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## Legacies of Wartime Sexual Violence: Survivors, Psychological Harms, and Mobilization

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What are the psychological, social, and political legacies of sexual violence in armed conflicts? While conventional wisdom expects the exclusion of survivors from their societies due to stigma, we advance a theory of sociopolitical mobilization among wartime sexual violence survivors and their households. Our theory emphasizes the value that people place on their communities in conflictaffected contexts and incorporates the psychosocial harms that survivor-households experience as well as their agency. We use an original survey from eastern Democratic Republic of Congo to evaluate the theory. Analyses using list experiment measures of wartime sexual violence show that survivor-households engage in increased levels of social and political activities in their communities. Auxiliary analyses suggest that mobilization is driven by stigmatization and self-blame, a finding that resonates with social psychological research on exclusion and social reconnection.

Conflict-related sexual violence remains underreported owing to a lack of trust in the justice system, a fear of reprisals, pressure from family members, and stigma [...]. UN Secretary-General António Guterres (2021, emphasis added)

#### INTRODUCTION

Sexual violence by rebel groups, militias, and armies during civil wars is both widespread and highly varying in its extent and forms across conflicts (Dumaine et al. 2021).<sup>1</sup> Wartime sexual violence is often associated with the notion of being a "weapon of war," resulting in multidimensional adverse effects. The negative physical and psychological effects of wartime sexual violence for survivors are well documented (Amowitz et al. 2002; Dumke et al. 2021; Johnson et al. 2010; Kelly et al. 2017; Peterman, Palermo, and Bredenkamp 2011); and there are pernicious secondary "downstream" effects for survivors and their families including shame, stigma, victim-blaming, and withdrawal from social life (Kelly et al. 2017; Koos and Lindsey 2022; Woldetsadik 2018). Some studies suggest more ambiguous effects, including higher levels of prosocial behavior, women's protests, and even empowerment (Berry 2018; Koos 2018; Koos and Traunmüller 2024; Kreft 2019).

Despite the growing policy attention and research on wartime sexual violence over the past 10 years, systematic micro-level evidence on the implications for postconflict peace building and social and political development is scarce (González and Traunmüller 2023; Koos 2018; Koos and Traunmüller 2024). In this article, we address the following research question: Does wartime sexual violence affect social and political mobilization among survivors and their families? If so, which mechanisms underpin this relationship?

Contrary to conventional wisdom that emphasizes pervasive, downstream consequences associated with sexual violence, we argue that wartime sexual violence increases social and political mobilization. Our microlevel theory starts with the assumption that in contexts of high insecurity and a lack of state-provided basic services, being and remaining part of a community is critical for survival. Confronted with the threat of stigmatization and exclusion, survivors of sexual violence and their families will increase their social and political investment in their communities. We suggest that this is a likely response mechanism whether or not social exclusion ever actually occurs. The threat of exclusion affects everyone, but how survivors perceive their likelihood of being excluded depends on psychosocial factors, which we explore as theoretical mechanisms.

We see our theory as rectifying two seemingly competing claims about the effects of sexual violence on social and political outcomes: (i) research demonstrating the harmful psychological effects of exposure on survivors and their families, suggesting social exclusion

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<sup>&</sup>lt;sup>1</sup> When we use the term sexual violence in the context of this article, we mean sexual violence perpetrated by state and non-state armed actors. We define sexual violence as rape and sexual slavery committed by one or more perpetrators in the private or public sphere (Wood 2015).

and decreased sociopolitical engagement (Dumke et al. 2021; Finnbakk and Nordås 2019; Kelly et al. 2017), and (ii) literature suggesting that social and political mobilization often occurs in conflict-affected contexts, including places where sexual violence occurs (Bauer et al. 2016; Berry 2018; Koos 2018; Kreft 2019).

To assess our theory, we use an original populationbased survey of one thousand respondents from eastern Democratic Republic of Congo (DR Congo). This is an area in which sexual violence by armed groups has continued to be widespread even in the aftermath of a large-scale civil war that ended formally in 2003. It also represents a hard case for a theory of sociopolitical mobilization because survivors may not be able to overcome society's strong norms of stigmatization and because of women's low levels of formal political inclusiveness overall (Inter-Parliamentary Union 2017; Kelly et al. 2017).

