When Violence Binds:

Shared Repression and Opposition Cooperation

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Abstract

Does state repression strengthen cooperation among opposition organizations? This article argues that the consequences of lethal repression depend not only on who experiences violence, but on whether organizations endure it together. Shared lethal repression creates experiential ties through relational certification, dyadic memory, and opportunities for renewed coordination. Linking African opposition organizations to protest and repression events, the analysis compares existing partners present at and absent from the same lethal protest, alongside dyads exposed to violence together and separately. Organizations experiencing lethal repression together are substantially less likely to dissolve their cooperative ties and engage in significantly more joint protest afterward. These patterns persist after accounting for prior joint protest, organizational activity, alliance, and event-level differences. Pre-event trends and comparisons with nonlethal repression provide further evidence consistent with the argument. The findings identify costly shared experience as a relational foundation of opposition cooperation alongside shared goals and formal alliances.

Keywords: Lethal Repression, Opposition Coalitions, Protest, Shared Victimization

Introduction

State repression can divide opposition organizations, but it can also reinforce cooperation among them. Why do some organizational ties survive violent crackdowns while others dissolve? Scholarship on repression and dissent has long examined whether state coercion deters or intensifies mobilization (Lichbach, 1987; Moore, 1998; Davenport, 2007; Earl, 2011). Some studies show violent repression backfiring by generating outrage and further mobilization (Francisco, 2004; Hess and Martin, 2006), while others find that repression can suppress subsequent challenges and contribute to the weakening or destruction of opposition organizations (Sullivan, 2016). The literature often evaluates consequences of repression for individual actors or aggregate protest: empirical research on the protest–repression nexus rarely moves beyond aggregate counts of protest and repression (Grimm and Harders, 2018). Recent work shows that how repression is distributed across opposition groups can also shape identification and polarization (Nugent, 2020).

This article argues that the relational distribution of violence shapes the subsequent trajectory of opposition ties. Drawing on research on shared adversity and cooperation (Bauer et al., 2016; Whitehouse et al., 2017), the social psychology of crowds under police violence (Drury and Reicher, 2000), and interaction rituals in protest (Ketchley, 2014), it develops the concept of an experiential tie. When two organizations endure lethal repression at the same protest, the event offers observed evidence that each was willing to bear the same costs (relational certification), creates a memory particular to the pair (dyadic memory), and generates recurring occasions for joint action through funerals, commemorations, and public condemnations (coordination focality). Lethal repression experienced separately may generate parallel grievances, but it does not create the same relational information. The distinction is thus between common victimhood and shared victimization.

The empirical analysis constructs dyad-year data by linking the Anatomy of Resistance Campaigns (ARC) dataset on African opposition organizations (Butcher et al., 2022) to protest and repression events in SCAD (Salehyan et al., 2012), ACLED (Raleigh et al.,

2010), and the Mass Mobilization Project (Clark, Regan and H. Clark, 2016). The primary design compares, for each organization present at a lethal protest, its existing partners who were also present with those who were absent from that event. The analysis further compares partners of the same focal organization, holding constant characteristics of that organization. A complementary cross-event analysis compares dyads that experienced lethal repression together with dyads exposed at different events. The analysis centers on Egypt and Nigeria since they provide the clearest empirical variation in shared and separate exposure to lethal repression.

The analysis yields two main findings. First, organizations that endured lethal repression together were substantially more likely to maintain their ties than organizations exposed separately. This pattern appears in both the same-event and cross-event comparisons and remains robust to differences in prior joint activity. Second, shared lethal repression was followed by greater subsequent joint protest with the specific partner. By contrast, shared nonlethal repression shows no comparable pattern.

The article contributes to three bodies of research. For the repression–dissent literature, it redirects attention from the amount of violence to the way violence is configured across opposition actors. For research on opposition coalitions, which has devoted more attention to coalition formation than to persistence (Van Dyke and Amos, 2017), it suggests a source of durability distinct from ideological compatibility and formal commitments. For research on violence and cooperation, it shifts the unit of analysis from individuals and communities to organizations, distinguishing jointly experienced events from exposure in general.

The remainder of the article proceeds as follows. The next section reviews existing research on repression, opposition coalitions, and shared adversity. It then develops the concept of experiential ties, deriving hypotheses about relational persistence, relational intensification, and the importance of costly shared experience. The following section introduces the data and research design, including the same-event and cross-event comparisons. It then presents the empirical results and robustness checks before concluding with the broader

implications for the study of repression, coalition durability, and political cooperation.

Repression, Coalitions, and Shared Adversity

The findings in the field of the repression–dissent nexus remain highly inconsistent. Existing research documents deterrent, escalatory, and nonlinear effects of repression, with variation attributed to political context, timing, network structure, and dissidents' strategic responses (Lichbach, 1987; Moore, 1998; Davenport, 2007; Earl, 2011; Siegel, 2011; Honari, 2018). Repression can suppress contention, but it can also generate backlash by producing outrage, moral shock, and renewed mobilization (Jasper and Poulsen, 1995; Francisco, 2004; Hess and Martin, 2006; Pearlman, 2013). At the organizational level, repression can weaken dissident organizations, provoke backlash, or alter their political standing (Sullivan, 2016; Sullivan and Davenport, 2017; Pan, Xu and Xu, 2026). Yet the literature still generally treats repression as an attribute of a target or period rather than as a relational experience among organizations. The closest exception is Nugent (2020), who shows that targeted and widespread repression shape identification and polarization differently across opposition groups. Yet it does not explain why organizations exposed to repression together may remain connected and continue acting jointly, while organizations exposed separately do not.

The literature on opposition coalitions speaks to the question by examining the conditions under which organizations form and sustain cooperative ties. Research on coalition formation points to social ties, ideological compatibility, resources, and political threats and opportunities, with similar patterns found among rebel organizations (Van Dyke, 2003; Sullivan and Davenport, 2017; Gade et al., 2019). Here, threat is crucial: threats to shared goals and constituencies can encourage coalition building, and repression or confrontation with the state has repeatedly prompted new alliances across diverse settings (McCammon and Campbell, 2002; Almeida, 2003; Van Dyke, 2003; Aiyede, 2004; Levi and Murphy, 2006; Chang, 2008; Gandhi and Reuter, 2013; Biagini, 2017).

Less is known about why opposition ties endure once they have formed. Coalitions often weaken when the threats or opportunities that brought them together recede, especially when cooperation rests on tactical goals rather than durable identity or trust (Diani and Bison, 2004; Kraetzschmar, 2011; Abdelrahman, 2013; Van Dyke and Amos, 2017). Existing explanations of durability therefore emphasize what organizations already share, including prior interaction, overlapping ties, and preexisting relational trust (Verbrugge, 1979; Akcinaroglu, 2012; Wang and Soule, 2012; Topal, 2025), leaving open how later experiences may alter the strength and persistence of their ties.

Research on wartime violence finds that exposure to violence can increase cooperation and civic participation (Bellows and Miguel, 2009; Blattman, 2009; Gilligan, Pasquale and Samii, 2014; Bauer et al., 2016). Social-psychological research also points to the importance of shared experience: painful or negative experiences can strengthen identification, cooperation, and social integration when they are endured in common (Bastian, Jetten and Ferris, 2014; Whitehouse et al., 2014; Jong et al., 2015; Knight and Eisenkraft, 2015; Whitehouse et al., 2017; Qi et al., 2020). Research on crowds and high-risk activism similarly shows that common exposure to violence can produce shared identity, solidarity, and commitment among participants (Drury and Reicher, 2000, 2009; Vollhardt, 2009). Similar processes have also been observed among organizations, where repression can reactivate existing ties and connect otherwise distinct actors through common experience (Aiyede, 2004; Parkinson, 2013). The literature thus suggests that the consequences of violence may depend not only on whether actors are exposed to it, but also on whether they experience it together. Yet it mostly focuses on individuals, communities, or groups subjected to violence over extended periods rather than on relationships between organizations. It also rarely distinguishes jointly experienced events from parallel exposure.

In sum, the three literatures leave an important question unresolved. Research on repression generally treats violence as an attribute of targets or periods; research on coalitions explains durability largely in terms of what organizations already share; and research on

shared adversity has not fully extended its relational insight to ties between organizations. If shared adversity can strengthen bonds among individuals, then jointly experienced repression may have similar consequences for organizations. This possibility shifts attention from whether two organizations were both repressed to whether they endured the same episode of repression together.

Theory

Experiential Ties

Lethal repression rarely affects only one organization. Protests are often organized by multiple groups, so when the state uses deadly force, several organizations may be exposed at the same event. Other organizations may face violence from the same regime at different protests, places, or times. Two opposition fields in which the same number of organizations lose members can thus differ in the pattern of who endured violence with whom: the relational distribution of repression. At the dyadic level, lethal repression is either an event two organizations experienced together or one they experienced apart.

This article's central concept is the experiential tie: a relational bond produced when organizations endure a consequential event together. What matters is not mere copresence but costly copresence. Organizations appear together at many protests, but a protest at which people are killed reveals something different: each organization observes that the other remained present, that both became targets of the same state violence, and that neither escaped the risk at the other's expense. The shared event makes their mutual willingness to bear the cost close to common knowledge.

An experiential tie differs from the other foundations of cooperation among opposition organizations (Table I). Shared demands indicate compatible preferences; formal alliances

represent declared commitments; repeated joint protest records a history of interaction.[1] Shared lethal repression contributes what these other bases do not: observed evidence of what the partner is willing to endure. Demands and alliances reveal what organizations want and what they have promised, but not whether those commitments survive under fire.

Table I. Ties Among Opposition Organizations and What They Provide

Tie	What it provides	What the two organizations can say of each other
Shared demands	Compatible preferences	"We want the same things"
Formal alliance	Declared commitment	"We said we would act together"
Repeated joint protest	Interaction history	"We have acted together"
Shared lethal repression	Credible shared sacrifice	"We paid the price together"

Costly copresence can furnish a relationship with three related resources. A shared lethal event changes what they know about one another (relational certification), gives them a common past (dyadic memory), and creates occasions around which they can act together again (coordination focality). They are best understood as components of a single relational process rather than as separate mechanisms. Certification arises from what organizations observe about one another during the event, while memory and focality capture ways the shared event may continue to organize the relationship over time.

