

ORCA - Online Research @ Cardiff

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:https://orca.cardiff.ac.uk/id/eprint/173062/

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Ismail, Ramzi Abou, Cichocka, Aleksandra, Phillips, Joseph and Sengupta, Nikhil 2024. Authoritarianism and social dominance as differential predictors of collective violence beliefs. Psychology of Violence 10.1037/vio0000580

Publishers page:

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See http://orca.cf.ac.uk/policies.html for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



Abstract

Objective: In political psychology, extreme forms of outgroup animosity, such as collective violence, remain understudied. As such, we know little about the ideological reasons people support different kinds of collective violence. This study builds on recent research on the dimensionality of collective violence beliefs, we test the link between two well-established intergroup ideologies (RWA) and (SDO) and support for two types of collective violence: diffuse collective violence (against members of outgroups) and upward collective violence (against leaders of outgroups). We hypothesised that RWA would predict higher support for diffuse collective violence, but *lower* support for upward collective violence. We also expected that SDO would predict higher support for both forms of violence.

Methods: We employed Structural Equation Modeling (SEM) to scrutinise the relationships between Right-Wing Authoritarianism (RWA), Social Dominance Orientation (SDO), and latent constructs of diffuse and upward collective violence beliefs. This research was conducted using two distinct and diverse community samples in Lebanon, (N = 596; 1,035) respectively.

Result: Results showed consistent evidence of a negative relationship between RWA and upward collective violence beliefs and a positive relationship between SDO and diffuse collective violence beliefs.

Conclusion: The findings indicate that in a conflict-ridden settings, individuals may legitimise or delegitimise violence based on different ideological underpinnings, highlighting the complex interplay of beliefs and context. Future studies could expand this research into diverse environments to explore how conflict intensity affects these ideological influences on attitudes toward violence.

Keywords: Authoritarianism, Social Dominance, Collective Violence, Intergroup Relations

Public Significance Statement

This study highlights how two key ideologies—authoritarianism and social dominance—predict different forms of support for collective violence in a conflict-ridden society like Lebanon. People with authoritarian beliefs tend to reject violence against leaders, while those with a strong social dominance orientation are more likely to support violence against outgroup members. These findings deepen our understanding of how ideological beliefs can shape attitudes toward violence in complex social contexts.

Authoritarianism and Social Dominance as differential predictors of support for collective violence

Collective violence is a significant issue in many parts of the world, including regions underrepresented in psychological research. The term "WEIRD" (Western, Educated, Industrialised, Rich, and Democratic) highlights the focus on Western populations in much psychological research, which can limit the generalisability of findings (Henrich et al., 2010). Lebanon, with its unique sectarian power structure and history of conflict, offers a valuable context for investigating collective violence world. For example, in Lebanon, on 14 October 2021, while members of Hizbullah and Amal Movement were protesting against the lead judge probing the 2020 Beirut's port explosion, a series of violent clashes erupted taking the lives of six people and injuring many others (El Dahan, Perry & Bassam, 2021). The 2021 Beirut massacre was the worst the country has seen ever since the May conflict of 2008. The clashes took places in a famous area known for being a former civil war front line between Christian and Muslim Shiite neighbourhoods. The clashes were followed by intense and hostile exchanges on social media platforms between supporters of the different groups involved (Abou-Ismail, 2022), revealing how ideological narratives shape the justification and commission of collective violence against perceived ingroup enemies (see also Gallacher et al., 2021). In the current paper, we empirically test the association between ideology and collective violence beliefs in Lebanon for the first time.

To do so, we integrate one of the most researched theories in intergroup relations, the dual process model of ideology and prejudice (Duckitt, 2001), with recent developments in conceptualising and measuring individuals' support for collective violence. Specifically, Abou-Ismail et al. (2022) showed that collective violence beliefs in high conflict contexts can be characterised by two dimensions – upward collective violence, targeted at outgroup leaders, and diffuse collective violence, targeted at outgroup members – and developed a scale

differential relationships with several theoretically relevant constructs. This suggested that the vast majority of the literature on collective violence, that treats it as unidimensional (e.g., Spanovic et al., 2010; Tausch et al., 2011), may be missing an important part of the picture. This is especially plausible given that the intergroup relations literature shows that people support different kinds of outgroup-directed animosity for different reasons.

Specifically, the large literature on the dual process model of ideology and prejudice has revealed that there are at least two distinct motivations for expressing animosity towards outgroups:(a) an ideological motive for social conformity and stability called right wing authoritarianism (RWA; Altemeyer, 1998); and (b) an ideological motive for hierarchy and group dominance called social dominance orientation (SDO; Pratto et al., 1994). While these two ideologies are related, they also have distinct elements (Sibley et al., 2007; Sibley & Duckitt, 2008; Duckitt & Sibley, 2010). Considering the differences between them, we will test the hypothesis that RWA is positively related to diffuse collective violence, but negatively related to upward collective violence. This is because RWA reflects support for authority structures in society and thus, enacting violence against group leaders, even *outgroup* leaders, may be unpalatable to people high on RWA. On the other hand, we expect SDO to be positively related to both forms of violence, consistent with its function and content relating to maintaining group-based dominance (Sidanius & Pratto, 1999). We test these hypotheses in two diverse, community samples from Lebanon (n = 596 & 1,035).

Predictors of Individuals' Support for Collective Violence

The study of collective violence in the social sciences has mainly been undertaken in the fields of political science (Fearon & Laitin, 2003; Balcells & Stanton, 2021) and economics (Collier & Hoeffler, 2004), with a focus on the structural causes of violence (such as economic conditions or the nature of the political system; Dixon, 2009). Political science

work on collective violence, for instance, tends to focus on nation-level or group-level analyses, as researching individual attitudes in times of conflict is risky and impractical most of the time (Balcells & Stanton, 2021). Relatedly, the fields of evolutionary biology and evolutionary psychology focus on distal causes – i.e., selection pressures in ancestral environments that lead to 'coalitional aggression', across many species and across time, either as an adaptive behaviour or as a by-product of other adaptations (Durrant, 2011).

Research on gang violence has also considered the roles different factors such as geography, networks and community, culture, families, schools, and gang membership play in promoting violence (Vasquez et al. 2010; Papachristos et al., 2013; Wood et al., 2022). While gang violence differs from our focus here on collective violence in Lebanon, both involve complex social dynamics and environmental influences that contribute to violent behaviour. These insights help us understand the broader context of collective violence and the interplay of various factors that drive it.

Nevertheless, psychological research on the *proximal, individual-level* predictors of collective violence remains much scarcer (but see Bartusevičius et al., 2020; Kalmoe and Mason, 2022). The small literature in social psychology, which attempts to differentiate between 'collective action' that is normative versus non-normative (e.g., peaceful versus violent protests), comes closest, providing insight on why people differ in their support for collective violence (see Becker & Tausch, 2015 for a review).

In a seminal study, Tausch et al., (2011) distinguished normative from non-normative collective action and showed that these two kinds of collective behaviour have different psychological antecedents. Since this initial work, a handful of more recent studies have taken up the mantle of examining the antecedents of non-normative collective action (e.g., Stathi et al., 2019; see also Agostini & van Zomeren, 2021). For example, Travaglino's (2019) 'social banditry' framework builds on Tausch et al.'s (2011) model to show that perceived injustice

and low political efficacy predict support for dissident groups that engage in non-normative political acts (e.g., the hacking group, Anonymous).

Another recent thread of social-psychological research examines non-normative collective action, under the rubric of 'political violence'. For example, Schumpe et al. (2018) found that providing alternate means to achieve social change reduces the motivation to engage in political violence. Moreover, Bartusevičius et al. (2020) found that individuals' levels of autocratic (vs. democratic) political belief predicted higher support for political violence. These findings underscore the importance of studying the proximal, individual-level predictors of support for extreme forms of collective action, especially in places where normative means to social change are hard to achieve.