Our methodology reveals the importance of accounting for social desirability bias and nondisclosure of sexual violence in survey questions, which we believe may confound studies of both wartime sexual violence and social and political outcomes. We use a *list experiment* which is an indirect way to measure sensitive behavior, experiences, and attitudes and provides respondents with anonymity. The list experiment measure suggests a prevalence rate of more than 12%, while only 6% report to our conventional, direct question.

We use both measures to estimate the effect of wartime sexual violence on social and political mobilization at the household level. Using the list experiment measure of sexual violence, we find that sexual violence exposure increases a range of local-level social and political outcomes including the frequency of social interactions, engagement in local political and social associations, and public goods contributions. Using the direct question, we find no significant effects across these sociopolitical outcomes. The differential findings reveal how essential it is to account for bias in survey disclosure when examining sociopolitical outcomes among conflict-affected populations. We also show evidence that survivors and their families who anticipate stigma and feel self-blame largely drive the mobilization process. Sociopolitical mobilization occurs among the population of survivors and their families that are most affected by psychosocial harms of stigma and self-blame.

Our article presents a new micro-level theory and quantitative empirical evidence of the increased social and political engagement among households that include survivors of wartime sexual violence. This evidence challenges prevalent notions in the literature on women, sexual violence, and war (Dumke et al. 2021; Finnbakk and Nordås 2019; Kelly et al. 2017; Koos and Lindsey 2022; United Nations Secretary-General 2021), while also bolstering emerging research that has found similar patterns in other contexts (González and Traunmüller 2023; Koos 2018; Kreft 2019). Therefore, our article makes the case that psychosocial harms do not preclude sociopolitical mobilization but, in fact, may even be a catalyst for it.

## PRIOR RESEARCH ON THE LEGACY OF VIOLENCE

#### **Disaggregating Exposure to Violence**

Over the past 15 years, civil war scholars have increasingly turned from understanding the causes of war onset to understanding the micro-level impacts of violence on people's social, political, and economic preferences and behaviors. Studies have shown that direct or indirect exposure to violence can increase prosocial behavior toward ingroup members but aggravates intergroup relations (Bauer et al. 2016; De Juan et al. 2024). Over time, the perceptions of rival outgroups have been shown to improve (Scacco and Warren 2018) but distrust and negative sentiments toward the government remain (De Juan and Pierskalla 2016). Several mechanisms have been proposed to explain the observed relationships, such as post-traumatic growth and migration of asocial types (Gilligan, Pasquale, and Samii 2013). However, we still know very little about the mechanisms that underpin the relationship between general exposure to violence and sociopolitical behaviors.

Studies often conceptualize and measure "violence exposure" as a simple binary measure of whether respondents reside inside conflict-affected areas (Yaylacı and Price 2023). This overlooks the intricate variations in types of violence experienced during civil wars, which differ in terms of lethality, frequency, degrees of exposure, and personal significance (Gutiérrez-Sanín and Wood 2017).

While sexual violence is one form of violence against civilians among many that occur in violent conflicts, it is an extremely brutal and consequential human rights violation. The qualitative knowledge base suggests that it is important to disaggregate sexual violence from other types of violence to understand its impact on social and political behavior (Dumaine et al. 2021; Gutiérrez-Sanín and Wood 2017).

## The Harmful Legacies of Wartime Sexual Violence

The psychological and social consequences of wartime sexual violence are understood to be distinct from the consequences of other forms of violence. It is often nonlethal, and accompanied by a sense of shame from having been dominated by another individual (Eriksson Baaz and Stern 2009) and the expectation that one's community will blame the victim for their experience (Koos and Lindsey 2022; Woldetsadik 2018). Survivors often feel stigmatized and a sense of self-blame for violating social norms of fidelity, sexuality, honor, and reproduction. Thus, there is a direct harm associated with sexual violence as well as an acknowledged secondary trauma experienced by survivors, including social stigma and shame. These consequences have been described by victims as comparable to the experience of rape itself (Woldetsadik 2018).

