology, in other words, if affective polarization and group efficacy had different predictive effects for rightists versus leftists. We constructed interaction terms between affective polarization and political ideology as well as between group efficacy and political ideology and added them to the logistic regression. Neither the interaction with affective polarization (B = -.31, SE = .24, p = .190; OR = 0.73) nor with group efficacy (B = .42, SE = .22, P = .059; OR = 1.53) was significant.

<sup>5)</sup> Neither log transformation nor Box-Cox transformation reduced the skew of the variable or improved the normality of the residuals. While dichotomization generally should be avoided, methodologists have indicated that one instance where it is acceptable is when there is a large number of participants responding with a complete lack of the variable being measured (MacCallum et al., 2002) and when one expects that there are two basic types of people underlying the distribution (DeCoster et al., 2009), i.e., in this case, those who absolutely refuse to legitimize violence and those who are on some level willing to legitimize violence.



### Discussion

The results of Study 1 demonstrated that low non-violent group efficacy predicts the legitimization of violence against the political outgroup, while counter to our preliminary hypothesis, we found null results for the association between affective polarization and the legitimization of violence. These findings suggest that the instrumental explanation might be more beneficial than the affective one for explaining the legitimization of cross-party violence. However, the validity of this conclusion is limited. First, it relies upon a single case study; thus, it is unclear whether the findings will replicate. Second, since we did not measure other behavioral outcomes (e.g., social distance) in Study 1, it is hard to tell whether affective polarization as we measured it does not specifically explain the support for violence or, in general, is not related to behavioral tendencies. We conducted Study 2 to address both issues.

Another intriguing finding of Study 1 is the fact that the order of the questions about the legitimization of violence (starting with questions about the ingroup or the outgroup) was also associated with the DV, with the largest *OR*. We think that a possible reason for this could be that participants who started with the questions about the outgroup were more inclined to think about the comparison between the groups when they considered the ingroup use of violence, thus legitimizing it less to preserve a positive group image (Turner, 1975). The effect of order deserves a separate comprehensive investigation in future studies since it could have critical implications for the understanding of polarization and the design of interventions to mitigate polarization. For example, it could point out that individuals' criticism about ingroup members' transgression could increase if presented after the outgroup's transgression. However, in the current research manipulating the order of questions was used to control for covariates (since we asked about both ingroup and outgroup use of violence) and not as the focus of the study; thus, it was not included in Study 2 as presented below.

# Study 2

As mentioned above, we sought to replicate the design in a different context to validate the findings of Study 1. As we completed the analyses of the Israeli data, the Capitol riots erupted in the US, in which a mob of President Trump's supporters attacked the Capitol building as part of their attempts to overturn the election results, keep Trump in power, and prevent the inauguration of President-elect Biden. Notably, these riots occurred in the final days of Trump's presidency, considered one of the most polarized eras in US history, or as CNN phrased it: "Trump leaves America at its most divided since the Civil War" (Spetalnick et al., 2021). Although problematic in many other aspects, this violent event was ideal for replicating our study since, like the situation in Israel, it occurred at the peak of tension between the political groups and involved extreme levels of violence. While there are apparent differences between the case studies, for example, Israel has a multi-party political system while the US has a two-party system, both countries are characterized as affectively polarized states (Gidron et al., 2020), and both are facing the challenge of political violence (Avishai, 2020; Boxerman & Staff, 2020).

Study 2 also aimed to strengthen and provide additional evidence for the predictive validity of our measure of affective polarization by confirming that it indeed predicts a behavioral outcome that, according to the existing literature, should be associated with it. To do this, in Study 2, we added a measure of social distance – e.g., the willingness of individuals to interact with members from other groups (Bogardus, 1947) – a behavioral intention that is described in the literature as associated with affective polarization (Iyengar et al., 2012). Since social distance in the political sphere reflects a desire for minimum interaction with the political outgroup but has no concrete political goals (contrary to violence that directly affects the political opponent), we hypothesized that it would be explained by affective polarization and not at all by non-violent group efficacy.



#### Method

### **Participants and Procedure**

We recruited American participants via Mturk. Our sample consisted of 741 participants who accessed the survey from a distinctive IP and fully completed it. We filtered out participants who failed to answer the two attention check questions (e.g., "This is an attention check. Please select highly agree if you are reading") (n = 25), leaving a sample of 716 participants. We aimed for a sample of 700 participants based on a sensitivity analysis indicating that this would give us the ability to detect an effect of OR = 1.3, well below a small effect of OR = 1.5, which would give us more confidence if we failed to find an effect of affective polarization. We excluded from all analyses participants who identified as independents in the following question: "Generally speaking, do you usually think of yourself as a Democrat, a Republican, or an Independent?" (n = 85). Our final sample included 631 participants ( $M_{age} = 42.34, 52.1\%$  female°). The study was not pre-registered.