Relational certification. The most immediate resource is information about the partner under costly conditions. A lethal event provides evidence that the partner actually accepted risk and paid a cost. Behavior conveys commitment when it entails a cost that an uncommitted actor would be unwilling to bear (Fearon, 1997), and strong ties grounded in trust can connect otherwise separated parts of an organization under intense repression (Parkinson, 2013). The informational value of sacrifice is illustrated by Libyan revolutionaries, who distinguished between those who had borne the costs of frontline participation

[1] Network research on civil society accordingly uses joint participation in previous public events as an indicator of identity ties that extend beyond a single campaign (Diani and Bison, 2004).

and supporters who had not. The latter were described as free-riders who stood to benefit from Gaddafi's fall without having made comparable sacrifices (Whitehouse et al., 2014). Studies of protest coalitions similarly find that organizations partner when they can draw on preexisting trust and credibly commit to delivering what they promise (Levi and Murphy, 2006). An ally that exists only on paper is thus different from an organization that remained alongside its partner once shooting began. During the 2011 Egyptian uprising, embodied performances under threat generated information about alignment: protesters used face-to-face fraternization to make claims on soldiers' loyalty and interpreted soldiers' responses as evidence of where they stood (Ketchley, 2014).

Dyadic memory. Costly copresence can also give the pair a shared past. Whitehouse and Lanman (2014) distinguish categorical ties, grounded in shared beliefs, from relational ties rooted in shared self-defining episodic memories, such as the experience of frontline violence; the latter can generate a sense of psychological kinship. Organizations that encounter lethal repression at different protests may thus develop similar grievances, but they do not share a memory of a single event. For organizations that endured the same lethal protest, that event becomes part of the relationship's history. Such memories can outlast the event itself: personal reflection on shared negative experiences is one route through which these bonds develop (Jong et al., 2015). Within organizations, members and leaders who were present carry this memory, while organizational records preserve accounts of the event.

Coordination focality. A shared event can also create recurring opportunities for renewed joint action. Anniversaries and other salient dates can provide focal points for coordination (Truex, 2019), while deaths and funerals can generate occasions for renewed mobilization. After the August 2013 dispersals in Egypt, funerals for killed protesters became occasions for new marches, and the one-month anniversary produced the largest number of anti-coup protest events recorded on a single day (Grimm and Harders, 2018). Mourning cycles and weekly rituals have served similar date-setting functions for organizationally weak oppositions elsewhere (Ketchley and Barrie, 2020). By giving participants recurring occa-

sions to return to the same event, these practices can bring actors back into contact and create opportunities for renewed coordination.

Together, relational certification, dyadic memory, and coordination focality describe different ways in which a jointly experienced violent event can persist in a relationship after the event has ended. Costly copresence can reveal commitment under pressure, leave the pair with a shared past, and create occasions for renewed interaction. The experiential tie is thus the relationship that remains after such costly copresence.

Shared victimization versus common victimhood

Consider two organizations that encounter lethal repression at separate events. Both may lose members to the police, and both may become angrier at the regime. Yet separate exposure does not provide partner-specific trust, a shared relational history, or a common event around which the two can coordinate again. Separate lethal repression can thus generate parallel grievances without producing relational information. The central distinction is therefore between common victimhood, which organizations experience individually, and shared victimization, which is a property of their relationship. Experiential ties arise from the latter. Experimental evidence is consistent with this distinction: pain increases cooperation when it is shared but not when the same pain is experienced separately (Qi et al., 2020). Jasper (1998) distinguishes shared emotions directed toward a common object from reciprocal emotions that movement participants feel toward one another. Separate exposure may generate the former, while costly copresence can also generate the latter. Egypt after the 2013 coup illustrates the difference between common victimhood and shared victimization. Different opposition actors had suffered lethal repression at different moments, but those parallel losses did not produce a common relational history. Earlier mistrust persisted, and anti-coup mobilization remained concentrated among Islamist allies rather than expanding into a broader opposition coalition (Ketchley, 2013; Grimm and Harders, 2018).

Hypotheses

If costly copresence produces an experiential tie, the bundle of relational resources described above should be associated both with more joint action with the specific partner immediately after the event and with continued joint action in the following year. Persistence means that an existing tie survives; intensification means that it generates more joint action. Either outcome can occur without the other.

H1 (Relational persistence). Pairs that endure lethal repression together at the same protest are more likely than pairs exposed separately to continue protesting together in the following year.

H2 (Relational intensification). Pairs that endure lethal repression together exhibit a larger post-event increase in joint protest with that specific partner than pairs exposed separately.

The argument also implies that the cost of the shared event should matter. Certification should be strongest when the jointly experienced event imposes severe costs. Experiencing arrests or dispersal together without deaths demonstrates copresence but reveals much less about what each organization is willing to bear. Shared nonlethal repression should thus display a weaker association with persistence, or none at all. Table II summarizes the observable implications of the experiential-tie argument.

Table II. Hypotheses and Observable Implications

Hypothesis or implication	Relational basis	Observable implication
H1 Relational persistence	Costly copresence leaves relational resources that can sustain the tie	Dissolution of joint protest in t+1: shared < separate
H2 Relational intensification	The shared event gives the dyad a partner-specific basis for renewed joint action	Joint protest with the partner after the event: shared > separate
Weight of the event	Costly events provide stronger relational information than low-cost copresence	Shared nonlethal repression: weak or no association

Research Design

Data

The organizational data come from the Anatomy of Resistance Campaigns (ARC) dataset, which records 1,426 organizations involved in maximalist contention in Africa between 1990 and 2015, including their interorganizational alliances and identifiers for the protest events in which they participated (Butcher et al., 2022). ARC identifies participating organizations from event datasets and newswire searches, and it also codes the constituent members of a participating front as participants if they had joined the front within the previous three years (Butcher et al., 2022). This rule is useful for the present dyadic design: fronts coordinate member organizations, and treating a front as a unitary actor would erase the member-level relationships. ARC explicitly accepts the possibility that some recent members did not attend a particular protest because the rule recovers organizations, including local human-rights, women's, and youth groups, that often participate but are overlooked in news coverage (Butcher et al., 2022). These identifiers are used to connect organizations to protest and repression events, with event information drawn from the Social Conflict Analysis Database (SCAD; Salehyan et al., 2012), the Armed Conflict Location and Event Data (ACLED; Raleigh et al., 2010), and the Mass Mobilization Project (MMD; Clark, Regan and H. Clark,

2016). Organizations coded by ARC as formally or informally co-opted by the regime are excluded. The unit of analysis is the organization dyad-year. To avoid treating missing event coverage as tie dissolution, only country-years with event data in both t and t+1 are retained.

Measuring ties

Joint protest. Two organizations are coded as protesting together in year t when they are linked to at least two of the same protest events in that year. A single appearance at a large demonstration provides weak evidence of cooperation, whereas repeated co-participation better captures an operative relationship, consistent with prior work that treats joint protest participation as interorganizational collaboration (Wang and Soule, 2012). Protest events include SCAD protests, riots, and strikes; ACLED protests and violent demonstrations; and all MMD events. Dissolution equals one when a dyad that protested together in t shares fewer than two protest events in t+1.

Formal alliance. The alliance measure draws on ARC's bilateral alliance records and codes organizations that belong to the same umbrella front as the alliance. Alliances involving rebel groups are excluded. Front organizations themselves are removed from the joint-protest and alliance layers, and events attributed only to a front are not reassigned to its members. Online Appendix F describes an alternative coding that retains umbrella fronts as separate organizations in both layers.

Lethal repression and exposure

The analysis counts only repression with recorded deaths: SCAD events coded as lethal repression with at least one death, ACLED repression events that record fatalities, and MMD events in which killings were the state response. Because the same episode may appear in several sources or as multiple consecutive records, records from the same country and date, as well as records with identical participant sets occurring within 14 days, are

combined into event clusters (238 lethal records form 159 clusters).

Among dyads in which at least one organization experienced lethal repression in year t, exposure is coded as shared when both organizations were present at the same protest at which deaths occurred. Exposure is coded as separate when at least one organization experienced lethal repression, but the two organizations never did so at the same protest. For each dyad, t0 marks the date of the first lethal repression experienced by either organization in that year. The event data record that an organization was present at a protest at which deaths occurred, not whether the dead were its own members; exposure thus refers to presence at a lethal event rather than to an organization's own losses.

Sample and case selection

The sample includes dyads that protested together repeatedly in year t. Both organizations must remain active in protest in t and $t+1$, so that tie dissolution is not conflated with organizational demobilization. At least one organization must also have protested without the other during year t. Because separately exposed dyads necessarily satisfy this condition, the analysis applies the same restriction to all dyads for comparability.

The main analysis uses a same-event sample. For each organization present at a qualifying lethal event cluster, the sample contains its year-t partners who were also present and its year-t partners who were absent and never shared lethal repression with it. The comparison relies on within-event variation in partner presence. It therefore does not require both shared and separate exposure to occur within the same country, allowing lethal events from all ARC-covered countries to enter the analysis. In practice, Egypt and Nigeria supply most of this sample: in the same-event sample used for H2, they account for 1,042 of 1,146 observations and 22 of 34 event clusters (Online Appendix Table D1).