However, as argued by Abou-Ismail et al. (2022), the study of these proximal predictors has been hampered by the lack of a consistent conceptual and measurement framework for studying individual differences in collective violence support. An exception to this is the work by Winiewski and Bulska (2020), who presented an alternative model for examining individual differences in support for collective violence based on the intensity of the violent acts. Building on the larger interpersonal violence literature, and focussing on attitudes towards collective violence rather than violent behaviour *per se*, these authors found two distinct dimensions of individual-level attitudes. These were, support for collective violence targeted at outgroup members (termed 'diffuse collective violence') and targeted at outgroup leaders (termed 'upward collective violence'). This two-dimensional model was replicated across five studies in three high-conflict intergroup contexts and a scale to measure these dimensions was validated (Abou-Ismail et al., 2022). Crucially, criterion validity analyses revealed that diffuse and upward collective violence related differentially to established correlates of collective behaviour. For example, system justification and religious

fundamentalism were positively related to diffuse collective violence but negatively related to upward collective violence.

This further highlights the need to consider that individuals may support or oppose different types of collective violence for different reasons. In the current analysis, we address the scarcity in the literature on the proximal predictors of violence, by integrating one of the most researched models of intergroup attitudes – the dual process model of ideology and prejudice (Duckitt, 2001) – with the two-dimensional model of collective violence developed by Abou-Ismail et al. (2022).

The Dual Process Model and Collective Violence

The dual process model of ideology and prejudice (Duckitt, 2001) proposes that individual differences in intergroup attitudes can be explained by two orthogonal, but related, ideological motives: RWA (Altemeyer, 1998) and SDO (Sidanius & Pratto, 1999). In support of this model, hundreds of correlational studies find strong, consistent relationships between RWA and SDO on the one hand, and prejudice, ethnocentrism, nationalism, and support for right-wing policies on the other (see Duckitt & Sibley, 2016 for a review). Moreover, longitudinal studies have shown that RWA and SDO *precede* prejudice, providing evidence for the direction of the proposed causal effects of these ideologies (e.g., Asbrock et al., 2010). In most comprehensive analysis to date – a ten-year study using a large nationally representative sample – Osborne et al. (2021) found that RWA and SDO predicted within-person change in generalised prejudice, group-specific prejudice, and anti-minority beliefs.

Despite this accumulated evidence, very few studies go beyond prejudice, to examine the effects of RWA and SDO on group-based behaviour, such as collective violence (or putative support for such behaviour). The most relevant evidence comes from studies on the effects of RWA and SDO on behavioural intentions to engage in normative collective action. For example, Choma et al. (2020) found that both RWA and SDO positively correlated with

collective action which targets societal moral breakdown, but negatively correlated with collective actions aimed at equalising interracial relations. Saeri et al. (2015) found similar results among American adults, where those higher on RWA and SDO supported collective action that maintained the status quo or the established order. Lemieux & Asal (2010) found that those higher on SDO and RWA are generally less likely to take any action, although those higher on SDO were more likely to both choose terror attack and indicate it as more justified over choosing peaceful measures. In the only other study we know of to examine the relationship between RWA and SDO and collective violence, Winiewski & Bulska (2020) found that SDO predicted active forms of violence (e.g., physical aggression), but not passive forms of violence (e.g., exclusion). These findings provide the first evidence RWA and SDO predict violence beliefs via distinct psychological pathways.

Indeed, distinguishing between the distinct, authoritarian and dominance pathways at play in intergroup relations is one of the primary theoretical contributions of the dual process model (Duckitt & Sibley, 2010). According to the model, people low on openness to experience develop a worldview in which outgroups are perceived as threats to the collective security, leading to high RWA. They therefore express prejudice, and support authoritarian policies for maintaining law and order, as a way of tackling the perception of being threatened. On the other hand, people low on agreeableness develop a worldview in which outgroups are perceived as competitors for group dominance, leading to high SDO. They therefore express prejudice, and support hierarchical policies, as a way of promoting their group's interests in the perceived competition with outgroups.

A large number of studies have provided evidence for these differences in RWA and SDO, as well as evidence for their divergent effects on intergroup attitudes and behaviour. For example, Duckitt (2001) outlined decades of research indicating that RWA was related to attitudes and ideologies that can be considered 'socially conservative', whereas SDO was

related to attitudes and ideologies that are 'economically conservative' (see also, Cohrs and Asbrock 2009, Duckitt, 2006; Sibley et al., 2007). Heaven et al. (2006) found that RWA most strongly associated with national security and order values, whereas SDO was most strongly negatively associated with international harmony and equality. Finally, Bilewicz et al.'s (2015) study comes closest to the current paper's focus on collective violence, specifically, by examining the predictors of support for hate speech. They found that SDO was associated with opposition for hate-speech prohibition whereas RWA was associated with support for such prohibition. The authors theorised that people high in RWA are particularly sensitive to norm violations, and thus, are more inclined to oppose counter-normative expressions of prejudice such as hate speech.

These findings highlight that considering the differences between RWA and SDO provides a more nuanced view of the nature of relations between groups in multicultural societies. Given our current aim to integrate the dual process model with the two-dimensional model of support for collective violence developed by Abou-Ismail et al. (2022), the distinction between these two ideologies that is most relevant relates to the content of RWA that is not shared with SDO. Specifically, RWA connotes a certain deference to authority, and a desire to maintain social norms, that is not part of the content of SDO (Altemeyer, 1986; Duckitt et al., 2010; Passini, 2017). This feature of RWA suggests that it would lower support for collective violence against outgroup leaders (upward collective violence). With an interest in the maintaining collective security and protecting the existing power structures (Heaven et al., 2006; Sibley et al., 2007; Duckitt & Sibley, 2010), those high in RWA might be less willing to endorse aggression against group leaders, even leaders of outgroups. This type of 'upward violence' not only goes against their respect for authority, but also represents a potentially destabilizing change to the status quo. Such a prediction would be in line with

Bilewicz et al.'s (2015) finding that people high on RWA oppose counter-normative expressions of outgroup derogation.

However, RWA simultaneously connotes derogation of outgroups more generally, which suggests that violence against outgroup members can be justified – i.e., diffuse collective violence. This would align with the motivation to reduce perceived threats to the ingroup. In contrast, SDO indexes a general preference for group dominance and ingroup superiority (Sidanius & Pratto, 1999). As such, it should be positively associated with support for violence against both outgroup leaders and outgroup members, as complementary strategies to achieve dominance for their own group (Winiewski & Bulska, 2020).

The Present Research

Here, we test these differential effects of RWA and SDO on upward and diffuse collective violence in two large, diverse, community samples in Lebanon (N = 596 and 1035), after receiving ethical approval from University of Kent (Ethics ID 202116098466006933). Lebanon is a small country in the Middle East, born in 1920 and officially constitutes 18 sects, which are in principle variations of the three Abrahamic religions (Judaism, Christianity, and Islam). However, sects in Lebanon (especially ones larger in numbers such as Christian Maronites, Muslim Sunnis, Muslim Shia, Christian Orthodox, and Druze) have developed into different, and at times conflicting political identities. Fighting over resources and values, the Lebanese civil war of 1975 ignited after the different Lebanese sects disagreed on their position from what was going on in the region.

Lebanon is a particularly interesting context for such an investigation because it has 18 sects, dozens of political parties and has witnessed sects dominating one another and take over roles and positions every time the situation permitted, making it very hard to point out the advantaged group. Lebanon has also developed a political system that is very hierarchical, putting the biggest sects on top of every office in the country in what became known as

consensual democracy between the sects (Henley, 2016). This unique blend of sects in the Middle East still preserves traditions and witnesses both conversative and liberal norms, making it suitable to observe how RWA and SDO predict prejudice in different forms of aggression. Moreover, tensions between sects have often resulted in collective violence (both upward and diffuse) at various times in Lebanese history, including recently (Abou-Ismail, 2022).