Participants answered questions regarding personality traits that might be associated with the legitimization of political violence (i.e., trait aggression, SDO, RWA). Next, we asked participants to indicate whether they identify as Democrats (n = 351) or Republicans (n = 280), and in all following questions, the outgroup set for Democrats was Republicans and vice versa. The following questions included all the measures used in Study 1 and additional measures of social distance. We also had several exploratory questions about the COVID-19 pandemic in this survey related to a separate study (Balmas et al., 2022). Lastly, participants completed a short demographic questionnaire.<sup>7</sup>

#### Measures

Since our goal in Study 2 was to replicate the findings of Study 1, we used identical measures for the following variables: Affective polarization, Non-violent group efficacy ( $\alpha$  = .88), and Legitimization of cross-party violence ( $\alpha$  = .97). The only change was the replacement of rightist and leftist with Democrats and Republicans in all the places where the ingroup and outgroup were mentioned. We also measured all the relevant covariates again, with some adjustments that were needed: Since our adaptation of the Short SDO scale in Study 1 did not have high reliability, we now measured SDO using three items from the original scale ( $\alpha$  = .74); because of length limitations we dropped one of the items assessing RWA and used a scale of only three items ( $\alpha$  = .85); Trait aggression was measured with the same three items ( $\alpha$  = .83); and strength of party identity was measured with the same three items that we used for the strength of ideological identity in Study 1, this time ranging from 0 to 100 ( $\alpha$  = .89). Demographics were measured with the same items as in Study 1.

As noted above, in Study 2 we added a measure of *social distance* that included three items (Druckman & Levendusky, 2019): "How comfortable are you having close personal friends who are Democrats/Republicans (*outgroup*)?", "How comfortable are you having neighbors on your street who are Democrats/Republicans (*outgroup*)?", "Suppose a son or daughter of yours was getting married. How comfortable would you be if he or she married someone who is a Democrat/Republican (*outgroup*)?" ( $\alpha = .93$ ). The scale ranged between 0 – not at all comfortable and 100 – extremely comfortable, and we reverse coded this variable so higher ratings would indicate lower willingness to interact with the outgroup.

The survey also included a list of measures and items related to a separate study, so we do not report any of them in the current paper, but a full list of measures can be found in the Supplementary Information (Section B).

<sup>7)</sup> Considering the proximity between the data collection and the riots in the Capitol, we included in the study a section examining understanding, legitimization, and approval of the riots in the Capitol and the suspension of President Trump's accounts by several social media platforms following the riots. Since these constructs are inherently different from our main DV (which is the legitimization of violence against the political outgroup) we do not present the results of analyses in the paper, but all analyses can be found in the Supplementary Information, Section A, Tables 12-17.



<sup>6)</sup> The sample included five participants (0.7% of the sample) who identified as transgender or preferred not to identify themselves by gender. Since the gender groups were extremely unbalanced, we collapsed these two categories with the female group for all further analysis.

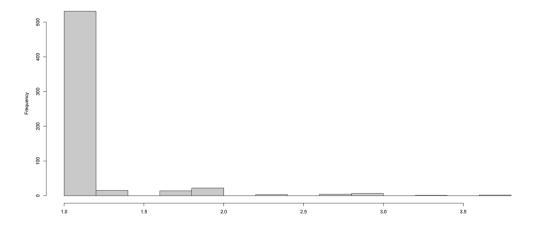
#### Results

The analysis strategy for Study 2 was the same as in Study 1. Descriptive statistics and correlations between the main variables are presented in the Supplementary Information (Section A, Table 3). Inspection of the correlations led us to find a counter-intuitive negative correlation between affective polarization and the legitimization of violence, r(629) = -.17, p < .001), meaning that participants who reported warmer feelings toward the outgroup were also more prone to legitimize violence against it. Since this pattern seemed unusual and we could not find a reasonable explanation for it, we examined the scatterplot of these variables and noticed that a small group of observations seemed to be driving the effect. Therefore, we decided to examine whether there are bivariate outliers using Cook's distance, which estimates the variations in regression coefficients after removing each observation, one by one (Cook, 1977). Using the standard of Cook's D > 3 times the mean (of Cook's D), we detected 33 outliers (Glen, 2016), whom we then removed from our sample, leaving us with a sample of 598 participants.<sup>8</sup>