Dozens of qualitative studies have documented the pervasive social consequences of wartime sexual violence. Drawing on interviews with women in Mozambique, Sideris (2003) traces how women who were raped and impregnated by Renamo rebels were rejected by their husbands and children born of rape were not accepted in their communities. In another study from post-genocide Rwanda, Mukamana and Brysiewicz (2008) document that rape victims were often labeled as prostitutes by their community members which exacerbated social marginalization and exclusion. Kelly et al. (2017) and Finnbakk and Nordås (2019) draw on interviews with rape survivors in DR Congo to describe victim experiences of social exclusion and collective suffering.<sup>2</sup>

The majority of these studies were conducted with the aim of exposing and tracing continued harms, social ostracization and exclusion felt by survivors of sexual violence. However, they do not engage with questions about sociopolitical participation explicitly. They were also not designed to make statements about effects of sexual violence on the wider population of survivors since these studies primarily draw from small convenience samples rather than representative populations. Nonetheless, conventional wisdom tends to extrapolate from this literature that sexual violence will decrease sociopolitical engagement.

#### Wartime Sexual Violence and Survivor Mobilization

At the same time—and taking inspiration from earlier quantitative work that finds increased political participation after exposure to armed violence—new work highlights survivor agency and community mobilization in response to sexual violence.<sup>3</sup>

Kreft (2019) finds that *countries affected by sexual violence* have a higher likelihood of women's protests. While informative, aggregate-level analyses like these cannot unpack sociopolitical consequences at the subnational or individual level. For example, Kreft's (2019) work does not speak to survivor mobilization in rural areas, but rather women in urban areas whose risk of wartime sexual violence is comparatively low.

Turning attention to research on survivors, Koos (2018) finds that sexual violence victimization increases prosocial behavior in post-war Sierra Leone. Yet, the survey measure of sexual violence exposure leaves questions about measurement and underreporting. In separate studies, González and Traunmüller (2023) and Koos and Traunmüller (2024) also find evidence of increased social activity among survivors of sexual violence in several contexts. The authors use a list experiment to analyze effects, but leave central questions open about whether and how known psycho-social processes associated with sexual violence—such as stigma and self-blame—relate to survivor mobilization.

While there is emerging quantitative evidence that wartime sexual violence may lead to increased social and political participation, this finding is not well established for survivors, their families and communities at large. Existing studies also do not engage with the psychological and ethnographic literature that demonstrates a range of harms that survivors and their families experience and which are—at first glance—at odds with the notion of sociopolitical mobilization. A full understanding of the effects of wartime sexual violence on social and political attitudes, preferences and behaviors among survivors and their families requires a new theory that rectifies these seemingly conflicting sets of evidence.

#### SURVIVOR SOCIOPOLITICAL MOBILIZATION: THEORIZING SURVIVOR NEEDS, PSYCHOSOCIAL HARMS AND AGENCY

## **Theoretical Motivation**

How does sexual violence by armed groups affect social and political action among survivors and their households? Given stigmatization of and shame felt by survivors, the most established view suggests that survivors and their families will be ostracized and excluded from sociopolitical participation in their communities, or at best ignored (Kelly et al. 2017; Koos and Lindsey 2022; Woldetsadik 2018). This notion is also reinforced by the framework advanced by the United Nations and other organizations that sexual violence is a weapon of war that destroys and weakens the social fabric of communities (Amnesty International 2010; Médecins Sans Frontières 2021; United Nations Secretary-General 2014).

Indeed, sexual violence is often perpetrated with immense brutality leading to long-lasting physical and psychological effects not only for the survivors themselves but also for their families and community members. Survivors and their families often feel shame, even guilt, and experience stigmatization, which makes it challenging to reintegrate into communal life and foment social reconnections.

We offer a theory that builds on the new literature on survivor agency while also emphasizing the relevance of the described social harms for how survivors and their families respond and engage in their communities. The theory directly addresses a tension in the literature between research on survivor experiences of stigma and exclusion (Dumke et al. 2021; Kelly et al. 2017; Koos and Lindsey 2022; Woldetsadik 2018) and some early quantitative evidence on mobilization and participation (González and Traunmüller 2023; Koos 2018; Kreft 2019). Rather than viewing these as competing understandings, we describe how psychosocial harms can beget social and political mobilization.

Our theory of survivor sociopolitical engagement centers on the different ways survivors and their families navigate the social harms that they experience. We first describe how people in weak, conflict-affected states primarily rely on their local communities, a background condition under which we expect our

<sup>&</sup>lt;sup>2</sup> See Koos (2017) and Nordås and Cohen (2021) for recent overviews of this literature.

<sup>&</sup>lt;sup>3</sup> Indeed, the very term "survivor" is chosen to highlight this agency (Marks 2014).

theory to operate. We then describe how psychosocial factors associated with sexual violence are essential mechanisms within our theory of survivor-driven mobilization.