A complementary cross-event comparison contrasts dyads that shared lethal repression with dyads exposed at different events. This comparison requires both forms of exposure to occur within the same political setting, so the cross-event sample is selected for variation

in exposure rather than for outcomes: the rule requires at least 30 dyads of each exposure type (Online Appendix Table A1). Only two countries satisfy the rule: Egypt (31 separate, 315 shared) and Nigeria (37 separate, 75 shared). These dyad-years are concentrated in Egypt in 2011–2013 (25 of 31 separately exposed and 306 of 315 shared-exposure dyads) and in Nigeria in 1993 (32 of 37 and all 75); the remaining dyad-years fall in other years and are retained in all analyses (Online Appendix Table B2). Separately exposed dyads are nearly absent elsewhere. This selection strategy permits a within-crisis comparison of the two exposure patterns, but it also limits the scope of inference: Egypt and Nigeria are not treated as representative of African opposition politics, and the cross-event estimates should not be generalized to the continent as a whole. Their analytical value lies instead in asking whether the same relational contrast appears in two distinct crises: the post-2011 transition in Egypt and the crisis following the annulment of Nigeria's 1993 presidential election. In Egypt, the revolutionary coalition fractured after Mubarak's fall as successive votes deepened the Islamist–non-Islamist divide, culminating in the military's removal of President Morsi in July 2013 (Brown, 2013; Ketchley and El-Rayyes, 2021). In Nigeria, annulment of the June 1993 election prompted human rights organizations, labor unions led by the oil-sector unions, and student, professional, and women's organizations to coordinate through umbrella organizations such as the Campaign for Democracy; mass action led by the Nigeria Labour Congress preceded General Babangida's resignation in August 1993 (Aiyede, 2004; Tar, 2009).

Estimation

For H1, the analysis estimates linear probability models in which dissolution is regressed on exposure; corresponding logit estimates, where they can be estimated, appear in the Online Appendix. Standard errors are clustered by lethal event cluster. The baseline same-event models and the cross-event models include country and year fixed effects. The same-event design is additionally estimated with event fixed effects and with focal-organization-

by-event fixed effects, which absorb respectively all characteristics shared by dyads anchored to the same lethal event and all characteristics shared by the partners of the same focal organization at that event. These models estimate adjusted associations rather than causal effects: exposure is not randomly assigned, and the focal-organization-by-event specification cannot eliminate dyad-specific factors associated with both copresence and subsequent tie persistence.

All controls are measured before exposure and are included to address specific alternative explanations. Prior shared protests, measured as the number of joint protests in year t before the reference date, address the possibility that organizations with stronger existing ties were more likely to be present together. The reference date is the lethal event date in the same-event sample and $t0$ in the cross-event sample. Activity, defined as the sum of the two organizations' protests before the reference date, addresses the possibility that highly active organizations both attend major lethal protests and remain active afterward. Alliance captures coalition embeddedness. Total joint protest in year t is deliberately excluded because it contains post-t0 joint protest and thus incorporates part of the outcome predicted by H2.

H1 is evaluated primarily with the same-event sample. For each organization present at a lethal event, the models compare year-t partners who were also present with absent partners, with all controls measured before the event date. The main comparison is between present partners and all absent partners, regardless of whether the latter experienced lethal repression elsewhere in the same year. A supplementary comparison restricts absent partners to those who experienced lethal repression at another event in the same year.

The focal-organization $\times$ event specification compares partners of the same organization at the same lethal event, absorbing event-level conditions and focal-organization characteristics common to its relationships at that event. Identification thus comes from variation in partner presence within the same focal-organization-event, although dyad-specific factors related to both attendance and persistence may remain.

A cross-event comparison complements this design by contrasting shared and separate

exposure across events in Egypt and Nigeria while adjusting for prior relational characteristics. Because this comparison relies on variation across events rather than within them, it is treated as supporting evidence.

For H2, Poisson regressions estimate the number of joint protests with the partner during the 90 days after the event in the same-event sample, controlling for joint protest in the preceding 90 days, the two organizations' activity during that window, and alliance, with country and year fixed effects. To evaluate whether the cost of the event matters, the analysis also examines nonlethal repression. These are repressed events with no recorded deaths, excluding MMD shootings and SCAD events coded as lethal when no death count is reported.

Figure 1 illustrates the cross-event contrast in the two crises, using the country-year in each selected country with the most separately exposed dyads. Each node is an organization and each edge a dyad in the cross-event sample. Blue edges join organizations that experienced lethal repression at the same protest, red edges join organizations that experienced it at different events, and dashed edges mark ties that dissolved in t+1. In Nigeria in 1993, 31 of 32 separately exposed ties dissolved, compared with 16 of 75 shared-exposure ties. In Egypt in 2011, shared-exposure ties dissolved relatively often (35 of 65), but separately exposed ties dissolved more often still (9 of 12).

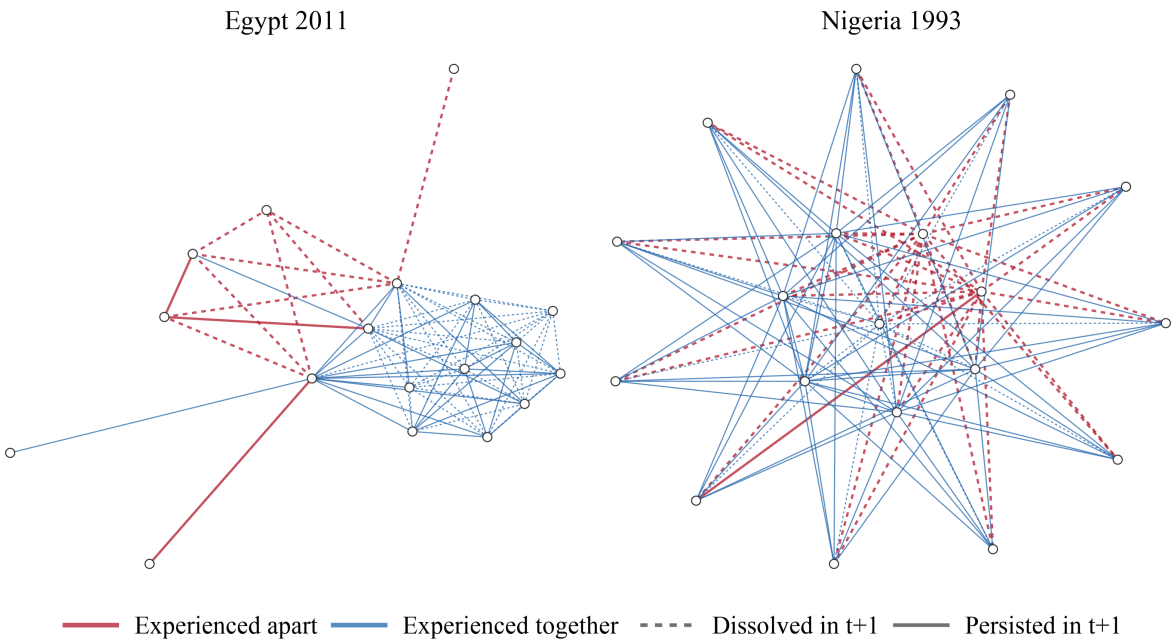


Figure 1. Lethal Exposure and Tie Persistence in Two Crises

Results

Relational persistence (H1)

Table III presents the main H1 results. In the same-event sample, ties to partners present at a lethal event are significantly less likely to dissolve than ties to absent partners, even after accounting for prior joint protest, organizational activity, and alliance. This association remains robust with event fixed effects and focal-organization × event fixed effects, indicating that the pattern persists when comparing partners exposed to the same event and partners of the same focal organization.

Panel B provides a more direct comparison between partners who shared the lethal event and those who experienced lethal repression elsewhere in the same year. Ties to present partners are significantly less likely to dissolve across specifications, including the focal-organization × event model. A three-group specification further shows that separately exposed partners are most likely to dissolve, followed by unexposed partners, while partners

present at the same lethal event are least likely to dissolve. Experiencing violence from the same regime at a different event therefore does not exhibit the same pattern of tie persistence as enduring the event together.

Table III. Linear Probability Models of Tie Dissolution (H1)

	Same-event (1)	Same-event (2)	Same-event (3)	Same-event (4)	Cross-event (1)	Cross-event (2)
Panel A. Main specifications						
Present at the lethal event	-0.531^{***}	-0.464^{***}	-0.435^{**}	-0.486^{***}		
	(0.100)	(0.095)	(0.121)	(0.117)		
Experienced separately					0.578^{***}	0.456^{**}
					(0.126)	(0.126)
Controls		✓	✓	✓		✓
Country FE, year FE	✓	✓			✓	✓
Event FE			✓			
Focal org. × event FE				✓		
Observations	1,165	1,165	1,162	1,029	458	458
Event clusters	38	38	35	30	12	12
Mean of outcome	0.22	0.22	0.22	0.22	0.23	0.23
Panel B. Present vs. separately exposed partners						
Present at the lethal event	-0.655^{***}	-0.638^{***}	-0.594^{**}	-0.679^{***}		
	(0.088)	(0.129)	(0.174)	(0.147)		
Observations	1,065	1,065	1,060	928		
Event clusters	33	33	28	22		
Mean of outcome	0.17	0.17	0.17	0.17		

Note: $^{*}p < .05$, $^{**}p < .01$, $^{***}p < .001$.

Table IV addresses the possibility that partners present at lethal events were already closer to the focal organization. Across categories of prior joint protest, ties to present partners consistently exhibit lower dissolution than ties to absent partners. Together, these findings narrow explanations based on event-level conditions, focal-organization characteristics, and prior tie strength, although unobserved dyad-specific factors may still influence both copresence and persistence.

An alternative explanation is that partners present at lethal events were already developing stronger cooperative ties before the event. Figure 2 examines this possibility by tracing monthly joint protest in the same-event sample before and after lethal repression, excluding the event itself and associated records. Panel (a) displays changes relative to each group's

Table IV. Same-Event Sample: Dissolution by Prior Joint Protests (H1)

Prior joint protests	Absent partners	Present partners	Absent: dissolved	Present: dissolved
0	63	111	81%	39%
1	7	81	71%	21%
2–3	29	11	69%	0%
4–9	8	254	75%	5%
10+	9	68	100%	18%

Note: All countries. Prior joint protests counted in year t before the lethal event; present partners weighted as in Table III.

earlier baseline, while Panel (b) compares pre- and post-event changes between present and absent partners, alongside a placebo comparison within the baseline period. This approach distinguishes preexisting differences in relational strength from changes in cooperation over time.