The country's political system, established by the National Pact of 1943 and reinforced by the Taif Agreement of 1989, allocates key political offices along sectarian lines: the President is always a Maronite Christian, the Prime Minister a Sunni Muslim, and the Speaker of the Parliament a Shia Muslim. This arrangement has historically led to shifts in power as different sects and political parties gain or lose influence based on demographic changes, political alliances, and external interventions. For instance, during the Lebanese Civil War, various sectarian militias controlled different regions, significantly impacting political and military power dynamics. In the post-war period, groups like Hezbollah have emerged as powerful political and military forces, further complicating the traditional sectarian power balance.

The nature of power in Lebanon encompasses political control, cultural dominance, and economic influence. Political power involves control over government positions and legislative influence, while cultural dominance pertains to influence over media, education, and cultural institutions. Economic power relates to control over resources and economic activities. The 2019 Lebanese protests, known as the October Revolution, were driven by widespread public frustration with corruption, economic mismanagement, and sectarianism. The protests saw participation from diverse demographic groups, including youth, students, civil society organisations, and disenchanted members of traditional political parties. While

the movement was notable for its cross-sectarian nature, specific demands and levels of participation varied among different groups.

This unique power structure in Lebanon is both a strength and a limitation for our study. It provides a rich context to examine the interplay between ideological constructs and support for collective violence. However, the dynamic nature of sectarian power relations makes it challenging to identify consistently advantaged or disadvantaged groups.

Based on the analysis presented in the preceding section, we will test the hypothesis that RWA will be negatively associated with upward collective violence, but positively associated with diffuse collective violence while controlling for SDO. On the other hand, we hypothesise that SDO will be positively related to both upward and diffuse collective violence while controlling for RWA. For a depiction of the full theoretical model being tested in the present research, see Figure 1.

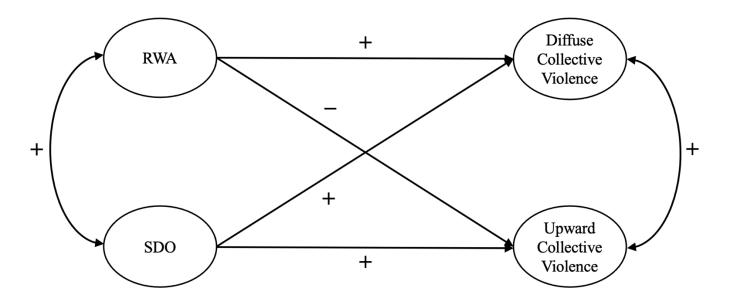


Figure 1.

Conceptual model of the hypothesised associations of RWA and SDO with support for diffuse and upward collective violence.

Method

Study 1

Participants

The adult convenience sample was recruited by circulating an anonymous Qualtrics link via social media, leveraging the lead author's connections with various civic movement political organisations in Lebanon. These organisations are actively involved in advocating for political participation, proper governance, and social justice. They play a crucial role in mobilising the community and raising awareness about political and social issues. The sample consisted of 596 participants and was broadly representative of the various sectarian groups in this diverse country. Specifically, the sample was 17.3% Christian Maronite, 15.1% Shi'a, 32.5% Sunni, 23.4% Druze, 13.7% Christian Orthodox, 0.9% Armenian, 4.1% Other Christian sects, 3% Other Muslim sects. Around 21% of the sample identified themselves as politically affiliated with the October revolution of 2019, while the remaining were either members of traditional parties or other political groups. The sample had a mean age of 28.71 (SD = 9.61) and comprised 58.5% women.

Measures

All scales were measured on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

SDO was measured using seven items from Ho et al. (2015), translated into Arabic. The scale was translated into Arabic and then back translated into English by two independent translators. The accuracy of the translation was confirmed by the lead author, who is a native Arabic speaker and bilingual: "An ideal society requires some groups to be on top and others to be on the bottom", "Some groups of people are simply inferior to other groups", "No one group should dominate in society (R)", "Groups at the bottom are just as deserving as groups at the top (R)", "Group equality should not be our primary goal", "It is unjust to try to make groups equal", "We should do what we can to equalize conditions for different groups (R)" The scale showed moderate internal reliability ($\alpha = .67$), which, although slightly below the

conventional threshold of > .7, may be influenced by cultural and contextual factors specific to the Lebanese sample.

RWA was measured using the Very Short Authoritarian (VSA) scale developed by Bizumic & Duckitt (2018), translated into Arabic using the same method as SDO: "It's great that many young people today are prepared to defy authority (R)", "What our country needs most is discipline, with everyone following our leaders in unity", "God's laws about abortion, pornography, and marriage must be strictly followed before it is too late", "There is nothing wrong with premarital sexual intercourse (R)", "Our society does NOT need tougher government and stricter laws (R)", "The facts on crime and the recent public disorders show we have to crack down on troublemakers, if we are going to preserve law and order". The first and fifth item showed very weak factor loadings in our CFA, indicating that they did not perform well in the Lebanese context. These items were therefore removed from the final model to improve the reliability of the latent factor. The reliability of the scale without removing the items was ($\alpha = .44$). After removing these items, the reliability improved to ($\alpha = .59$).

Collective violence was measured using the scale developed by Abou-Ismail et al. (2022). The scale included 17 items in Study 1, measuring two dimensions. Diffuse Collective Violence was measured using items such as "It can be justified for members of my sect to hit members of a different sect". Upward Collective Violence was measured using items such as "Building representative figures of corrupted politicians and destroying them in groups is a justified act". Both subscales had good internal reliability (diffuse collective violence $\alpha = .93$; upward collective violence $\alpha = .87$).

Results

Descriptive statistics and correlations between all variables are presented in Table 1. RWA and SDO were positively correlated (r = .076, p < .05), suggesting that individuals who

score higher on one ideological dimension tend to also score higher on the other, albeit the correlation being modest. Diffuse collective violence was positively correlated with SDO (r = .31, p < .01). Upward collective violence was negatively correlated with RWA (r = .28, p < .01) and SDO (r = .10, p < .05). While these correlations provide initial insights into the relationships between our key variables, they do not account for potential confounding factors or the simultaneous influence of multiple predictors. Therefore, we fitted a structural equation model to test the simultaneous effects of RWA and SDO on diffuse collective violence and upward collective violence, while adjusting for the residual covariance between the two outcomes.

Table 1.

Descriptive Statistics and Correlations Between Latent Variables and Key Demographics

	1	2	3	4	5	6
1. RWA						
2. SDO	$.076^{*}$					
3. DCV	0.06	.31**				
4. UCV	28**	10*	0.02			
5. Age	18**	0.04	10*	-0.01		
6. Gender	21**	.14**	.14**	.11**	.09*	
M	2.99	1.89	1.38	3.34	28.7	1.42
SD	0.8	0.72	0.7	1.07	9.61	0.5
* p < .05		*	* p < .01			

As shown in Figure 2, latent diffuse collective violence and latent upward collective violence were each regressed on latent RWA, latent SDO and all covariates simultaneously namely: age and gender (coded as 1 female, 2 male; see Table 2 for more details). Overall, results showed that model fit the data very well ($\chi^2(392) = 764.73$, p < .001, CFI = 0.94, SRMR = .06 RMSEA = .04 CI [.036, .044]). Parameter estimates (see Table 2) revealed no association between RWA and diffuse collective violence (b = .05, se = .04, p = .19) but a

positive association between SDO and diffuse collective violence (b = .33, se = .05, p < .001). In contrast, RWA (b = -.18, se = .05, p < .001) and SDO (b = -.16, se = .06, p = .003) were both negatively associated with upward collective violence. While the study provided valuable insights into the relationships between RWA, SDO, and collective violence, it is important to acknowledge that the RWA scale used was not optimal. Some items did not load properly, which created difficulties when constructing the model and led to their removal. These issues with the scale's reliability and validity highlight the need for future research to use more robust and validated measures of RWA to ensure the accuracy and reliability of the findings.