We first examined the distribution of the legitimization of political violence (M = 1.1, SD = 0.4). Overall, 89% of participants rated their level of legitimization of physical violence against the political outgroup with a score of one (the lowest possible point on the scale); therefore the dependent variable for our model is positively skewed, even to a greater extent than in Study 1: skew = 3.98 (Figure 3). The skewness of the distribution of legitimization of violence is consistent with the findings of Kalmoe and Mason (2019), who found that large majority of Americans (between 76% and 97%, depending on the specific item and the political group) fully reject the use of violence against the other political party. In the second stage, we used a regression analysis to check the normality of the error residuals of the legitimization of political violence. Again, all predictors added to the regression model were first standardized. We found that the error residuals of the dependent variable were not normally distributed (Figure 4).

Figure 3

Study 2 – Distribution of the Legitimization of Cross-Party Violence (n = 598)

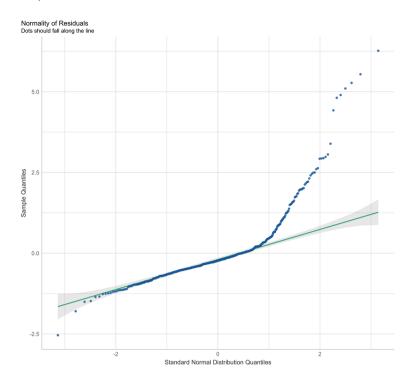


<sup>8)</sup> Demographics of the new sample: 53% females, Mage = 42.59, 44.3% Republicans. Descriptive statistics and correlations between the main variables are presented in the Supplementary Information, Section A, Table 4. Cronbach's alpha of the legitimization of cross-party violence has changed from  $\alpha = .97$  to  $\alpha = .90$ . Other than that, none of the scales differed by more than .04 from the originally reported values. In addition, when including the 30 outliers, the logistic regression used to test the research hypothesis also yielded similar results for all variables except for affective polarization (see Supplementary Information. Section A. Table 5).



Figure 4

Study 2 – Residual Distribution



Once again, we converted the dependent variable into a binary variable<sup>9</sup>, so that participants who rated the legitimization of political violence with the score 1 in the original data received the score 0 in the new variable, and those who originally rated their level of legitimization as higher than 1, received the score 1 in the new variable. Then, we conducted a logistic regression with the new binary variable as the dependent variable. All predictors in the model were standardized before the analysis of the regression.<sup>10</sup>

Table 2 shows that the personality traits of SDO, RWA, and aggressiveness are all significant predictors of the legitimization of violence against the political outgroup (SDO is a negative predictor, and the two last are positive predictors). Unlike in the Israeli sample, in the US, age and strength of ideological identity are also predictors of the legitimization of political violence, with the first negatively predicting legitimization and the latter positively predicting it. The difference we find between the two samples, specifically regarding the strength of ideological identity, suggests that further examination of this factor could be beneficial, but it is not the focus of the current study. Together with that, the results shown in Table 2 support the findings of Study 1. Affective polarization is not a significant predictor of the legitimization of political violence, while non-violent group efficacy negatively and significantly predicts it.

<sup>11)</sup> The relationship between SDO and the legitimization of cross-party violence in the American sample is in the opposite direction from the relationship found in the Israeli sample, and to some extent, also counter intuitive. However, previous research suggests that the relationship between SDO and support for inter-group political violence is not always positive but depends on the power relations between the groups (Henry et al., 2005).



<sup>9)</sup> Again, log and Box-Cox transformations did not improve the skew of the variable or the normality of the residuals.

<sup>10)</sup> Due to length constraints, participants in the US were asked only about the legitimization of violence when it is used by members of the ingroup (and not when members of the outgroup use it). Accordingly, the order of questions was not manipulated in this study, and we do not control it in the analyses.