Before the protest wave preceding lethal repression, present partners engaged in more joint protest than absent partners, but their trajectories were similar. Neither the baseline trend tests nor the placebo comparison indicates a systematic divergence during this earlier period. The pattern also holds when the largest lethal event is excluded. Thus, although present partners had stronger prior ties, those ties were not already strengthening at a systematically faster rate during the baseline period.

Differences began to emerge during the protest wave preceding the lethal event, as joint activity among present partners increased relative to absent partners. The divergence became substantially larger immediately afterward, with present partners exhibiting a pronounced increase in joint protest that gradually subsided over the following months. The difference-in-differences estimates confirm greater post-event increases among present partners, while the placebo estimates remain close to zero. These findings are robust to excluding the largest event.

Because cooperation had already begun to diverge during the preceding protest wave, the post-event difference cannot be attributed to lethal repression alone. Nevertheless, the

absence of an earlier divergent trend, followed by a pronounced increase around the event, suggests that the observed differences are not simply a continuation of long-standing relational trajectories. Rather, shared lethal exposure is associated with intensified cooperation emerging during the surrounding mobilization and becoming especially pronounced after the event.

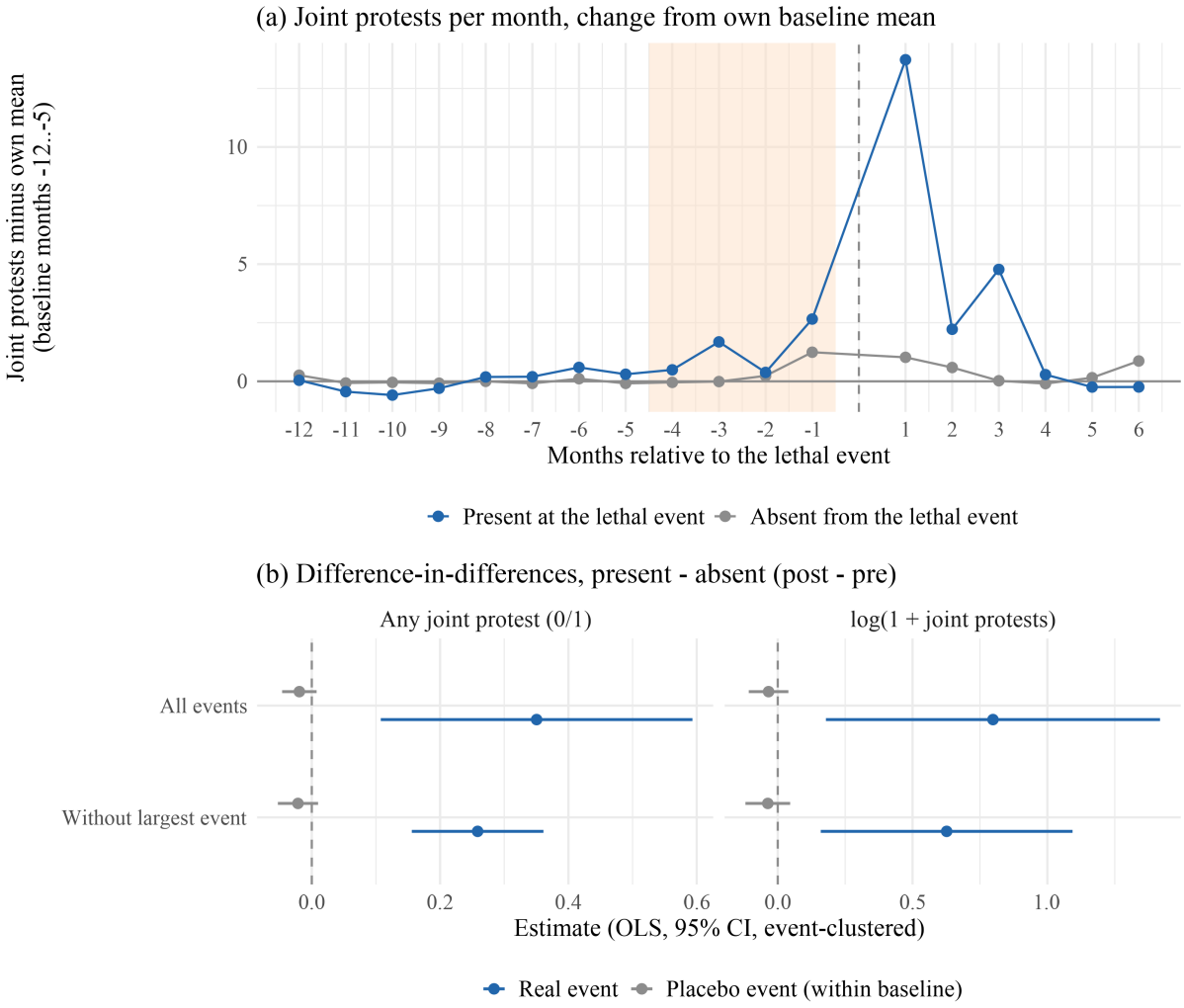


Figure 2. Joint Protest Before and After the Lethal Event

Note: Panel (a) shows monthly joint protests relative to each group's baseline mean (months −12 to −5). Shading indicates the preceding protest wave. The lethal event and associated records are excluded. Panel (b) reports difference-in-differences estimates for post-event changes and placebo comparisons within the baseline. Estimates include pair and event × period fixed effects; 95% confidence intervals are clustered by event.

The cross-event comparison reinforces this pattern. In both Egypt and Nigeria, dyads

that experienced lethal repression separately were more likely to dissolve than those that endured it together. The difference also holds across country-years in which both exposure types are observed and remains statistically significant after adjusting for prior joint protest, activity, and alliance. Although this comparison is more vulnerable to selection across events, its consistency with the same-event results lends further support to H1.

Relational intensification (H2)

Table V reports Poisson estimates of joint protest with the partner during the 90 days after the event. After accounting for prior joint protest, organizational activity, and alliance, partners present at the lethal event protested together significantly more often than absent partners. The association remains robust when the sample is restricted to Egypt and Nigeria and when present partners are compared only with those who experienced lethal repression separately (Online Appendix Table D1). While joint protest with separately exposed partners remained relatively stable before and after the event, joint activity with present partners increased substantially. This pattern suggests that the post-event difference reflects intensified cooperation with the specific partner.

Table V. Poisson Models of Joint Protest in the 90 Days After the Event (H2, Same-Event Sample)

	(1)	(2)
Present at the lethal event (incidence rate ratio)	11.24***	8.52***
95% confidence interval	[4.54, 27.87]	[3.43, 21.16]
Controls (prior 90-day joint protest, activity, alliance)		✓
Country FE, year FE	✓	✓
Observations	1,146	1,146
Event clusters	34	34

Note: Event-cluster confidence intervals. $^{***}p < .001$.

Figure 3 illustrates the same pattern descriptively for the selected-country dyads used in the cross-event comparison. Before t0, organizational activity was similar across the two exposure groups. Following shared lethal repression, both organizations became substan-

tially more active, with much of this activity involving joint protest. In contrast, separately exposed dyads showed a more modest increase in joint activity, while shared nonlethal repression was not followed by a comparable shift.

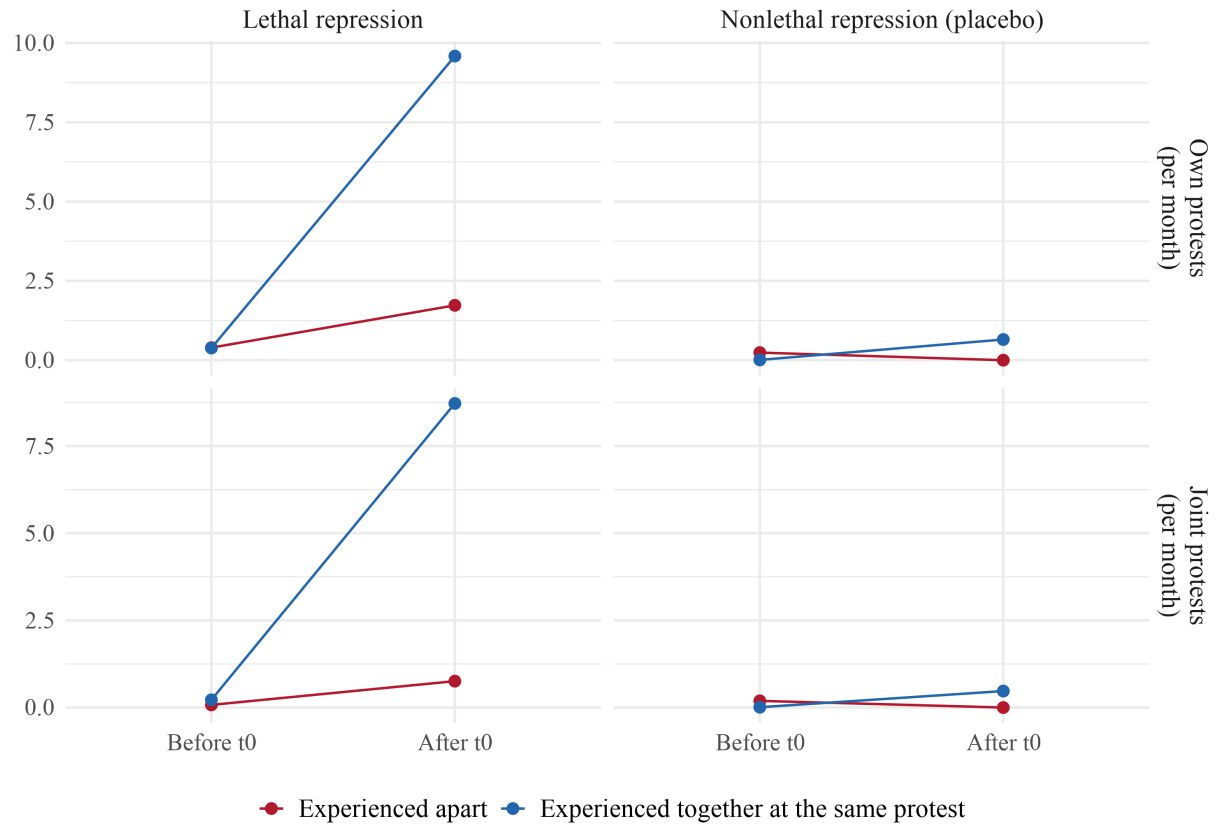


Figure 3. Monthly Protests Before and After Repression

Note: Top: own protests; bottom: joint protests (per month). Egypt and Nigeria pooled (cross-event sample). t0 = first lethal repression of either organization in the year (right panels: first nonlethal repression).