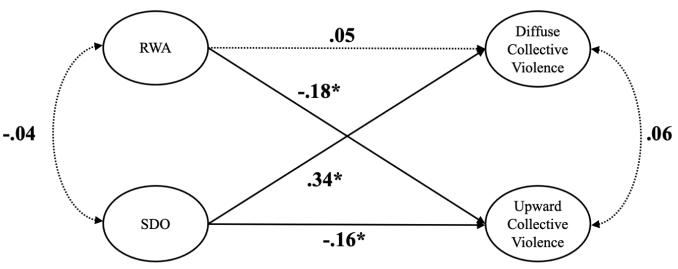


Figure 2.

Structural equation model in which latent RWA and latent SDO are modelled as simultaneous predictors of latent diffuse collective violence beliefs and latent upward collective violence beliefs. Note. *p < .01. For visual simplicity, observed indicators and covariates are not shown. For full results see Table SII.

Discussion

In this first study, we tested the relationship between sociopolitical attitudes (RWA & SDO) and collective violence (diffuse and upward). Consistent with our predictions we found that those high on RWA showed decreased support for collective violence against group leaders, whereas those high on SDO showed higher support for collective violence against

members of outgroups. However, contrary to our predictions, RWA was not associated with diffuse collective violence and SDO was negatively associated with upward collective violence.

Study 1 was the first attempt to draw an empirical distinction between the predictors of diffuse and upward collective violence. Thus, we sought to replicate the findings in a second, diverse community sample in Lebanon. We were also constrained in Study 1 by the fact that our measure of RWA was not the most commonly used in the literature (i.e., Altemeyer, 1998) and many of the items showed very poor loadings onto the latent construct. Thus, in Study 2 we tested the same pattern of relationships with updated measures. Finally, we aimed to recruit a larger sample (double the size of Study 1), to ensure that any non-significant effects were not simply a reflection of a lack of adequate statistical power to detect subtle ideological effects.

Table 2.

Parameter estimates for the models predicting diffuse and upward collective violence in Study 1.

	Upward Collective Violence										
	b	se	z	99% CI			b	se	z	99% CI	
				low	high	_			•	low	high
RWA	.05	.04	1.33	05	.16	RWA	18*	.05	-3.58	30	05
SDO	.33*	.05	6.44	.20	.46	SDO	16*	.06	-2.95	30	02
Age	14*	.05	-2.61	28	<.01	Age	09	.06	-1.51	25	.07
Gender (1Female. 2 Male)	.34*	.09	3.89	.12	.57	Gender	.22	.11	2.05	06	.50

Note. *p < .01

Study 2

The second study had two main goals: (1) to test SDO and RWA using different scales than the ones used in our first study after the poor performance of some of the items and, (2) to replicate the associations between ideology (i.e., RWA and SDO) and collective violence (i.e., diffuse and upward) found in Study 1 in a larger sample.

Participants

An adult convenience sample was recruited by circulating an anonymous Qualtrics link via social media, using the lead author's links with community organisations in Lebanon. The sample consisted of 1035 participants and was broadly representative of the various sectarian groups in this diverse country. Specifically, the sample was 29.5% Christian Maronite, 15.9% Shi'a, 23.9% Sunni, 13.3% Druze, 9% Christian Orthodox, 0.4% Armenian, 5.6% Other Christian sects, 1.9% Other Muslim sects. The majority of the sample identified themselves as not affiliated with any political group including alternative groups that were set up after the 2019 revolution. The sample had a mean age of 31.05 (SD = 18.10) and comprised 47% women.

Questionnaire Measures

SDO was measured using the only version of SDO that has been validated in Arabic – specifically, the 4-item scale from Pratto et al. (2013): "In setting priorities, we must consider all groups. (R)", "We should not push for group equality", "Group equality should be our ideal (R)", "Superior groups should dominate inferior groups" ($\alpha = .58$).

RWA was measured using the short 6-item scale from Altemeyer, translated into Arabic using the same methods as Study 1: "It is always better to trust the judgment of the proper authorities in government and religion than to listen to the noisy rabble-rousers in our society who are trying to create doubt in people's minds", "It would be best for everyone if the proper authorities censored the internet so that people could not get their hands on trashy and disgusting material", "Our country will be destroyed someday if we do not smash the perversions eating away at our moral fibre and traditional beliefs", "People should pay less attention to the religious books and other old traditional forms of religious guidance, and instead develop their own personal standards of what is moral and immoral", "Atheists and others who have rebelled against established religions are no doubt every bit as good and virtuous as those who attend church regularly", "Some of the best people in our country are

those who are challenging our government, criticizing religion, and ignoring the "normal way" things are supposed to be done" ($\alpha = .74$).

Collective violence was measured using the same scale as Study 1. Both subscales had excellent internal reliability (diffuse collective violence, $\alpha = .89$); upward collective violence, $\alpha = .94$). All scales were measured using 5-point Likert scale.

Results

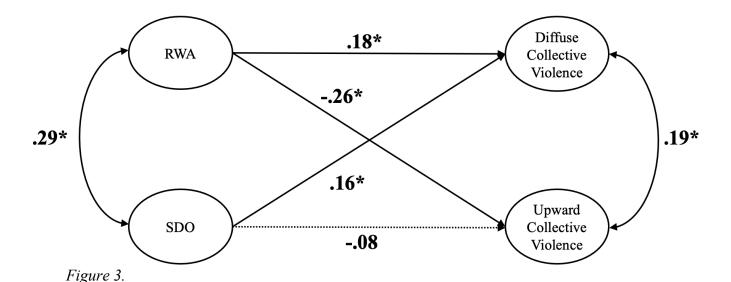
Descriptive statistics and correlations between all variables are presented in Table 3. RWA and SDO were positively correlated (r = .23, p < .01), indicating a stronger relationship between these ideological dimensions in this sample compared to Study 1. Diffuse collective violence was positively correlated with both RWA (r = .17, p < .01) and SDO (r = .18, p < .01), suggesting that individuals higher in these ideologies are more likely to support diffuse collective violence. Upward collective violence was negatively correlated with RWA (r = .24, p < .01) and SDO (r = -.15, p < .01), indicating decreased support for upward violence among those with higher RWA and SDO. Additionally, upward collective violence was positively correlated with diffuse collective violence (r = .08, p < .05). As in Study 1 we fitted a structural equation model to test the simultaneous effects of RWA and SDO on diffuse collective violence and upward collective violence, while adjusting for the residual covariance between the two outcomes.

Table 3.

Descriptive Statistics and Correlations Between Latent Variables and Key Demographics

	1	2	3	4	5	6		
1. RWA								
2. SDO	.23**							
3. DCV	.17**	.18**						
4. UCV	24**	15**	$.08^*$					
5. Age	0.05	0.08	-0.03	19**				
6. Gender	0.05	.11*	0.04	0.02	-0.04			
M	2.35	1.68	1.36	3.86	31.05	1.53		
SD	0.91	0.7	0.61	1.13	18.1	0.5		
* p < .05	** p < .01							

As shown in Figure 3, latent diffuse collective violence and latent upward collective violence were each regressed on latent RWA, latent SDO and all covariates simultaneously namely: age and gender (coded as 1 female, 2 male; see Table 4 for more details). Overall, results showed that model fit the data very well (χ^2 (391) = 849.79, p <.001, CFI = 0.94, SRMR = .05 RMSEA = .03 CI [.031, .037]). Parameter estimates (see Table 4) revealed a positive association between RWA and diffuse collective violence (b = .18, se = .05, p = .001) and between SDO and diffuse collective violence (b = .16, se = .06, p = .005). In contrast, RWA (b = -.26, se = .05, p <.001) but not SDO (b = -.08, se = .06, p = .15) was negatively associated with upward collective violence.