**Table 2**Study 2 – Legitimization of Cross-Party Violence in the US

Predictor	Legitimization of cross-party violence						
	OR	SE	CI				
			LL	UL	р		
(Intercept)	0.10	.02	0.07	0.16	< .001		
Sex	0.88	.25	0.50	1.55	.660		
Age	0.63	.10	0.46	0.84	.003		
Education	1.10	.16	0.84	1.46	.494		
Religiosity level	0.97	.15	0.72	1.31	.851		
SDO	0.74	.10	0.56	0.96	.024		
RWA	1.42	.22	1.04	1.94	.027		
Trait Aggression	1.41	.18	1.09	1.81	.008		
Strength of Party identity	1.49	.26	1.07	2.11	.021		
Affective polarization	0.84	.13	0.62	1.16	.282		
Non-violent Group Efficacy	0.63	.09	0.48	0.82	.001		
Observations			598				
R <sup>2</sup> Tjur			.100				

We also again tested whether these results were moderated by political ideology. We constructed interaction terms between affective polarization and political ideology as well as between group efficacy and political ideology and added them to the logistic regression. Neither the interaction with affective polarization (B = .60, SE = .33, p = .067; OR = 1.84) nor with group efficacy (B = .25, SE = .26, P = .333; OR = 1.29) was significant.

#### Additional Analysis - Affective Polarization and Social Distance

In the current study, we had an additional goal: to examine whether affective polarization predicts social distance, a negative behavioral tendency that has been strongly linked to affective polarization in previous research. On the other hand, we would not expect non-violent group efficacy to be associated with social distance. We first checked the distribution of the social distance variable (M = 43.99, SD = 28.7) and found it was close to normality, with a very small skewness: skew = 0.09 (for a figure visualizing this finding, see Supplementary Information, Section A, Figure 1). Then, we conducted a linear regression with the social distance as the dependent variable. All predictors in the model were standardized before the analysis of the regression.

Table 3 shows that social distance is predicted by three demographic characteristics: sex, age, and religiosity. Since the measure captures how comfortable participants said they were with having close interactions with the political outgroup, these results suggest that men, older and more religious individuals are more open to such interactions. Specifically, regarding our hypotheses, we found that social distance is predicted by the strength of party identity and affective polarization. Participants with stronger party identity are less comfortable interacting with the political outgroup, while those with warmer feelings towards the outgroup are also more open to such interactions. Aligned with our hypothesis, non-violent group efficacy did not predict social distance.

Overall, the results of Study 2 replicate the findings of Study 1. Non-violent group efficacy predicted the legitimization of political violence, while affective polarization did not. Study 2 also demonstrated that affective polarization has its expected negative behavioral implications as it was associated with reduced willingness of individuals to interact in routine everyday life with their political opponents.



**Table 3**Study 2 – Social Distance in the US

Predictors	Social Distance						
	Estimates	SE	CI				
			LL	UL	p		
(Intercept)	39.89	1.44	37.07	42.71	< .001		
Sex	5.81	2.00	1.88	9.74	.004		
Age	-2.95	0.98	-4.87	-1.04	.003		
Education level	1.53	0.98	-0.39	3.44	.118		
Religiosity	-3.82	1.05	-5.89	-1.76	< .001		
SDO	-1.74	1.01	-3.73	0.25	.086		
RWA	43	1.04	-2.47	1.62	.682		
Trait aggression	1.64	1.10	-0.52	3.80	.136		
Strength of party identity	6.68	1.11	4.49	8.86	< .001		
Affective polarization	14.08	1.15	11.82	16.33	< .001		
Non-violent Group Efficacy	.63	1.07	-1.47	2.74	.556		
Observations			598				
$R^2/R^2$ adjusted	.360 /.349						

### General Discussion

Cross-party violence has been challenging the Western democratic world for decades, and in the last few years, it has become an even more prominent phenomenon that raises much concern. Scholars from political science and political psychology increasingly warn that this may be the result of affective polarization, meaning that the intergroup violence derives from the growing dislike between the political groups (e.g., Cassese, 2021; Martherus et al., 2021; Moore-Berg et al., 2020; Warner & Villamil, 2017); however, this approach has not received sufficient empirical support. In the current paper, we wanted to examine this relationship while suggesting an alternative instrumental approach to explain cross-party violence: the lack of non-violent group efficacy.

We analyzed survey data collected during two real-world violent events in 2020, in Israel and in the US. The logistic regression analysis showed that non-violent political efficacy negatively and significantly predicted the legitimization of cross-party violence, while affective polarization was not a significant predictor. Furthermore, we found that affective polarization did predict social distance from political opponents – a behavioral tendency that is known to relate to affective polarization – while low non-violent group efficacy had no association with it. Notably, the effect size of group efficacy (as well as other effect sizes in the study) was relatively small, meaning that group efficacy alone does not have a large effect on the legitimization of violence; instead, the findings suggest that high levels of legitimization become more likely when many of the factors we examined are present together. Thus, these findings should not be interpreted as pointing to a single predictor of the legitimization of violence as the only explanation for this phenomenon.