The weight of the event

Shared nonlethal repression does not exhibit a similar pattern. In the selected-country sample, dyads that experienced nonlethal repression together were more likely to dissolve than those that shared lethal repression (64 percent of 22 dyads, compared with 14 percent). The same-event comparison shows a similar descriptive contrast, with substantially higher dissolution among partners present at nonlethal events; the corresponding adjusted comparison is

not statistically distinguishable from zero (Online Appendix E). These findings are consistent with the argument that the severity of shared experience matters for tie persistence.

Does costly copresence matter beyond copresence itself?

A possible alternative explanation is that the observed association arises from copresence rather than from the costs of repression. Organizations attending the same protest may already share networks, routines, or strategic priorities that help preserve their relationships. Lethal protests might therefore simply reveal partnerships that would have endured regardless of the violence. Under this explanation, attendance with a partner should predict lower dissolution even at protests without repression. The experiential-tie argument, by contrast, implies that the association should be negligible at unrepressed protests, weaker at nonlethally repressed protests, and strongest at events involving deaths. This severity gradient is a joint implication of relational certification, dyadic memory, and coordination focality, not a means of distinguishing among those components.

To assess this implication, the same-event comparison is applied to three categories of protests: those without recorded repression, those involving nonlethal repression, and those involving lethal repression. Within each event, an attending organization's year-t partners who were present are compared with those who were absent, adjusting for prior joint protest, organizational activity, and alliance. Absent partners are included regardless of their exposure at other events, ensuring a consistent comparison across severity categories. Consequently, the lethal-event estimate is not identical to the estimate in Table III.

The estimates display the predicted gradient (Online Appendix Table E4). Attendance together at unrepressed protests has little association with subsequent tie dissolution, while the association at nonlethally repressed protests is modest and statistically indistinguishable from zero. At lethal protests, however, copresence is associated with a markedly lower probability of dissolution. In stacked models with severity-specific event fixed effects, the lethal-versus-unrepressed difference is statistically significant; the result also holds with focal-

organization × event fixed effects. Thus, shared attendance alone does not account for the persistence pattern. The stronger association at lethal events is consistent with the argument that costly copresence, rather than copresence per se, provides a relational basis for enduring cooperation.

Robustness

The same-event results remain robust across alternative specifications (Table VI; Online Appendix Figure E1). The association persists when country and year fixed effects are replaced by event fixed effects or focal-organization × event fixed effects, and remains stable after controlling for previous-year joint protest and exposure-event size. In the cross-event comparison, separately exposed dyads continue to exhibit higher dissolution after these additional controls and when the analysis is restricted to Egypt. Stratified comparisons by country, prior relational intensity, and tie thickness show a consistent pattern (Online Appendix Table B4).

Table VI. Additional Fixed Effects, Controls, and Subsamples (Linear Probability)

Check	Same-event	Cross-event
Event fixed effects	−0.43 (p = .001)	—
Focal org. × event fixed effects	−0.49 (p < .001)	—
+ previous-year joint protests	−0.44 (p < .001)	+0.44 (p = .006)
+ exposure event size	−0.47 (p < .001)	+0.46 (p = .004)
Egypt only	—	+0.36 (p = .016)
Excluding largest event cluster	−0.30 (p < .001; 713 obs.)	+0.17 (p = .11; 236 dyads)
Excluding largest event, vs. separately exposed partners	−0.37 (p = .009; 616 obs.)	—
Same comparison, focal org. × event fixed effects	−0.49 (p = .003; 479 obs.)	—

Table VI also examines dependence on the largest lethal event, the late-November 2012 protest in Egypt. Excluding it reduces the estimated association, but the same-event comparison remains statistically significant, including when absent partners are restricted to those separately exposed and under focal-organization × event fixed effects. In contrast,

the cross-event estimate is attenuated and is no longer statistically distinguishable from zero when that event is excluded. The cross-event evidence thus depends more strongly on this influential event than does the main same-event comparison. The sensitivity of the findings to dyad attrition and to a comparison with protests without recorded repression is reported in Online Appendix E.

Because the treatment of umbrella fronts affects both the organizational sample and the measurement of alliances, the analyses are repeated using an alternative coding that retains fronts as organizations and treats member–front relations as alliances rather than assigning alliances through shared front membership (Online Appendix F). Although this coding expands the samples, the main findings for H1 and H2 remain consistent. Shared exposure continues to be associated with lower tie dissolution in both the same-event and cross-event comparisons, including specifications with focal-organization $\times$ event fixed effects and those excluding the largest Egyptian event. Partners present at the same lethal event also exhibit substantially greater subsequent joint protest, reinforcing the overall consistency of the findings across alternative coding decisions. Online Appendix E examines three additional concerns. First, political divisions, notably the Islamist–secular cleavage in post-2011 Egypt, may have placed absent partners disproportionately on opposite sides of an existing divide. If that divide accounted for the results, adjusting for shared demands and cross-camp pairings should weaken the estimates, and the association should disappear among same-camp pairs. Instead, the same-event estimates change little and remain evident within camps (Table E1). Second, inference based on a limited number of lethal-event clusters may be too precise under conventional cluster-robust standard errors. Wild cluster bootstrap tests nevertheless retain statistical significance for the same-event specifications and cross-event comparison (Table E2). Third, restricting the sample to organizations active in t+1 may induce differential attrition. Lee bounds for the same-event comparison exclude zero, and partners attending the lethal event are more likely to remain active in t+1 than absent partners (Table E3).

Discussion and Conclusion

The article shows that the way lethal repression is distributed across opposition organizations is associated with the subsequent trajectory of their relationships. Ties to partners that endured lethal repression at the same protest were more likely to persist into the following year than ties to absent partners. This pattern holds when comparing partners of the same focal organization at the same event and across all levels of prior joint protest. The difference is even larger when the comparison is restricted to partners exposed to lethal repression at other events. Organizations also returned to the streets with those partners much more often after the event, and comparisons of dyads exposed together and apart point in the same direction. Shared nonlethal repression exhibits no comparable pattern. The central empirical implication is thus relational: what matters is not only whether opposition organizations are repressed, but whether they endure the same costly event together.

This relational perspective adds a dyadic dimension to how repression is understood in contentious politics. Existing research has shown that the distribution of repression across opposition groups can shape identification and polarization; the findings here show that it also matters which organizations endure the same violent event together. The same episode of state violence can create different relational environments depending on who experiences it together. For research on opposition coalitions, this suggests a source of durability distinct from ideological compatibility and formal commitments: costly copresence can add a shared history to existing ties. For research on violence and cooperation, the findings shift attention from broader patterns of identification and solidarity to the durability and activation of specific interorganizational ties, while sharpening the distinction between common victimhood and shared victimization.

The argument also has implications for the strategic effects of repression. Violence concentrated on several organizations at the same event may leave those organizations with partner-specific information, memories, and occasions for renewed coordination, whereas violence dispersed across organizations may generate parallel grievances without the same

relational history. This possibility complements evidence that repression targeted at a single opposition group can polarize the opposition (Nugent, 2020) and that divisions within revolutionary coalitions can facilitate counterrevolution (Clarke, 2023). It also suggests that analyses focused only on the overall severity of repression may miss an important dimension of how coercion reorganizes opposition fields.

The empirical scope should be kept distinct from the broader theoretical claim. The main same-event design admits qualifying lethal events from all ARC-covered countries, but Egypt and Nigeria still supply most of its observations, so it sharpens the comparison within these crises more than it broadens their geographic scope. The strongest specifications hold constant the lethal event and, additionally, characteristics shared by partners of the same focal organization. However, unobserved dyad-specific differences may remain. The complementary cross-event comparison is based on Egypt and Nigeria, selected because both shared and separate lethal exposure are observed often enough to permit comparison; its dyads are concentrated in two political crises—Egypt in 2011–2013 and Nigeria in 1993. Neither set of estimates is intended to represent Africa as a whole. Generalization beyond these observed crises and events therefore remains a question for additional cases rather than an implication of the sampling design.

Data Availability Statement

Replication data and code will be deposited in a public repository with a persistent identifier upon publication.

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Online Appendix

Appendix A. Sample and Case Selection

Sample conditions. A dyad-year enters the sample if (1) the two organizations protested together repeatedly in year t, defined as at least two shared protest events; (2) both organizations protested in t and t+1; (3) at least one organization protested without the other in t; and (4) event data are available for the country in both t and t+1.

Lethal and nonlethal repression. Lethal repression includes SCAD events with a repression code of 2 or higher (lethal, or lethal and nonlethal) and at least one recorded death; ACLED repression events (excessive force against protesters; protests with intervention) with fatalities; and MMD events for which killings are recorded as the state response. Nonlethal repression includes repressed events that meet neither this definition nor a broader lethal definition that also counts MMD shootings, SCAD events coded as lethal without a recorded death count, and ACLED state violence against civilians with fatalities; such events enter neither category. In analyses of nonlethal repression, dyads containing an organization that experienced lethal repression under the broader definition are excluded. Event dates correspond to the SCAD start date, the ACLED event date, and the MMD start date.

Event clusters. Records from the same country and date are grouped, and records sharing identical participant sets within 14 days are chained into a single cluster. The 238 lethal records form 159 clusters, while the 633 nonlethal records form 391. In the cross-event comparison, the reference cluster for a shared-exposure dyad is the first lethal event attended by both organizations; for a separately exposed dyad, it is the earlier lethal event experienced by either organization.