#### Community Reliance and Access to Local Public Goods

The value of belonging to a community is an important condition for understanding people's sociopolitical engagement in areas of insecurity and ongoing fighting. During violent conflict, the state rarely provides security, justice, or basic services. Rather, communities collaborate to generate local public goods to address pressing needs (Migdal 1988). Community acceptance is important for accessing these locally generated public goods, which in turn can incentivize stigmatized survivors and their households to seek connections with their communities.

For example, in DR Congo, traditional authorities within communities mete out justice for many withincommunity disputes. In addition, communities are often tasked with providing their own means of protection from armed groups and people band together to gain access to security information (Lindsey 2022). Being integrated and networked within a community is essential for having access to such essential public goods; thus there are clear risks that accompany exclusion. The increased risk of exclusion provides survivors and their families an instrumental incentive to engage with their community despite and perhaps even because of the psychosocial harms that they anticipate.

Evidence suggests that people under severe duress have become more politically and socially engaged. In the case of Rwanda, Berry (2018) describes how the genocide-imposed need for women's access to land to support their own lives and the lives of children drove women to lobby for those rights and achieve greater representation. Survival needs can thus be understood as both threatening to people's well-being and politically mobilizing. In the same vein, we suggest that survivors and their families operate under the potential threat of exclusion from their communities and thus seek to offset this threat by engaging with and embedding themselves in their communities rather than retreating or remaining passive.

## Psychosocial Factors Motivating Sociopolitical Action

In this theory, we suggest that sexual violence survivors and their families very often face a threat of social exclusion due to prevailing gender norms. However, some survivors and their families will perceive a greater risk of exclusion than others. We argue that this depends on several psychosocial factors.

#### Stigma

Stigma can be defined as a "mark that links an individual to an undesirable characteristic" (Link and Phelan 2001, 365). It has been described as the second trauma of sexual violence (Woldetsadik 2018)—a trauma that is both felt by survivors and their families and implemented by the societies in which they live. Stigma is widely understood as a mechanism that leads to status loss and social exclusion of survivors and their households (Koos and Lindsey 2022), ultimately dividing and weakening communities (Atuhaire et al. 2018; United Nations Secretary-General 2021).

Yet, social psychological research—unrelated to civil wars or sexual violence-has shown that stigmatization can promote behavior that aims to achieve social re-connection with others (Molden and Maner 2013; Shih 2004). Even within low-stake laboratory conditions, studies have shown that stigmatized people would agree to obviously false statements in order to conform to a group's view and gain acceptance. This indicates the importance of group belonging and the costs people are willing to pay (e.g., Bonanno, Westphal, and Mancini 2011; Shih 2004). Moreover, in experiments that primed individuals to merely think about social exclusion, participants have been observed to be more interested in making new friends and working in groups. These participants also assessed other participants as more sociable and attractive (Maner et al. 2007). We argue that this drive for social re-connection is particularly relevant in conflict contexts due to the high-stake environment and relevance of community belonging to survival. Anticipated and experienced stigmatization indicate to survivors and their families that they risk marginalization and exclusion, thus intensifying their incentive to act against this perceived threat.

#### Self-Blame

Previous research shows that stigma is amplified in communities where its members are more likely to blame victims for rape (Koos and Lindsey 2022). The norm of blaming victims is often internalized by survivors and their families, such that victims blame themselves for the harm that they have experienced. Studies have shown that survivors who blame themselves for their victimization have more negative mental health outcomes (Bhuptani and Messman-Moore 2019) such as depression, which can lead survivors and their families to self-isolate.

However, survivors and families that blame themselves are also going to perceive a high likelihood of being excluded from their communities, because they adopt the very narratives of social exclusion that their communities hold. To that end, self-blame makes the possibility of exclusion explicit and real. Hence, we suggest that self-blame will lead survivors and their families to socially and politically engage to reduce the heightened perceived risk of social exclusion. This reflects psychological studies showing that people who blame themselves may be more likely to act to improve their future situation (Foster, Matheson, and Poole 1994), suggesting that they will take action to achieve reconnection.