Structural equation model in which latent RWA and latent SDO are modelled as simultaneous predictors of latent diffuse collective violence beliefs and latent upward collective violence beliefs. Note. *p < .01. For visual simplicity, observed indicators and covariates are not shown. For full results see Table SI2.

Discussion

We attempted to replicate the findings of the first study using different scales for RWA and SDO in a new, larger, community sample in Lebanon. This study confirmed some of our original predictions on the association between RWA, SDO, and collective violence and replicated some of the findings from Study 1. We found that those high on RWA to justified collective violence against members of the outgroup more than others; and justified collective violence against group leaders less than others. On the other hand, we found those high on SDO justified collective violence against members of the outgroup more than others. The relationship between SDO and upward collective violence was not significant. Thus, Study 2 replicated some of the findings in study 1 namely: the relationship between RWA and upward collective violence, and the relationship between SDO and diffuse collective violence. It is worth considering that the significant results between RWA and diffuse collective violence, which are in line with our original hypothesis, may be influenced by the use of a more reliable measurement of the construct. However, this explanation does not seem to apply to SDO (as discussed in more detail below).

Table 4.

Parameter estimates for the models predicting diffuse and upward collective violence in Study 2.

Diffuse Collective Violence						Upward Collective Violence					
	b	se	\boldsymbol{z}	99% CI			b	se	e z		6 CI
			•	low	high	_			•	low	high
RWA	.18*	.05	3.34	.04	.16	RWA	26*	.05	-5.14	39	13
SDO	.16*	.06	2.8	.01	.46	SDO	08	.06	-1.45	22	.06
Age	.14*	.05	2.62	<.01	<.01	Age	07	.05	-1.3	19	.06
Gender (1Female. 2 Male)	<.01	.03	.09	08	.09	Gender	.01	.03	0.26	07	.09

Note. *p < .01.

General Discussion

Here, we integrated the dual process model of ideology and prejudice with the two-dimensional model of collective violence (Abou-Ismail et al., 2022) by testing the relationship RWA and SDO and support for two diffuse and upward collective violence. The relationship was analysed using two separate scales and samples from Lebanon. Both studies confirmed our predictions about (a) the association between RWA and upward violence and (b) the association between SDO and diffuse violence. In both studies, RWA had a negative association with support for upward violence, and SDO had a positive association with support for diffuse violence.

Overall, these findings support our argument that that those high on RWA, motivated by respect for authority structures, would show lower support for acts of violence targeting group leaders, even if they are leaders of an outgroup. They also suggest, that those high on SDO, motivated to dominate and out-compete outgroups, show increased support acts of violence against outgroup members more generally. Findings regarding the other associations in our theoretical model were more mixed. Specifically, the relationship between RWA and diffuse collective violence was only positive and significant in Study 2, while the relationship between SDO and upward collective violence was only significant (but negative) in Study 1.

We did not find consistent support for the idea, drawn from prior research on prejudice (Sibley & Duckitt, 2010), that RWA would be positively related to support for diffuse collective violence. However, we believe the null effect in Study 1 may be a methodological artefact driven by the unreliable measurement of RWA. Some of the items on the RWA scale used in Study 1 loaded so poorly onto the latent construct that we had to exclude them entirely, resulting in a truncated scale and consequently reduced reliability. The fact that the more typical and more reliable measure of RWA used in Study 2 revealed a significant effect in the expected direction lends support to this conjecture. Therefore it is important to note that the significant results between RWA and diffuse collective violence in line with our original hypothesis are most likely the result of using a more reliable measurement of the construct. However, they may also be influenced by other factors that require further in-depth analysis beyond the scope of this paper.

In contrast, we believe the reasons for the inconsistent observed effects of SDO on upward collective violence are more theoretical than methodological. SDO was initially conceptualised as a preference for the dominance of one's *ingroup* over outgroups in society (Pratto et al., 1994). However, as Jost & Thomson (2000) noted in their seminal article, SDO has also often been conceptualised as a preference for hierarchy *whether or not* it benefits one's ingroup. For groups lower in the intergroup hierarchy, opposition to equality implies maintaining the status quo that disadvantages their group, whereas group dominance implies upending that status quo in favour of their group. For advantaged groups, however, group dominance and opposition to equality both function to maintain the ingroup's advantaged position. Thus, the effects of SDO are contingent on the particular intergroup hierarchy being examined (Jost & Thompson, 2000).

In Lebanon, the sectarian power-sharing arrangements for governing the country, and complexity of ethnoreligious groups involved in it (Salibi, 1990; Harris, 2014), mean that it is

not clear which groups can be considered advantaged and disadvantaged in the sense typically used in intergroup research – or indeed which groups see themselves as relatively advantaged or disadvantaged in the current hierarchy. Indeed, the history of conflict between groups could mean that every group considers themselves to be disadvantaged in some way. Prior research has shown that highly conflictual contexts foster feelings of deprivation regardless of the ingroup's objective position in the hierarchy (Leach et al., 2007). Being high in SDO and perceiving one's ingroup to be relatively disadvantaged should be linked to increased support for violence motivated by hierarchy maintenance.

The fact that SDO can imply these opposing processes, which could not be disentangled in the current context, might explain the lack of a consistent effect of SDO on upward collective violence observed here. Indeed, Study 2 which had higher statistical power and more reliable violence measures showed a *weaker* (and non-significant) effect of SDO on upward collective violence. This provides further support for the idea that opposing processes or unmeasured moderators help explain the nature of the relationship between SDO and violence beliefs. Potential moderators that could influence this relationship include group status, perceived threat, and context-specific factors such as political instability or intergroup conflict intensity. For instance, group status can significantly affect how individuals with high SDO express their dominance motives (Pratto et al., 1994). When the in-group is dominant, high-SDO individuals may support maintaining the status quo, whereas, in contexts where the in-group feels threatened, they might endorse more aggressive measures to restore dominance (Sidanius & Pratto, 1999). Additionally, perceived threat has been shown to amplify the effects of SDO on intergroup hostility (Duckitt, 2006). Future research that can account for relative ingroup status, the two dimensions of SDO, as well as the two dimensions of

collective violence, would help shed light on when the motivation for dominance is associated with collective violence and when it is not.

Overall, the current findings extend the psychological literature on collective violence by further reinforcing the importance of recent attempts to develop a multidimensional framework for collective violence attitudes at the individual level. In particular, they extend Abou-Ismail et al. (2022) recent two-dimensional model in which violence targeted at outgroup members and leaders was found to have different correlates. Integrating this model with the dual process model of ideology and prejudice, we show that those low in RWA, who are motivated to question authority and established norms, seem more willing to support collective violence against outgroup leaders. However, those high in SDO, who are motivated to dominate outgroups, seem more willing to support collective violence against outgroup members. Given the prevalence of both kinds of violence across societies, future research should attempt to distinguish between them when considering the causes of intergroup disharmony in a given context, as well as when proposing potential solutions.

Our findings also extend the literature on the psychology of prejudice and discrimination. The vast literature showing that RWA and SDO predict negative intergroup attitudes and behaviour might lead to the straightforward prediction that these ideologies would also promote support for outgroup-targeted violence. However, our findings show that this is only true for justifying violence enacted against the average member of the outgroup member. RWA and SDO do not predict increased support for violence against outgroup leaders. In the case of RWA, the focus on authority and social conformity seems to result in an aversion to upward collective violence, whereas in the case of SDO the relationship may be null. The findings on RWA dovetails with research suggesting that authoritarians can sometimes support egalitarian intergroup beliefs if the social norms are egalitarian, in line with their motive for conformity (Altemeyer, 1998; Duckitt, 2001; Bilewicz et al., 2017;

Gorska et al., 2021). Future research that considers when the motivation for conformity and support for authority indexed in RWA can lead to atypical intergroup outcomes (i.e., not just more intergroup antipathy), would help shed light on how this ideology functions. Finally, our model also suggests that future research on outgroup animosity that falls short of violence (e.g., prejudice) should move beyond attitudes towards outgroups, and consider attitudes towards outgroup leaders and members separately.