However, our results have some important implications. First, they suggest that affective polarization has a limited association with aggressive behavior and that the mere dislike of the out-party cannot provide a sufficient explanation for the legitimization of violence (but it does explain avoidance, as in social distance). That means that even if an individual immensely dislikes a member of the out-party, harming them (or legitimizing violence against them) probably still demands more specific conditions and circumstances, perhaps because it is considered such an extreme violation of democratic norms (Karstedt, 2006). We are not the first to present this claim; as mentioned in the introduction, Lelkes and Westwood (2017) previously suggested that the actual effect of affective polarization on cross-party prejudicial behaviors is limited. More specifically, in the context of cross-party violence, our findings join previous work that found a weak association between affective polarization and support for violence (Mernyk et al., 2022) and they support the



claim by Broockman and colleagues (2022) that affective polarization might be more influential in the inter-personal domain and have less impact on political and democratic attitudes and behaviors. While the previous studies have suggested that more work should be done to detect the specific factors that enhance undemocratic behavior, we examine here one such potential factor that, to the best of our knowledge, has not been previously systematically examined in this context – low non-violent group efficacy.

Based on the results of our two studies, it seems that, in the context of cross-party violence, individuals who perceive non-violent actions as ineffective for advancing their political goals are also more willing to legitimize the use of violence against the out-party, perhaps because they believe they have nothing more to lose (Saab et al., 2016). While the instrumental considerations might seem reasonable when thinking of violence directed toward targets that hold political power or authority – and this is also the type of political violence that has been mainly studied so far in the context of group efficacy (e.g., Becker & Tausch, 2015; Heering et al., 2020; Thomas et al., 2019), here we found that such instrumental considerations can also lead to the legitimization of violence targeted at political opponents as a social group, regardless of the power they hold. Further research into the impact of group efficacy on cross-party violence is thus essential, as the current findings imply that without such a subjective experience of efficacy, support for violence toward political opponents might increase. As we see this phenomenon as a significant threat to democratic societies, we are encouraged by these findings suggesting that there are practical tools – such as increasing non-violent efficacy among ideological groups – that can decrease the support for violence among society members while still allowing them to promote the political goals they support.

# **Explaining the Null Results for Affective Polarization**

The null results we found for a correlation between affective polarization and the legitimization of cross-party violence were, to some extent, surprising. As a possible explanation, we suggest considering the idea that affective polarization is simply an affective construct that is too broad to produce extreme behavior such as violence. Currently, affective polarization captures general negativity toward the out-party, while the research on emotions recognizes a broader range of discrete emotions and their possible (distinct) behavioral consequences (Dukes et al., 2021). For example, fear and anger are both negative emotions, but while the first is related to avoidance, the second is associated with an approach tendency (Halperin, 2008). Thus, when trying to understand whether negative affect toward the political outgroup leads to the legitimization of aggressive behavior toward the out-party, it might be useful to consider more specific intergroup emotions that lead to such extreme approach behavior. Hatred is the first emotion that comes to mind in this regard, as it is suggested as an emotion that induces a desire to reduce the influence of the hated target or even eliminate the target itself (Ben-Ze'ev, 1992) and has also been found to be related to support for aggressiveness in the context of intergroup conflicts (Halperin, 2008).

Given the attention affective polarization has received in the last decade, other scholars may also be surprised that it is not associated with cross-party violence. However, we would like to highlight that these results only indicate that affective polarization does not correlate with cross-party violence on the individual level, meaning that an individual who is highly polarized is no more likely than an individual low in polarization to engage in violence. That being said, affective polarization may still correlate with cross-party violence on the societal or state levels; in other words, societies with higher levels of polarization may be more likely to experience higher levels of violence. In fact, our results could even be interpreted as supporting such a hypothesis. Research has shown that affective polarization is associated with a lack of willingness to cooperate and/or compromise with the other party, often resulting in political gridlock (see Hetherington & Rudolph, 2015). Such political gridlock may make citizens feel that typical normative and non-violent means of affecting politics are no longer effective (i.e., low political group efficacy), thus making it more likely that they will resort to violence. Future research should explore these potential links between affective polarization, non-violent group efficacy, and cross-party violence on the societal level.