#### Post-Traumatic Growth

While anticipated stigma and self-blame can be described as threat-related motivations to act, post-traumatic growth refers to personal growth in response to harm. Post-traumatic growth is often referenced in the literature to explain why brutal violence can increase people's involvement in local politics and prosocial behavior (Bauer et al. 2016). Post-traumatic growth can be described as a re-awakening in which people refocus their lives because of an egregious harm (Tedeschi and Calhoun 2004). People overcome and transcend the harm and adopt a new empowered life even in the presence of other adverse effects. When individuals experience personal growth after trauma, anticipated stigma and self-blame become seemingly less relevant to behavior even while they may coexist.

We consider post-traumatic growth an important psychological mechanism that can lead survivors and their families to engage socially and politically within their communities. As with other psychosocial mechanisms, post-traumatic growth complements need-based incentives to achieve reconnection in communities where the risks of social exclusion are pronounced.

#### **Empirical Expectations**

Summarizing the overlapping needs-based framework and psychosocial consequences that we believe push survivors and their families toward achieving reconnection with their communities, we propose the following directional hypothesis.

## **Hypothesis:** Wartime sexual violence increases social and political mobilization and action.

Empirically, we assess our hypothesis by examining the effects of sexual violence exposure within households on several measures of sociopolitical engagement. We then examine the plausibility of the psychosocial mechanisms described within our theory. We use an original survey conducted in eastern DR Congo. Before turning to the description of the survey design and results, we introduce the study context and discuss the existing evidence base on sexual violence and its social and political implications in this critical case.

#### STUDY CONTEXT: EASTERN DR CONGO, WARTIME SEXUAL VIOLENCE AND ITS LEGACIES

Eastern DR Congo has been at the center of international attention for its high prevalence of sexual violence perpetrated by armed groups and security forces (e.g., Amnesty International 2010; Médecins Sans Frontières 2021). Since the onset of what has come to be known as "Africa's World War" in 1994, many scholars have tried to explain the high levels of sexual violence perpetrated by armed groups in DR Congo, with explanations such as opportunism, domination, systematic gender inequality, aggression due to the hardships endured by armed group members, and lust (Eriksson Baaz and Stern 2009).

Some suggest that stigma associated with rape in this context is more pronounced than other contexts. The logic behind this claim is that DR Congo is a society built upon traditional gender roles where women's fidelity is prized and female rape victims are thought of and treated much as female adulterers (Koos and Lindsey 2022). There have been many studies highlighting the prevalence of stigma and associated harms in this context such as wife rejection, unmarriagabilty of unmarried women, and refusal to care for children born of rape (Finnbakk and Nordås 2019; Kelly et al. 2017).

The harmful repercussions of wartime rape are evident and the humanitarian and advocacy community has raised international attention to these harms as part of its efforts to support peacebuilding in DR Congo (e.g., Médecins Sans Frontières 2021). Humanitarian agencies have launched countless programs to assist sexual violence victims with medical and psychosocial support. For example, Panzi Hospital in Bukavu and Heal Africa in Goma were supported and helped thousands of women to overcome the physical damage to their bodies and to support them as best as possible to regain control over their lives, especially when they have been rejected by their families or communities (Bartels et al. 2010).

Yet, there are also questions about how much we know about levels of sexual violence in DR Congo and elsewhere. Quillard (2016) has argued that humanitarian organizations have overestimated the number of victims in order to garner funding for their projects. Narratives about women's victimization have been the predominant focus of research and media on DR Congo. While such narratives are critical for garnering support for program interventions, we also believe that highlighting the potential for resilience and agency in the aftermath of victimization will bring a fuller perspective to the lives of survivors of sexual violence in this context.

DR Congo may be considered a hard case to find resilience and mobilization in response to sexual violence. The prevalence of wartime sexual violence is extensive, but women's political involvement is, overall, very low. For example, at the time of our research, only 8.9% were women in the legislative assembly and only 4.6% in the upper chamber (Inter-Parliamentary Union 2017). Possibilities for women to participate politically at the local level are also restricted through gendered social norms that assign women roles in the domestic sphere. However, some reports document women's influence in resolving local conflicts especially in areas that experienced large-scale massacres in the past (Jones and Espenshade 2021) or demonstrations against the impunity of sexual violence perpetrators (Bihamba 2017), suggesting that women have mobilized.

Finally, eastern DR Congo is a context in which people face insecurity both at the hands of the state and of armed groups. Public goods and security networks are largely organized and produced locally

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(Lindsey 2022). Thus, DR Congo provides the conditions to observe needs-based and psychosocial dynamics that we have described in our theory.