Strengths and limitations

The current study is cross-sectional and therefore precludes causal inferences. We cannot be sure that RWA and SDO cause collective violence beliefs. Our hypotheses, however, were based on prior theorising as well as experimental and longitudinal research suggesting that RWA and SDO predict downstream intergroup attitudes and behaviour. However, longitudinal research also indicates that people's intergroup attitudes can affect their levels of RWA and SDO over time (Osborne et al., 2021). Thus, it is likely that our results reflect a snapshot of a reciprocal process.

Our study is also limited by its focus on a single context, that of Lebanon. There is need for further replication of these patterns across other conflictual contexts. However, as noted earlier, Lebanon provides a unique environment for studying collective violence, which our study has been able to leverage. With its complex sectarian history and politics, it represents a social structure that is prevalent across many similar nations, but that is not well represented in the psychological literature. Most social psychology research, including studies on prejudice and discrimination, is conducted in WEIRD contexts (Henrich et al., 2010). This focus on WEIRD samples has led to a lack of diversity in research populations, which is reflected in the scarcity of psychological studies on extreme forms of intergroup disharmony, such as collective violence. These extreme forms of violence are more prevalent in non-WEIRD contexts, although they are also becoming more common in WEIRD countries

(Borowczyk-Martins et al., 2017). This imbalance highlights the need for more research in diverse cultural settings to understand the full spectrum of intergroup conflict and violence. Our findings suggest that phenomena such as collective violence are complex, cannot be straightforwardly extrapolated from other intergroup attitudes, and may be highly dependent on the nature of intergroup hierarchy being studied.

One final but significant limitation that we must acknowledge is the internal consistency of our RWA and SDO scales. The lower internal consistency of the SDO scale in Study 2, as well as the issues with both the RWA and SDO scales in Study 1, present important limitations to this research. These measurement issues underscore the necessity of using comprehensive and validated scales in future studies to ensure the reliability and validity of findings. The reduced number of items likely contributed to the lower reliability scores, potentially compromising the multidimensional constructs of RWA and SDO. Specifically, the RWA scale may not have adequately captured its three-dimensional nature (authoritarian submission, authoritarian aggression, and conventionalism), and the SDO scale may have failed to fully represent its two-dimensional structure (group-based dominance and opposition to equality). Nevertheless, the results remain highly valuable given the novelty of the research and the insights gained, which we hope will guide future research on these topics in understudied countries.

Furthermore, the smaller sample size in Study 1 may have resulted in a Type II error, where true effects were not detected due to insufficient statistical power. This suggests that the significant findings in Study 2, with its larger sample size, are more reliable and underscore the importance of adequate sample sizes in capturing the complexity of religious intragroup variability. Therefore, while Study 1 provided an essential foundation, its limitations highlight the critical need for larger, more diverse samples in future research.

Conclusion

We have tested the association between authoritarianism and social dominance, and two types of collective violence (diffuse and upward) using two different samples from a non-WEIRD context, namely Lebanon. We found that those high on authoritarianism tend to oppose collective violence beliefs against leaders, and justify it against members of outgroups. While the first finding was consistent, the second was not. Social dominance on the other hand was found to justify collective violence beliefs against members of outgroups in both of our studies, and oppose it against leaders in one of the studies. While the literature has extensively investigated the effect of these attitudes on different forms of prejudice, research that studies the effect of authoritarianism and social dominance on extreme forms of prejudice such as collective violence remains scarce. Future research can investigate this relationship further and in different contexts, especially with collective violence being an ongoing worldwide phenomenon.

References

Abou-Ismail, R. (2022). Ideological narratives shape the social media war in Lebanon.

Retrieved 9 January 2022, from https://thepoliticalpsychologist.com/articles/f/ideological-narratives-shape-the-social-media-war-in-lebanon"

https://thepoliticalpsychologist.com/articles/f/ideological-narratives-shape-the-social-media-war-in-lebanon

Abou-Ismail, R., Phillips, J. B., & Sengupta, N. (2022). Developing a New Scale to Measure Individuals' Support for Collective Violence. *Preprint*.

https://psyarxiv.com/5qrgt/download

- Agostini, M., & van Zomeren, M. (2021). Toward a comprehensive and potentially cross-cultural model of why people engage in collective action: A quantitative research synthesis of four motivations and structural constraints. *Psychological bulletin*, *147*(7), 667. https://doi.org/10.1037/bul0000256
- Altemeyer, B. (1998). The other "authoritarian personality". In *Advances in experimental social psychology* (Vol. 30, pp. 47-92). Academic Press. https://doi.org/10.1016/S0065-2601(08)60382-2
- Altemeyer, R. A., & Altemeyer, B. (1981). *Right-wing authoritarianism*. University of Manitoba press.
- Anderson, C. a, & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, *53*, 27–51. http://www.ncbi.nlm.nih.gov/pubmed/11752478
- Asbrock, F., Sibley, C. G., & Duckitt, J. (2010). Right-wing authoritarianism and social dominance orientation and the dimensions of generalized prejudice: A longitudinal test. *European Journal of Personality*, 24(4), 324-340. https://doi.org/10.1002/per.746

- Balcells, L., & Stanton, J. A. (2021). Violence against civilians during armed conflict: Moving beyond the macro-and micro-level divide. Annual Review of Political Science, 24, 45-69. https://doi.org/10.1146/annurev-polisci-041719-102229
- Bartusevičius, H., van Leeuwen, F., & Petersen, M. B. (2020). Dominance-Driven Autocratic Political Orientations Predict Political Violence in Western, Educated, Industrialized, Rich, and Democratic (WEIRD) and Non-WEIRD Samples. *Psychological Science*, *31*(12), 1511–1530. https://doi.org/10.1177/0956797620922476
- Becker, J. C., & Tausch, N. (2015). A dynamic model of engagement in normative and non-normative collective action: Psychological antecedents, consequences, and barriers.

 European Review of Social Psychology, 26(1), 43–92.

 https://doi.org/10.1080/10463283.2015.1094265
- Beelmann, A., & Heinemann, K. S. (2014). Preventing prejudice and improving intergroup attitudes: A meta-analysis of child and adolescent training programs. *Journal of Applied Developmental Psychology*, 35(1), 10–24. https://doi.org/10.1016/j.appdev.2013.11.002
- Bilewicz, M., Soral, W., Marchlewska, M., & Winiewski, M. (2017). When authoritarians confront prejudice. Differential effects of SDO and RWA on support for hate-speech prohibition. Political Psychology, 38(1), 87-99. https://doi.org/10.1111/pops.12313
- Bizumic, B., & Duckitt, J. (2018). Investigating right wing authoritarianism with a very short authoritarianism scale. *Journal of Social and Political Psychology*, *6*(1), 129–150. https://doi.org/10.5964/JSPP.V6I1.835
- Borowczyk-Martins, D., Bradley, J., & Tarasonis, L. (2017). Racial discrimination in the US labor market: Employment and wage differentials by skill. *Labour Economics*, 49, 106-127. https://doi.org/10.1016/j.labeco.2017.09.007

- Bushman, B. J., & Anderson, C. A. (2001). Is it time to pull the plug on the hostile versus instrumental aggression dichotomy? *Psychological Review*, *108*(1), 273–279. https://doi.org/10.1037/0033-295X.108.1.273
- Cuddy, A.J.C., Fiske, S.T., & Glick, P. (2008). Warmtn and Competence as Universal

 Dimensions of Social Perception: The Stereotype Content Model and the BIAS Map.