Same-event sample. For each organization present at a lethal event cluster E, the sample contains its year-t partners who were present at E and its year-t partners who were absent from E and never shared lethal repression with it. Absent partners are further divided into those that experienced lethal repression at another event in year t (separately exposed)

and those that did not; Panel B of Table III compares present partners with the former. Dyads present together enter once for each reference organization with weight 1/2. Prior shared protests and organizational activity are measured in year t before the date of E. Baseline models include country and year fixed effects. Additional specifications use event fixed effects and focal-organization × event fixed effects; the latter identifies the coefficient from variation among partners of the same focal organization at the same event. Strata with no within-stratum variation in partner presence do not identify that coefficient.

Table A1. Case Selection: Lethal Exposure by Country (At Least 30 Dyads of Each Type)

Country	Lethal, separate	Lethal, shared	Meets rule
Nigeria	37	75	Yes
Egypt	31	315	Yes
Sudan	3	1	
Tunisia	2	1	
Kenya, South Africa	1 each	0	
Morocco	0	23	
Eswatini	0	13	
Burkina Faso	0	7	
Congo (both)	0	3	

Appendix B. Descriptive Results

Table B1. Dissolution in t+1 by Country

	Separate	Shared
Egypt	55% (17/31)	12% (38/315)
Nigeria	97% (36/37)	21% (16/75)
Pooled	78% (53/68)	14% (54/390)

Stratified comparison. Dyads are assigned to strata defined by country × prior joint-protest intensity (0 / 1 / 2–3 / 4–9 / 10+) × tie thickness (action only / action and alliance). Within strata containing both exposure types, differences in dissolution are calculated and then averaged using weights equal to the number of separately exposed dyads. p-values

Table B2. Dissolution in t+1 by Country-Year

Country-year	Separate	Shared
Egypt 2005	0% (0/6)	—
Egypt 2011	75% (9/12)	54% (35/65)
Egypt 2012	43% (3/7)	1% (2/226)
Egypt 2013	83% (5/6)	7% (1/15)
Egypt 2014	—	0% (0/9)
Nigeria 1993	97% (31/32)	21% (16/75)
Nigeria 1994	100% (5/5)	—

Note: Egypt 2005, Egypt 2014, and Nigeria 1994 contain only one exposure type but are retained in all cross-event analyses.

Table B3. Monthly Protests Before and After Repression

Pooled, mean per month	Before t0	After t0
Shared: each organization's protests	0.38	9.59
Separate: each organization's protests	0.40	1.73
Shared: joint protests	0.22	8.72
Separate: joint protests	0.08	0.76

are obtained from 2,000 within-stratum permutations of the exposure labels. Intensity is measured both by joint protests before the first death and by joint protests in the preceding year. Dropping one country-year at a time produces ranges of −5 to +43 percentage points (Egypt, pre-death intensity) and +8 to +35 (pooled, previous-year intensity).

Table B4. Stratified Differences in Dissolution (Separate − Shared)

Intensity measure	Country	Stratified difference	Matched dyads (sep./shared)	Permutation p
Before death	Egypt	+27 pp	30 / 230	.007
Before death	Nigeria	Not estimable	0 / 0	—
Previous year	Egypt	+35 pp	29 / 277	$< .001$
Previous year	Nigeria	+16 pp	37 / 75	$< .001$
Previous year	Pooled	+24 pp	66 / 352	$< .001$

Appendix C. Additional Results for H1

Table C1. Linear Probability and Logit Estimates for H1 (Event-Cluster Standard Errors)

Model	LPM	95% CI	p	Logit OR	p
Same-event (1)	−0.531	[−0.726, −0.336]	$< .001$	0.033	$< .001$
Same-event (2) + controls	−0.464	[−0.649, −0.279]	$< .001$	0.048	$< .001$
Same-event (3) + event FE	−0.435	[−0.672, −0.197]	.001	0.085	.030
Same-event (4) + focal org. × event FE	−0.486	[−0.715, −0.257]	$< .001$	0.058	.005
Same-event (2), Egypt and Nigeria	−0.454	[−0.660, −0.248]	$< .001$	0.049	$< .001$
Same-event vs. separately exposed (1)	−0.655	[−0.827, −0.483]	$< .001$	—	—
Same-event vs. separately exposed (2) + controls	−0.638	[−0.891, −0.385]	$< .001$	—	—
Same-event vs. separately exposed (3) + event FE	−0.594	[−0.936, −0.253]	.002	—	—
Same-event vs. separately exposed (4) + focal org. × event FE	−0.679	[−0.968, −0.390]	$< .001$	—	—
Cross-event (1) separate only	+0.578	[0.331, 0.825]	$< .001$	37.16	$< .001$
Cross-event (2) + controls	+0.456	[0.209, 0.703]	.004	10.04	.001
Cross-event (3) one-sided	+0.448	[0.196, 0.700]	.005	8.68	.003
Cross-event (3) two-sided	+0.578	[0.172, 0.983]	.017	—	—

In specification (3) of the cross-event comparison, separate exposure is divided into dyads

in which only one organization experienced lethal repression (one-sided) and dyads in which both organizations did so at different events (two-sided). Logit specifications omit observations with no outcome variation within fixed-effect groups. The cross-event logit models use 438 dyads; the same-event country/year-FE models use 1,055 observations, the event-FE logit uses 840, and the focal-organization × event-FE logit uses 378. Logit estimates are not reported where every observation in an exposure category dissolved (two-sided separate exposure and the comparisons with separately exposed partners). The comparisons with separately exposed partners use 1,065 observations (33 clusters) in specifications (1)–(2), 1,060 (28) in (3), and 928 (22) in (4), where the estimate is identified from nine focal-organization × event strata.

Table C2. Full Logit Coefficients, Cross-Event Comparison (Country and Year FE, Country-Year Clustered SEs; 438 Dyads)

Variable	Odds ratio	95% CI	p
Experienced separately	10.04	[1.23, 82.07]	.031
log(1 + prior shared protests)	0.43	[0.15, 1.22]	.113
log(1 + activity)	1.35	[0.99, 1.83]	.056
Alliance	0.11	[0.01, 1.68]	.111

Note: Country-year clustered standard errors (few clusters). With event-cluster standard errors, $p = .001$ for separate exposure (Table C1).

Three-group specification. In the full same-event sample, absent partners are divided into those that experienced lethal repression at another event in year t and those that did not, with present partners as the reference category (linear probability models, same controls). Separately exposed partners show the highest dissolution probability, followed by unexposed partners. Both contrasts remain positive and statistically significant under focal-organization × event fixed effects, consistent with the main same-event results.

Appendix D. Additional Results for H2

In the same-event sample, joint protest increased markedly after the event among present partners, whereas it changed little among absent partners. Restricting the comparison to

Table D1. Poisson Models of Joint Protest in the 90 Days After the Event

	All (1)	All (2)	Egypt & Nigeria (1)	Egypt & Nigeria (2)	Vs. separately exposed (1)	Vs. separately exposed (2)
Present at the lethal event (IRR)	11.24	8.52	11.38	9.15	11.77	8.89
95% CI	[4.54, 27.87]	[3.43, 21.16]	[4.52, 28.64]	[3.64, 23.02]	[3.54, 39.15]	[2.67, 29.61]
Observations / clusters	1,146 / 34	1,146 / 34	1,042 / 22	1,042 / 22	1,059 / 31	1,059 / 31

Note: Columns (2) add controls. Vs. separately exposed: present partners compared only with partners exposed to lethal repression at other events.

present and separately exposed partners yields a similarly strong, statistically significant positive association with subsequent joint protest, both with and without controls.

Appendix E. Robustness

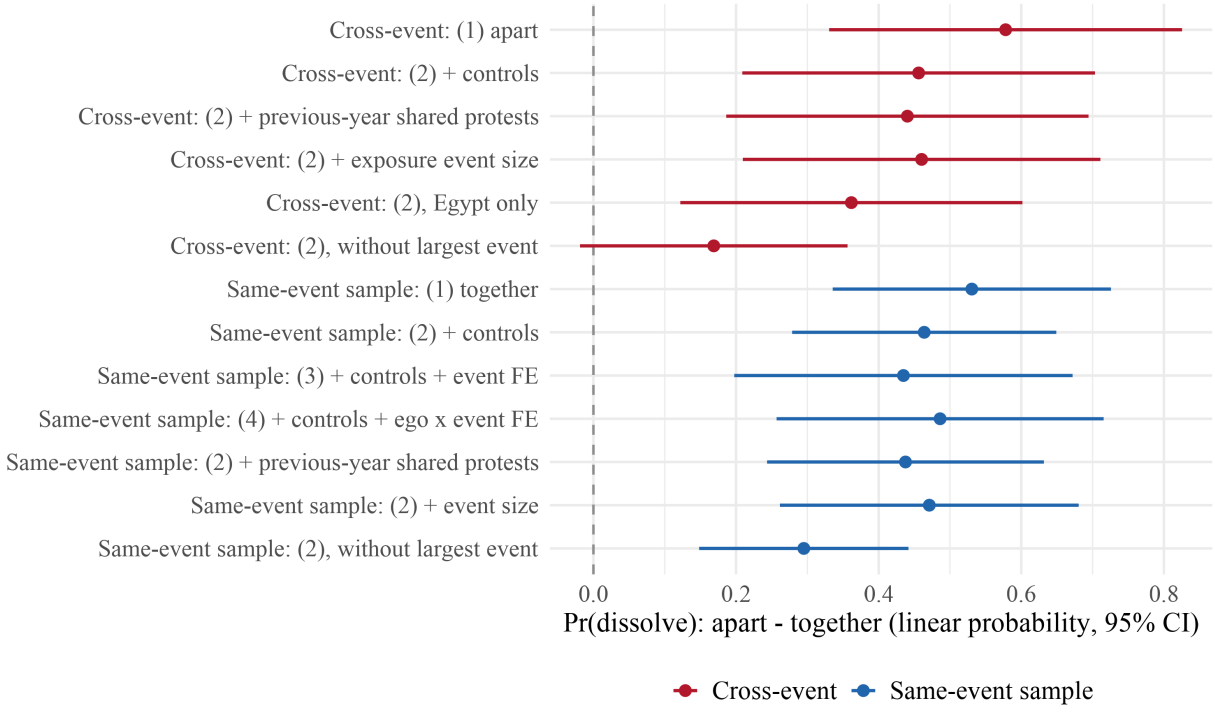


Figure E1. Estimates and Robustness for H1

Note: Linear probability estimates with 95% confidence intervals and event-cluster standard errors; same-event estimates sign-reversed for comparability.