# THE SURVEY: SAMPLING PROCEDURE, ETHICS, AND POTENTIAL BIASES

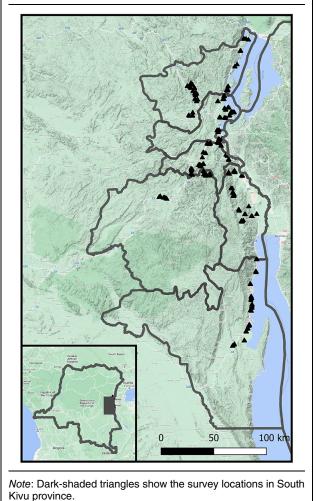
To assess our theoretical argument on sociopolitical mobilization in response to wartime sexual violence, we draw on an original household survey with one thousand households in one hundred villages in South Kivu, eastern DR Congo (see Figure 1) which was implemented by Research Initiatives for Social Development,<sup>4</sup> a Congolese survey organization in Bukavu. Building on estimated population figures at the *territoire* (ADM2) and *chefferie* (ADM3) level, we used a multi-stage sampling procedure to randomly select one hundred villages.<sup>5</sup>

In each village, enumerators randomly selected 10 households based on household rosters created together with the village heads and administrators. Given the potential for past displacement associated with sexual violence, village administrators were asked to include displaced people and minorities when creating the list of households within the village to sample. The survey was implemented in February and March 2017. In each village, a team of female and male enumerators conducted the interviews. Female respondents were interviewed by female enumerators. The survey was carried out in French and Kiswahili, after a translation and back-translation.

Given that the survey was designed to gain a better understanding of the social and political legacy of wartime sexual violence, the survey included sensitive questions. Extreme caution was taken to mitigate the potential of harm when conducting this survey.

First, enumerators received specific training from local gender experts on how to handle sensitive questions and emotional interactions that may arise. Second, respondents were made aware of the sensitive nature of the survey prior to agreeing to take part. Then, they were reminded prior to sensitive sections that they were free to opt out of the survey at any time. Finally, questions about sexual violence were asked about household rather than individual exposure.<sup>6</sup>

Approximately, 10% of the initially sampled villages had to be replaced for security reasons, in particular due to fighting between local armed groups and population displacement. These villages were replaced by contingency villages, which—assuming the potential of erupting local insecurity—had already been sampled in the initial sampling process to avoid ad-hoc village replacements. Given that people fled local fighting to nearby towns and villages, we do not expect this to have a major impact on the sample composition, since FIGURE 1. Survey Locations in Eastern DR Congo



displaced persons would be sampled in other towns and villages.

### MEASURING WARTIME SEXUAL VIOLENCE

#### List Experiments and Direct Questions

Measuring exposure to sexual violence at the individual and household level comes with significant measurement and ethical challenges. Many respondents who have been victims and fear stigmatization will choose not to report sexual violence when asked directly in a conventional survey question. Thus, conventional direct questions are most likely to underestimate prevalence rates of wartime sexual violence.

Moreover, nondisclosure to direct questions can be correlated with both psychological well-being such as shame and stigmatization but also social and political behavior. For instance, if survivors are socially engaged and this makes them more confident to report wartime sexual violence (to a direct question), there will be

<sup>&</sup>lt;sup>4</sup> https://risd-drc.org/.

<sup>&</sup>lt;sup>5</sup> The sampling protocol is available in the Codebook, 1–2.

<sup>&</sup>lt;sup>6</sup> Further discussion of ethical considerations associated with this research appears in Section 1 of the Supplementary Material.

measurement bias toward the hypothesis that wartime sexual violence victims are more sociopolitically active. Alternatively, if survivors are socially engaged and this makes them less likely to report sexual violence exposure (to a direct question), the results are biased against the hypothesis that sexual violence survivors are more socially engaged and demonstrate resilience. Thus, it becomes vital to consider measures that account for nondisclosure bias baked into direct questions commonly used.

The list experiment is an alternative to uncover truths about behaviors, attitudes and experiences that respondents may prefer not to disclose in direct survey questions. List experiments assign each survey respondent randomly to a treatment or a control group. The control group receives several (often three) nonsensitive item questions carefully formulated such that few people will respond "yes" (ceiling) or "no" (floor effects) to all three items. The treatment group receives one additional, sensitive question item considered more intrusive or implicating than the other items in the list. Each respondent only answers the total amount of items to which the answer is "yes." This gives anonymity to each respondent so that each feels less inhibited from revealing true answers to an unfamiliar enumerator. Estimates of the sensitive behavior are then calculated as the mean difference in the count of affirmed question items between the treatment and control groups.