 Advances in Experimental Social Psychology, 40(1), 61-149. https://doi.org/10.1016/S0065-2601(07)00002-0
- Choma, B., Hodson, G., Jagayat, A., & Hoffarth, M. R. (2020). Right-Wing Ideology as a Predictor of Collective Action: A Test Across Four Political Issue Domains. *Political Psychology*, 41(2), 303–322. https://doi.org/10.1111/pops.12615
- Cohrs, J. C., & Asbrock, F. (2009). Right-wing authoritarianism, social dominance orientation and prejudice against threatening and competitive ethnic groups. *European Journal of Social Psychology*, 39(2), 270-289. https://doi.org/10.1002/ejsp.545
- Collier, P., & Hoeffler, A. (2004). Greed and grievance in civil war. *Oxford Economic Papers*, 56(4), 563–595. https://doi.org/10.1093/oep/gpf064
- Daniele, G., & Dipoppa, G. (2017). Mafia, elections and violence against politicians. *Journal of Public Economics*, 154, 10-33. https://doi.org/10.1016/j.jpubeco.2017.08.004
- Denny, E. K., & Walter, B. F. (2014). Ethnicity and civil war. *Journal of Peace Research*, 51(2), 199–212. https://doi.org/10.1177/0022343313512853
- Dewall, C. N., Lambert, N. M., Pond, R. S., Kashdan, T. B., & Fincham, F. D. (2012). A grateful heart is a nonviolent heart: Cross-sectional, experience sampling, longitudinal, and

experimental evidence. *Social Psychological and Personality Science*, *3*(2), 232–240. https://doi.org/10.1177/1948550611416675

- Dixon, J. (2009). What causes civil wars? Integrating quantitative research findings.

 *International Studies Review, 11(4), 707–735. https://doi.org/10.1111/j.1468-2486.2009.00892.x
- Duckitt, J. (2006). Differential effects of right-wing authoritarianism and social dominance orientation on outgroup attitudes and their mediation by threat from and competitiveness to outgroups. *Personality and Social Psychology Bulletin*, 32(5), 684-696.

 https://doi.org/10.1177/0146167205284282
- Duckitt, J., & Sibley, C. G. (2010). Personality, ideology, prejudice, and politics: A dual-process motivational model. *Journal of Personality*, 78(6), 1861–1894.

 https://doi.org/10.1111/j.1467-6494.2010.00672.x
- Duckitt, J., & Sibley, C. G. (2016). Personality, Ideological Attitudes, and Group Identity as Predictors of Political Behavior in Majority and Minority Ethnic Groups. *Political Psychology*, *37*(1), 109–124. https://doi.org/10.1111/pops.12222
- Durrant, R. (2011). Collective violence: An evolutionary perspective. *Aggression and Violent Behavior*, *16*(5), 428–436. https://doi.org/10.1016/j.avb.2011.04.014
- El Dahan, M., Perry, T., & Bassam, L. (2021). Deadly shooting rocks Beirut as tensions over blast probe erupt. Retrieved 8 January 2022, from https://www.reuters.com/world/deadly-shooting-rocks-beirut-tensions-over-blast-probe-erupt-2021-10-14/
- Fearon, J.D. Laitin, D.D. (2003). Ethnicity, insurgency, and civil war. American Political Science Review, 97, 75-90.

- Feldman, S. (2003). Enforcing social conformity: A theory of authoritarianism. *Political Psychology*, 24(1), 41–74. https://doi.org/10.1111/0162-895X.00316
- Gallacher, J. D., Heerdink, M. W., & Hewstone, M. (2021). Online Engagement Between Opposing Political Protest Groups via Social Media is Linked to Physical Violence of Offline Encounters. *Social Media and Society*, 7(1). https://doi.org/10.1177/2056305120984445
- Górska, P., Stefaniak, A., Lipowska, K., Malinowska, K., Skrodzka, M., & Marchlewska, M. (2022). Authoritarians Go with the Flow: Social Norms Moderate the Link between Right-Wing Authoritarianism and Outgroup-Directed Attitudes. *Political Psychology*, *43*(1), 131-152. https://doi.org/10.1111/pops.12744
- Göttke, F. (2020). Burning United States Presidents: Protest Effigies in Iraq, Iran and Afghanistan. In *The Political Portrait* (pp. 328-336). Routledge.
- Haddock, G., Zanna, M. P., & Esses, V. M. (1993). Assessing the Structure of Prejudicial Attitudes: The Case of Attitudes Toward Homosexuals. *Journal of Personality and Social Psychology*, 65(6), 1105–1118. https://doi.org/10.1037/0022-3514.65.6.1105
- Harris, W., & Harris, W. W. (2014). Lebanon: A history, 600-2011. Oxford University Press.
- Heaven, P. C., Organ, L. A., Supavadeeprasit, S., & Leeson, P. (2006). War and prejudice: A study of social values, right-wing authoritarianism, and social dominance orientation. *Personality and Individual Differences*, 40(3), 599-608.

 https://doi.org/10.1016/j.paid.2005.08.005
- Henley, A. D. M. (2016). *Religious Authority and Sectarianism in Lebanon*. Carnegie Endowment for International Peace. Retrieved 3 October 2022, from

https://carnegieendowment.org/2016/12/16/religious-authority-and-sectarianism-in-lebanon-pub-66487

- Henrich, J., Heine, S. J., & Norenzayan, A. (2010). Most people are not WEIRD. *Nature*, 466(7302), 29-29. https://doi.org/10.1038/466029a
- Henry, P. J., Sidanius, J., Levin, S., & Pratto, F. (2005). Social dominance orientation, authoritarianism, and support for intergroup violence between the Middle East and America. *Political Psychology*, 26(4), 569-584. https://doi.org/10.1111/j.1467-9221.2005.00432.x
- Ho, A. K., & Kteily, N. S. (2020). The role of group-based egalitarianism in collective action.

 *Current Opinion in Psychology, 35, 108–113. https://doi.org/10.1016/j.copsyc.2020.05.009
- Ho, A. K., Sidanius, J., Kteily, N., Sheehy-Skeffington, J., Pratto, F., Henkel, K. E., Foels, R., & Stewart, A. L. (2015). The Nature of Social Dominance Orientation: Theorizing and Measuring Preferences for Intergroup Inequality Using the New SDO7 Scale. *Journal of Personality and Social Psychology*, 109(6), 1003–1028.
 https://doi.org/10.1037/pspi0000033
- Hoffmann, J. E. N. S., Meloy, J. R., & Sheridan, L. (2014). Contemporary research on stalking, threatening, and attacking public figures. *International handbook of threat assessment*, 160-177.
- Hoffmann, J., Meloy, J. R., Guldimann, A., & Ermer, A. (2011). Attacks on German public figures, 1968–2004: Warning behaviors, potentially lethal and non-lethal acts, psychiatric status, and motivations. *Behavioral sciences & the law*, 29(2), 155-179.

https://doi.org/10.1002/bsl.979

- Holt, L. F., & Sweitzer, M. D. (2020). More than a black and white issue: ethnic identity, social dominance orientation, and support for the black lives matter movement. *Self and Identity*, 19(1), 16–31. https://doi.org/10.1080/15298868.2018.1524788
- Kalmoe, N. P., & Mason, L. (2022). Radical American Partisanship: Mapping Violent Hostility, Its Causes, and the Consequences for Democracy. University of Chicago Press.
- Krahé, B. (2013). *The social psychology of aggression* (2nd ed.). New York, NY: Psychology Press.
- Leach, C. W., Iyer, A., & Pedersen, A. (2007). Angry opposition to government redress: When the structurally advantaged perceive themselves as relatively deprived. *British Journal of Social Psychology*, 46 (1) (2007): 191-204 https://doi.org/10.1348/014466606X99360
- Lemieux, A. F., & Asal, V. H. (2010). Grievance, social dominance orientation, and authoritarianism in the choice and justification of terror versus protest. *Dynamics of Asymmetric Conflict: Pathways toward Terrorism and Genocide*, *3*(3), 194–207. https://doi.org/10.1080/17467586.2010.531029
- Maguire, E. R., Barak, M., Cross, K., & Lugo, K. (2018). Attitudes among Occupy DC participants about the use of violence against police. *Policing and society*, *28*(5), 526-540. https://doi.org/10.1080/10439463.2016.1202247
- Osborne, D., Satherley, N., Little, T. D., & Sibley, C. G. (2021). Authoritarianism and social dominance predict annual increases in generalized prejudice. *Social Psychological and Personality Science*, *12*(7), 1136-1145. https://doi.org/10.1177/1948550620969608