Political cleavage. A potential confounder is the Islamist–secular division within opposition politics, especially in Egypt after 2011. Partners absent from a lethal protest may

have belonged disproportionately to the opposing camp and lost their ties because of polarization rather than nonattendance. In Egypt, absent partners—particularly those exposed separately—were indeed more likely than present partners to be paired across camps with the focal organization. To probe this explanation, Table E1 adds measures of shared demands and cross-camp pairing and restricts the analysis to within-camp dyads. The same-event estimates remain close to their Table III counterparts and persist among same-camp partners. Results likewise remain similar for separately exposed partners, the cross-event comparison, and subsequent joint protest.

Table E1. Robustness to Demand and Islamist–Secular Cleavage Controls

Specification	Estimate	95% CI	p	N / clusters
Same-event sample				
(2) Controls + cleavage	−0.459	[−0.659, −0.259]	< .001	1,165 / 38
(3) + event FE	−0.427	[−0.686, −0.167]	.003	1,162 / 35
(4) + focal org. × event FE	−0.476	[−0.729, −0.222]	< .001	1,029 / 30
(2) Same-camp pairs only	−0.421	[−0.624, −0.218]	< .001	935 / 37
Present vs. separately exposed partners				
(2) Controls + cleavage	−0.632	[−0.914, −0.349]	< .001	1,065 / 33
(3) + event FE	−0.573	[−0.956, −0.189]	.007	1,060 / 28
(4) + focal org. × event FE	−0.656	[−0.989, −0.324]	< .001	928 / 22
(2) Same-camp pairs only	−0.925	[−1.093, −0.757]	< .001	855 / 31
Cross-event comparison				
(2) Controls + cleavage	+0.455	[+0.198, +0.711]	.005	458 / 12
Joint protest in the 90 days after the event (H2, IRR)				
All partners, controls + cleavage	8.55	[3.43, 21.31]	< .001	1,146 / 34
Present vs. separately exposed partners	9.01	[2.72, 29.85]	< .001	1,059 / 31

Note: Linear probability models of dissolution in t+1; final panel, Poisson incidence rate ratios. Cleavage controls: shared demands and dyads with exactly one Islamist organization. Event-cluster standard errors.

Inference with few clusters. The relatively small number of lethal-event clusters, especially in the cross-event sample, raises concerns about the precision of conventional cluster-robust inference. Table E2 therefore reports restricted wild cluster bootstrap p-values, which are better suited to settings with few clusters. Statistical significance is retained for the same-event models, the cross-event comparison, the restriction to separately exposed partners, the same-event estimate excluding the largest lethal event, and the specifications adjusted for political cleavage.

Table E2. Wild Cluster Bootstrap Tests for H1 (Linear Probability Models)

Model	Estimate	p (cluster)	p (wild bootstrap)	Clusters
Same-event sample				
Same-event (1)	−0.531	< .001	.002	38
Same-event (2) + controls	−0.464	< .001	< .001	38
Same-event (3) + event FE	−0.435	.001	.011	35
Same-event (4) + focal org. × event FE	−0.486	< .001	.016	30
Cross-event comparison				
Cross-event (1)	+0.578	< .001	.028	12
Cross-event (2) + controls	+0.456	.004	.021	12
Present vs. separately exposed partners				
Present vs. separately exposed (1)	−0.655	< .001	< .001	33
Present vs. separately exposed (2) + controls	−0.638	< .001	.003	33
Present vs. separately exposed (4) + focal org. × event FE	−0.679	< .001	.045	22
Excluding the largest event cluster				
Same-event, excluding largest event	−0.295	< .001	.026	37
With cleavage controls (Table E1)				
Same-event (2) + cleavage	−0.459	< .001	< .001	38
Same-event (4) + focal org. × event FE + cleavage	−0.476	< .001	.022	30
Present vs. separately exposed (2) + cleavage	−0.632	< .001	.003	33
Cross-event (2) + cleavage	+0.455	.005	.015	12

Note: Restricted wild cluster bootstrap with Webb weights (9,999 replications), clustered by lethal event.

Collinearity. In the cross-event comparison, variance inflation factors are low. In the same-event sample, prior shared protests and organizational activity overlap substantially, but the exposure variable shows little collinearity with the controls. The substantive exposure contrast remains stable across the reported specifications.

Attrition. In Egypt, separately exposed dyads are more likely than shared-exposure dyads to leave ARC observation in t+1; in Nigeria, the pattern is reversed (no separately exposed dyads leave observation). Coding these dyads, together with dyads in which an organization did not protest in t+1, as dissolved renders the linear probability contrast statistically indistinguishable from zero, while the corresponding logit specification continues to indicate greater dissolution following separate exposure. This sensitivity limits the strength of the persistence inference.

Bounds for differential attrition. Eligibility for the main analysis requires both organizations in a dyad to be observed and active in t+1, potentially conditioning on a consequence of exposure. Table E3 addresses this concern using Lee bounds, which trim observations from the group with higher retention according to the difference in retention rates. In the same-event sample, partners present at lethal events have higher retention than absent partners. The estimated bounds exclude zero overall, in Egypt and Nigeria, and when the comparison is restricted to separately exposed partners. The bootstrap confidence intervals are nevertheless wide for the full sample and Egypt, reflecting the influence of a large event cluster. In the cross-event sample, the bounds exclude zero for the pooled sample and Nigeria. The low retention of separately exposed Egyptian dyads makes the corresponding estimates particularly sensitive to attrition.

Comparison with protests without repression. Dyads that jointly attended a lethal protest are compared with dyads in the same country-year that jointly attended a protest with no recorded repression and in which neither organization experienced lethal repression during that year. The models control for prior shared protests, activity, and alliance. The linear probability comparisons do not provide a consistently distinguishable difference in disso-

Table E3. Attrition Sensitivity: Lee Bounds for Tie Dissolution

Sample	Difference	Retained (treated / control)	Trimmed	Observed	Lee bounds	95% CI
Same-event, all countries	Present − absent	0.31 / 0.17	0.47	−0.624	[−0.784, −0.485]	[−0.901, +0.100]
Same-event, Egypt	Present − absent	0.44 / 0.12	0.73	−0.538	[−0.633, −0.280]	[−0.824, +0.253]
Same-event, Nigeria	Present − absent	0.36 / 1.00	0.64	−0.765	[−0.787, −0.728]	[−0.787, −0.727]
Present vs. separately exposed, all countries	Present − separately exposed	0.31 / 1.00	0.69	−0.840	[−0.840, −0.840]	[−0.976, −0.590]
Cross-event, Egypt and Nigeria	Separate − shared	0.14 / 0.51	0.73	+0.641	[+0.265, +0.779]	[−0.361, +0.935]
Cross-event, Nigeria	Separate − shared	1.00 / 0.61	0.39	+0.760	[+0.743, +0.787]	[+0.736, +0.787]

Note: Retained: share of dyads active in t+1 (treated = present partners or separately exposed dyads). 95% confidence intervals from 999 event-cluster bootstrap replications.

lution, whereas the logit specifications show significantly lower dissolution for the lethal-exposure group. These mixed results warrant caution.

Nonlethal repression. Applying the same-event specification to nonlethal events produces no statistically distinguishable association between partner presence and subsequent tie dissolution. Dissolution is generally high in this sample, and limited variation among absent partners restricts what can be inferred. A cross-event comparison cannot be estimated because separately exposed nonlethal dyads are too rare.

Repression severity. The preceding nonlethal analysis offers limited variation among absent partners and does not compare severity categories under a common design. To determine whether the association depends on event costs rather than shared attendance alone, Table E4 applies the same-event comparison consistently to protests without recorded repression, protests experiencing nonlethal repression, and lethal protests. As the experiential-tie argument anticipates, copresence at unrepressed protests has no discernible association with dissolution; the estimate for nonlethal events is small and statistically insignificant; and the estimate for lethal events is substantially negative. The lethal-versus-unrepressed contrast is statistically significant with both event fixed effects and focal-organization × event fixed effects.

Table E4. Copresence and Subsequent Tie Dissolution Across Event Types

	Event FE	Focal org. × event FE
Panel A. Present vs. absent partners, by type of event		
Protests without repression	−0.035	−0.084
	[−0.168, +0.097]	[−0.213, +0.045]
	p = .601; 8,096 / 180	p = .203; 7,733 / 169
Nonlethal repression	−0.137	−0.148
	[−0.315, +0.042]	[−0.323, +0.027]
	p = .136; 5,376 / 110	p = .101; 5,117 / 97
Lethal repression	−0.390	−0.442
	[−0.658, −0.122]	[−0.688, −0.196]
	p = .007; 1,470 / 46	p = .001; 1,340 / 41
Panel B. Difference from protests without repression (stacked sample)		
Nonlethal − without repression	−0.147	−0.158
	[−0.326, +0.031]	[−0.336, +0.019]
	p = .107; 14,942 / 296	p = .082; 14,190 / 269
Lethal − without repression	−0.377	−0.410
	[−0.651, −0.103]	[−0.656, −0.163]
	p = .007; 14,942 / 296	p = .001; 14,190 / 269

Note: Linear probability models of dissolution in t+1; controls as in Table III. Panel B uses the stacked sample with severity-specific fixed effects. 95% confidence intervals in brackets; p, observations, and clusters below. Event-cluster standard errors.