This "statistical truth serum" (Glynn 2013) has been used to estimate a wide range of outcomes, including people's true preferences for supporting insurgents in civil wars (Blair, Imai, and Lyall 2014), vote-buying by political parties (Corstange 2018), and intimate partner violence (Cullen 2023).<sup>7</sup>

#### **Our Two Survey Questions**

Given the high probability of disclosure bias and our focus on sociopolitical mobilization, we used a list experiment to estimate levels of wartime sexual violence in our survey sample. We administered the list experiment in the survey as follows.

Hold these stones behind your back in your left hand. I'm going to read out some statements. If this ever happened to you or your family, pass a stone from your left hand to your right hand.<sup>8</sup> At the end, I will ask you to show me how many stones are in your right hand. Are you ready?<sup>9</sup>

- 1. I moved away from my original place of birth.
- 2. I have lost a family member in an armed group attack.
- 3. I have experienced looting or theft of my house or property.

The other half of respondents were randomly assigned to the treatment condition in which the sensitive item "rape by armed groups" was added to the list above:

4. I or a member of my household has been raped by an armed group.

We emphasize that the validity of list experiments depends on a series of assumptions. First, respondents in control and treatment groups must not differ on average (randomization). Second, the inclusion of the sensitive item must not affect responses to the nonsensitive items (no design effect). Third, respondents must respond truthfully to the list experiment and must not strategically choose not to disclose.<sup>10</sup> Strategic nondisclosure can occur in the presence of ceiling (choosing all items) or floor effects (choosing no items) that threaten anonymity, the hallmark of list experiments. In Section 9 of the Supplementary Material, we describe these assumptions in detail and employ a variety of descriptive and statistical tests to assess the extent of design effects, ceiling and floor effects, strategic nondisclosure, and monotonicity (Aronow et al. 2015; Blair and Imai 2012; Buckley et al. 2024), and a simulation-based sensitivity analysis in which we test the robustness of our results to the inclusion of potential floor effects. Overall, we find no evidence that would threaten the validity of the list experiment estimate and the inferences we make in the analysis.

To validate our assumption about nondisclosure bias, we also asked respondents a direct question on wartime sexual violence. First, we compare the direct question to the estimated prevalence of the list experiment. Then, we use both measures in our empirical analysis to gain insights into mechanisms of sociopolitical mobilization.

In the direct question, all respondents were asked:

Have you or anyone else in your household ever been raped by armed groups since 2002, that is physically forced to have sexual intercourse?

#### **Household-Level Exposure**

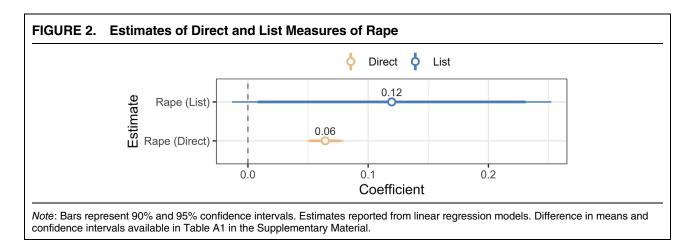
Both the list experiment and the direct question asked people whether they *or* someone in the household experienced wartime sexual violence, and not only the respondent. In addition to providing greater privacy to respondents, this approach captures the social

<sup>&</sup>lt;sup>7</sup> While most studies use the term "misreporting" to describe differences between list experiment and direct questions, we adopt the term disclosure to underscore the agency of the respondent in whether or not they choose to report.

<sup>&</sup>lt;sup>8</sup> This is a form of private tabulation described by Kramon and Weghorst (2019) as a useful way to increase the reliability of list experiments.
<sup>9</sup> Enumerators were trained to turn their back to the respondent

<sup>&</sup>lt;sup>9</sup> Enumerators were trained to turn their back to the respondent during the list experiment, so that they would not be able to detect movements of the respondents' hands.

<sup>&</sup>lt;sup>10</sup> We avoid the term "liars" often used in the literature to withhold moral judgment associated with not disclosing this sensitive experience.



and political implications at the household level, a highly relevant social unit in rural DR Congo.