- Papachristos, A. V., Hureau, D. M., & Braga, A. A. (2013). The corner and the crew: The influence of geography and social networks on gang violence. American sociological review, 78(3), 417-447. https://doi.org/10.1177/0003122413486800
- Parrott, D. J., & Giancola, P. R. (2007). Addressing "The criterion problem" in the assessment of aggressive behavior: Development of a new taxonomic system. *Aggression and Violent Behavior*, 12(3), 280–299. https://doi.org/10.1016/j.avb.2006.08.002
- Peace Alliance (2022). Retrieved 14 May 2022, from https://peacealliance"

 https://peacealliance.org/wp-content/uploads/2021/07/Terrorism-TPA-WEBSITE2.pdf
- Perry, R., Sibley, C. G., & Duckitt, J. (2013). Dangerous and competitive worldviews: A metaanalysis of their associations with social dominance orientation and right-wing authoritarianism. *Journal of Research in Personality*, 47(1), 116-127. https://doi.org/10.1016/j.jrp.2012.10.004
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751–783.

 https://doi.org/10.1037/0022-3514.90.5.751
- Pratto, F., Çidam, A., Stewart, A. L., Zeineddine, F. B., Aranda, M., Aiello, A., ... & Henkel, K.
 E. (2013). Social dominance in context and in individuals: Contextual moderation of robust effects of social dominance orientation in 15 languages and 20 countries. *Social Psychological and Personality Science*, 4(5), 587-599.
 https://doi.org/10.1177/1948550612473663
- Pratto, F., Sidanius, J., Stallworth, L. M., & Malle, B. F. (1994). Social dominance orientation:

 A personality variable predicting social and political attitudes. *Journal of Personality and Social Psychology*, 67(4), 741-763. http://dx.doi.org/10.1037/0022-3514.67.4.741

- Reimer, N. K., & Sengupta, N. K. (2021). Meta-Analysis of the 'Ironic' Effects of Intergroup Contact. *Journal of Personality and Social Psychology: Interpersonal Relations and Group Processes*. https://doi.org/10.31234/osf.io/vrsqe
- Saeri, A. K., Iyer, A., & Louis, W. R. (2015). Right-Wing Authoritarianism and Social Dominance Orientation predict outsiders' responses to an external group conflict: Implications for identification, anger, and collective action. *Analyses of Social Issues and Public Policy*, 15(1), 303-332. https://doi.org/10.1111/asap.12081
- Salibi, K. (1990). A house of many mansions: The history of Lebanon reconsidered. Univ of California Press.
- Satherley, N., Sibley, C. G., & Osborne, D. (2021). Ideology before party: Social dominance orientation and right-wing authoritarianism temporally precede political party support.

 *British Journal of Social Psychology, 60(2), 509–52 https://doi.org/10.1111/bjso.12414
- Schumpe, B. M., Bélanger, J. J., Giacomantonio, M., Nisa, C. F., & Brizi, A. (2018). Weapons of peace: providing alternative means for social change reduces political violence. *Journal of Applied Social Psychology*, 48(10), 549-558.
- Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, 12(3), 248–27

 https://doi.org/10.1177/1088868308319226
- Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: A meta-analysis and theoretical review. *Personality and Social Psychology Review*, 12(3), 248–27 https://doi.org/10.1177/1088868308319226

- Sibley, C. G., Robertson, A., & Wilson, M. S. (2006). Social dominance orientation and right-wing authoritarianism: Additive and interactive effects. *Political Psychology*, 27(5), 755-768. https://doi.org/10.1111/j.1467-9221.2006.00531.x
- Sibley, C. G., Wilson, M. S., & Duckitt, J. (2007). Effects of dangerous and competitive worldviews on right-wing authoritarianism and social dominance orientation over a five-month period. *Political Psychology*, 28(3), 357–37 https://doi.org/10.1111/j.1467-9221.2007.00572.x
- Sidanius, J., & Pratto, F. (1999). Social dominance: An intergroup theory of social hierarchy and oppression. 10.1017. *CBO9781139175043*.
- Sidanius, J., Pratto, F., & Mitchell, M. (1994). In-group identification, social dominance orientation, and differential intergroup social allocation. *Journal of Social Psychology*, 134(2), 151–16 https://doi.org/10.1080/00224545.1994.9711378
- Spanovic, M., Lickel, B., Denson, T. F., & Petrovic, N. (2010). Fear and anger as predictors of motivation for intergroup aggression: Evidence from Serbia and Republika Srpska. *Group Processes and Intergroup Relations*, *13*(6), 725–73

 https://doi.org/10.1177/1368430210374483
- Stathi, S., Vezzali, L., Waldzus, S., & Hantzi, A. (2019). The mobilizing and protective role of national identification in normative and non-normative collective action. *Journal of Applied Social Psychology*, 49(9), 596-608. https://doi.org/10.1111/jasp.12619

- Sturmey, P., Allen, J. J., & Anderson, C. A. (2017). Aggression and Violence: Definitions and Distinctions. *The Wiley Handbook of Violence and Aggression*, 1–1 https://doi.org/10.1002/9781119057574.whbva001
- Tausch, N., Becker, J. C., Spears, R., Christ, O., Saab, R., Singh, P., & Siddiqui, R. N. (2011).
 Explaining Radical Group Behavior: Developing Emotion and Efficacy Routes to
 Normative and Nonnormative Collective Action. *Journal of Personality and Social Psychology*, 101(1), 129–14 https://doi.org/10.1037/a0022728
- Tilly, C. (2003). *The politics of collective violence*. Cambridge University Press. 0521531454, 9780521531450
- Travaglino, G. A. (2019). Support for Anonymous as vicarious dissent: Testing the social banditry framework. *Group Processes and Intergroup Relations*, 22(2), 163–181. https://doi.org/10.1177/1368430217722037
- Vasquez, E. A., Lickel, B., & Hennigan, K. (2010). Gangs, displaced, and group-based aggression. *Aggression and Violent Behavior*, *15*(2), 130-140. https://doi.org/10.1016/j.avb.2009.08.001
- Vezzali, L., Di Bernardo, G. A., Stathi, S., Cadamuro, A., Lášticová, B., & Andraščiková, S. (2018). Secondary transfer effect among children: The role of social dominance orientation and outgroup attitudes. *British Journal of Social Psychology*, 57(3), 547–566.
 https://doi.org/10.1111/bjso.12248
- Waller, J. E. (2007). *Becoming evil: How ordinary people commit genocide and mass killing*.

 Oxford University Press. 0199774854, 9780199774852

Yakeley, J., & Meloy, J. R. (2012). Understanding violence: Does psychoanalytic thinking matter?. *Aggression and Violent Behavior*, 17(3), 229-239. https://doi.org/10.1016/j.avb.2012.02.006

Wood, J. L., Kallis, C., & Coid, J. W. (2022). Gang members, gang affiliates, and violent men:
Perpetration of social harms, violence-related beliefs, victim types, and locations. *Journal of interpersonal violence*, 37(7-8), NP3703-NP3727.
https://doi.org/10.1177/0886260520922371