Appendix F. Alternative Front Coding

ARC records membership in an umbrella front as a member–front alliance. Within each country-year, an organization is identified as a front if, in at least one member–front relation, it has more such relations than its counterpart and it has at least two members (261 front-years, including 26 in Egypt and 18 in Nigeria). In the main analyses, these fronts are removed from both relational layers, members of the same front in a given year are coded as allied with one another, and events attributed to the front itself are not reassigned to its members. The alternative coding reported here retains fronts as organizations, so that a front can form joint-protest ties and experience repression, and codes the member–front relation, rather than co-membership in the same front, as an alliance. All other settings are identical. The lethal event clusters are unchanged (238 records forming 159 clusters); the nonlethal records increase from 633 to 635 and their clusters from 391 to 394.

Three-group specification. With present partners as the reference category, the alterna-

Table F1. Dissolution in t+1 by Country and Country-Year Under the Two Front Codings

	Main: separate	Main: shared	Alternative: separate	Alternative: shared
Egypt	55% (17/31)	12% (38/315)	58% (22/38)	10% (42/422)
Nigeria	97% (36/37)	21% (16/75)	98% (39/40)	20% (18/89)
Pooled	78% (53/68)	14% (54/390)	78% (61/78)	12% (60/511)
Egypt 2005	0% (0/6)	—	0% (0/7)	—
Egypt 2011	75% (9/12)	54% (35/65)	75% (12/16)	45% (39/87)
Egypt 2012	43% (3/7)	1% (2/226)	56% (5/9)	1% (2/309)
Egypt 2013	83% (5/6)	7% (1/15)	83% (5/6)	6% (1/16)
Egypt 2014	—	0% (0/9)	—	0% (0/10)
Nigeria 1993	97% (31/32)	21% (16/75)	97% (33/34)	19% (17/88)
Nigeria 1994	100% (5/5)	—	100% (6/6)	100% (1/1)

Note: Case selection is unchanged. In Nigeria 1994, all dyads of both exposure types dissolved; in the country-years with both exposure types, separately exposed dyads dissolved more often.

Table F2. Estimates for H1 Under the Alternative Front Coding

Model	Main LPM	Alt. LPM	95% CI	p	Alt. logit OR	p
Same-event (1)	−0.531	−0.552	[−0.724, −0.380]	$< .001$	0.028	$< .001$
Same-event (2) + controls	−0.464	−0.579	[−0.765, −0.393]	$< .001$	0.015	$< .001$
Same-event (3) + event FE	−0.435	−0.559	[−0.808, −0.309]	$< .001$	0.016	.004
Same-event (4) + focal org. × event FE	−0.486	−0.648	[−0.871, −0.424]	$< .001$	0.007	$< .001$
Same-event (2), Egypt and Nigeria	−0.454	−0.585	[−0.779, −0.392]	$< .001$	0.015	$< .001$
Same-event vs. separately exposed (1)	−0.655	−0.724	[−0.877, −0.571]	$< .001$	—	—
Same-event vs. separately exposed (2) + controls	−0.638	−0.759	[−0.929, −0.588]	$< .001$	—	—
Same-event vs. separately exposed (3) + event FE	−0.594	−0.695	[−0.935, −0.456]	$< .001$	—	—
Same-event vs. separately exposed (4) + focal org. × event FE	−0.679	−0.772	[−0.956, −0.588]	$< .001$	—	—
Cross-event (1) separate only	+0.578	+0.602	[0.377, 0.827]	$< .001$	46.36	$< .001$
Cross-event (2) + controls	+0.456	+0.591	[0.363, 0.820]	$< .001$	34.35	$< .001$
Cross-event (3) one-sided	+0.448	+0.576	[0.320, 0.833]	.001	26.73	.001
Cross-event (3) two-sided	+0.578	+0.749	[0.469, 1.029]	$< .001$	—	—

Note: Main LPM reproduces Table C1; confidence intervals and p-values refer to the alternative coding. Event-cluster standard errors. Logit estimates are not reported where every observation in an exposure category dissolved.

tive front coding continues to show significantly higher dissolution among separately exposed and unexposed partners. The pattern also persists with focal-organization × event fixed effects, consistent with the corresponding main-coding comparisons.

Table F3. Additional Fixed Effects, Controls, and Subsamples Under the Two Front Codings (Linear Probability)

Check	Same-event, main	Same-event, alternative	Cross-event, main	Cross-event, alternative
Event fixed effects	−0.43 (p = .001)	−0.56 (p < .001)	—	—
Focal org. × event fixed effects	−0.49 (p < .001)	−0.65 (p < .001)	—	—
+ previous-year joint protests	−0.44 (p < .001)	−0.57 (p < .001)	+0.44 (p = .006)	+0.59 (p < .001)
+ exposure event size	−0.47 (p < .001)	−0.58 (p < .001)	+0.46 (p = .004)	+0.59 (p < .001)
Egypt only	—	—	+0.36 (p = .016)	+0.45 (p < .001)
Excluding largest event cluster	−0.30 (p < .001; 713 obs.)	−0.56 (p < .001; 843 obs.)	+0.17 (p = .11; 236 dyads)	+0.49 (p < .001; 283 dyads)
Exits and inactivity coded as dissolved	—	—	+0.14 (p = .27)	+0.24 (p = .23)
Excluding largest event, vs. separately exposed partners	−0.37 (p = .009; 616 obs.)	−0.62 (p < .001; 734 obs.)	—	—
Same comparison, focal org. × event fixed effects	−0.49 (p = .003; 479 obs.)	−0.74 (p < .001; 581 obs.)	—	—

Logit estimates generally support the alternative-coding results. The cross-event association remains positive and statistically significant in the Egypt-only comparison and when the largest event is excluded. The same-event event-fixed-effects specification continues to show significantly lower dissolution among present partners. These results are consistent with the broader pattern but do not eliminate differences in sensitivity across designs.

Attrition. Under the alternative coding, attrition remains more common among separately exposed dyads in Egypt. When organizational exit or inactivity is coded as dissolution, the linear probability contrast remains positive but is not statistically distinguishable from zero, reinforcing the attrition caveat.

Comparison with protests without repression. Relative to dyads jointly attending unrepressed protests, the alternative coding yields lower dissolution in all specifications, statistically significant in most but not in the linear probability model across all countries.

The findings are sensitive to the model and sample, and thus provide mixed corroborating evidence rather than an independent basis for causal inference.

Nonlethal repression. The same-event nonlethal specification under alternative front coding does not yield a statistically distinguishable association, consistent with the main coding. High dissolution and uneven partner-presence composition constrain interpretation.

Collinearity. The alternative front coding yields modest collinearity in the cross-event models. Prior joint protest and organizational activity overlap more substantially in the same-event sample, while the exposure estimate remains stable when related controls are added.

Table F4. Stratified Differences in Dissolution (Separate − Shared) Under the Alternative Front Coding

Intensity measure	Country	Stratified difference	Matched dyads (sep./shared)	Permutation p
Before death	Egypt	+39 pp	37 / 419	$< .001$
Before death	Nigeria	Not informative	1 / 1	—
Before death	Pooled	+38 pp	38 / 420	$< .001$
Previous year	Egypt	+48 pp	38 / 412	$< .001$
Previous year	Nigeria	+78 pp	40 / 88	$< .001$
Previous year	Pooled	+63 pp	78 / 500	$< .001$

Note: Strata and weights as in Table B4. Dropping one country-year at a time yields +22 to +54 pp (Egypt, pre-death) and +48 to +71 pp (pooled, previous-year).

Table F5. Same-Event Sample Under the Alternative Front Coding: Dissolution by Prior Joint Protests (All Countries)

Prior joint protests	Absent partners	Present partners	Absent: dissolved	Present: dissolved
0	72	139	79%	35%
1	7	95	71%	19%
2–3	32	14	72%	7%
4–9	11	341	82%	4%
10+	12	76	100%	17%

Table F6. Poisson Models of Joint Protest in the 90 Days After the Event Under the Alternative Front Coding

	All (1)	All (2)	Egypt & Nigeria (1)	Egypt & Nigeria (2)
Present at the lethal event (IRR)	12.62	10.35	12.76	10.99
95% CI	[4.76, 33.40]	[3.73, 28.68]	[4.75, 34.26]	[3.92, 30.78]
Observations / clusters	1,459 / 37	1,459 / 37	1,339 / 25	1,339 / 25

Note: All estimates $p < .001$. Present vs. separately exposed partners only: IRR 10.41 with controls (95% CI 2.92–37.10).

Appendix G. Analysis Settings

Table G1. Analysis Settings

Item	Setting
Organizations	All ARC organizations; organizations coded as formally or informally co-opted by the regime excluded
Alliance	Bilateral alliances plus co-membership in the same front; alliances involving rebel groups excluded
Front coding	Fronts identified from ARC member–front records (an organization with more member–front relations than its counterpart and at least two members, within country-year); fronts removed from both relational layers, co-members coded as allied, front events not reassigned. Alternative (Appendix F): fronts retained as organizations, member–front relations coded as alliances
Joint protest	At least two shared protest events (SCAD types 1–6, ACLED protests and violent demonstrations, MMD)
Lethal repression	SCAD repression ≥ 2 with deaths > 0; ACLED repression with fatalities; MMD killings
Nonlethal repression	Repressed events meeting neither the lethal definition nor a broader one that adds MMD shootings, SCAD lethal codes without recorded deaths, and ACLED state violence against civilians with fatalities
Event clusters	Same country and day; identical participant sets within 14 days
Case selection	At least 30 separate and 30 shared dyads (Egypt, Nigeria)
Estimation	Linear probability (main), logit, Poisson (H2); country and year FE in baseline models; event FE and focal-organization $\times$ event FE in same-event H1 specifications; event-cluster SEs
Controls	Prior shared protests, activity (log1p), alliance
Stratified comparison	Country $\times$ intensity $\times$ thickness; 2,000 permutations