## **Limitations and Future Study**

While our findings replicate in two very different contexts with well-powered samples, they also face some meaningful limitations. The first is that the study relies on a correlational design; thus, we cannot infer that affective polarization



or group efficacy causes the legitimization of violence and not the other way around. However, now that the current study has established the relationship between group efficacy and cross-party violence in these specific contexts, future studies could employ experimental design to increase internal validity and examine the directionality of this relationship by manipulating the perceived group efficacy and exploring how it affects the legitimization of violence. A second limitation regards the generalization of the findings, which is limited as data was collected through an online survey – thus, the sample might be biased (Andrade, 2020) – and within the specific context of two states experiencing severe political instability and societal unrest (Israel – Shamir & Rahat, 2022; the US – Galea & Abdalla, 2022), which might have impacted various patterns of results revealed in our studies (e.g., the repetitiveness of the elections in Israel could have decreased the sense of efficacy and independently led to frustration that might have increased the legitimization of violence). To overcome this limitation, future work can replicate the research in contexts outside Israel and the US. However, we urge researchers who wish to replicate the study to examine this relationship when there is an ongoing real-world occurrence of cross-party violence.

A more complex limitation arises from the nature of our outcome variable. Our study, together with other studies (e.g., Kalmoe & Mason, 2019), found that the support for or legitimization of violence expressed by participants in surveys ranged from low to extremely low. While this finding is encouraging when thinking of the societal implication of the legitimization of violence, it is also somewhat deceiving. The low legitimization found in surveys might result from social desirability, where participants feel uncomfortable about expressing their actual attitudes or worried about the consequences of sharing their real thoughts. We tried to overcome this challenge by first asking about the legitimization of this behavior and not about personal participation or support for it; second, we related to real-world events in which cross-party violence had become more acceptable to the general public, as we thought the dynamic in norms would enable participants to provide more authentic responses. Even so, the distribution of the DV in both of our samples was extremely skewed and lacked variance, leading to some methodological challenges. It is intriguing to speculate whether future studies will be able to develop a more sensitive tool to measure the legitimization of violence.

Finally, it is important to state that the research team leading this project consisted of Jewish-Israeli and white American researchers, a composition that affected the research focus and some of the methodological choices made throughout the research project. For example, the research focused on the two main ideological blocks in each case study without considering other marginalized social groups that these blocks might not represent. Furthermore, the research did not take into consideration the issue of power relations between groups, which might affect the relationship between group efficacy and the legitimization of violence. We suspect that, in contexts in which there is an asymmetry in power and in access to political power, different patterns of associations between our variables might appear. Future work could focus on populations we did not include in the current research that have lower access to political power; specifically, we suggest focusing on two contexts: 1) groups that are denied political power by institutional barriers (e.g., Palestinian citizens of Israel in the Israeli context, and other minority groups in other contexts) and 2) people who do not identify with one of the main political blocks (e.g., American independents).

### **Conclusions**

The current study contributes to ongoing scholarly efforts to unfold predictors for the legitimization of cross-party violence by providing correlative evidence suggesting that affective polarization has a limited association with such behavior while low non-violent group efficacy is highly correlated with it. On the theoretical level, our findings imply that the relationship between affective polarization and partisan violence should be further empirically studied to uncover whether (or maybe – under what conditions) the one impacts the other. More importantly, the current study suggests that if we want to better understand extreme political behaviors such as cross-party violence, we should continue the search for all possible predictors of this phenomenon, as each predictor also indicates the possible tools that could be used to address and resolve it. In that sense, our findings regarding the role of group efficacy could be further examined through interventions aiming at increasing efficacy and their potential impact on decreasing support for cross-party violence. Such inquiries would have important practical implications for democratic countries struggling with the threat of violence undermining their stability and risking human life.



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Data Availability: The research data for this article is freely available (Orian Harel, Shuman, Maoz, Balmas, & Halperin, 2022).

# Supplementary Materials

The Supplementary Materials contain the following items (for access see Index of Supplementary Materials below):

- · Research data
- Codebook
- Analysis code
- · Additional analyses, results and questionnaires of both surveys

### **Index of Supplementary Materials**

Orian Harel, T., Shuman, E., Maoz, I., Balmas, M., & Halperin, E. (2022). Supplementary materials to "Examining real-world legitimization of cross-party violence through two explanatory frameworks: Affective polarization and low group efficacy" [Research data, code, and materials]. OSF. https://osf.io/y37md/

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