Despite these advantages, there is likely some variation in whether respondents know about the victimization of other household members. Based on our impressions from field research in eastern DR Congo, there were two likely scenarios. First, sexual violence has been public, publicly known or so severe that household members had accurate information to respond to the question. Second, sexual violence has not been public so that survivors have chosen whether to share it with their spouses and family. Nondisclosure might allow the survivor to avoid negative repercussions such as stigmatization or spousal rejection. In our context, we would expect that surveyed survivors who did not disclose it to their partners would be unlikely to report their exposure in a direct question. However, they would be more likely to report under the conditions of privacy afforded by the list experiment. Overall, when someone has been affected personally or as a family, we expect it to have an impact on social and political attitudes and behavior of the household members collectively.

## Prevalence Estimations in Eastern DR Congo

Figure 2 shows the estimated prevalence rates of sexual violence for both measures. The list experiment suggests that 12.4% of households in our population-based sample have experienced sexual violence by armed groups. By comparison, the direct question suggests a point estimate of only 6.4%. Consequently, a conventional psychological or public health survey with direct questions would have missed almost half of the share captured by the list experiment.<sup>11</sup>

Because the list experiment adds random noise to provide anonymity and relies on a comparison between responses in the treatment group with responses in the control group, standard errors tend to be much larger than in direct questions. Thus, we estimate a large substantive but not statistically significant difference in estimates.<sup>12</sup> Scholars have highlighted important trade-offs between reduced disclosure bias and increased variance in list experiments (Blair, Coppock, and Moor 2020) and often recommend prioritizing precision unless there are strong theoretical reasons to expect bias in disclosure. Our approach is to conduct all our analyses using both the list experiment and direct measures of sexual violence, which ultimately shows that disclosure bias is essential to account for when considering the effects of sexual violence on sociopolitical outcomes despite increased variance.13

Although we cannot say how closely the estimate of 12.4% reflects the true value of household-level prevalence of wartime sexual violence in South Kivu, tip-ofthe-iceberg arguments on reporting sexual violence suggest that higher estimates tend to better reflect true levels.<sup>14</sup> The results also align with previous literature

<sup>&</sup>lt;sup>11</sup> List experiments require shorter form than direct questions and so often call for different wording. We note two ways in which the wording of the direct and list experiment versions of the question differ. First, the direct question more clearly defines rape for respondents. Second, the direct question asks about rape experienced post-2002. We do not expect that these differences affect our comparison due to well-known definitions of rape and the large 15-year time gap between the survey in 2017 and the reference year of 2002. We also

show that respondents who do and do not report sexual violence in the direct question (which asks about violence since 2002) do not differ substantively or significantly in age. If the reference date makes a difference, we would expect younger respondents to respond affirmatively to a question about rape post-2002, which is not borne out in the data. See Table A8 in the Supplementary Material. Theoretically, this reference point should also not be important for our main analysis of the social effects of wartime rape.

<sup>&</sup>lt;sup>12</sup> Numerical estimates provided in Table A1 in the Supplementary Material.

<sup>&</sup>lt;sup>13</sup> In addition, as we will describe in our section on "Model Specification," our analysis of sociopolitical outcomes uses methods designed to increase the precision of the list experiment estimate.

<sup>&</sup>lt;sup>14</sup> It is important to note that prior surveys in DR Congo and beyond have only relied on direct question techniques. For instance, based on 2007 Demographic and Household Survey data, Peterman, Palermo, and Bredenkamp (2011, 1064) find that in South Kivu 12.8% of women have reported "a history of rape" while 4.4% experienced rape in the past 12 months. However, note that rape in these data includes all forms of sexual violence from intimate partners, relatives, friends, neighbors, and strangers.

that finds higher estimates of intimate partner violence against women in list experiment measures (Cullen 2023).

In subsequent analyses and discussion of our theoretical argument, we prioritize the list experiment measure, because (i) the literature prioritizes it as a measure of this sensitive subject, and (ii) the nature of our outcome variable (sociopolitical mobilization) is inherently social, as is survey disclosure (Lindsey 2023). For scholars interested in comparing our householdlevel measures of sexual violence with event-based geospatial data, we provide correlations between our measures of sexual violence and geospatial data from two widely used, publicly available conflict event datasets in the Supplementary Material.<sup>15</sup>

#### MAIN ANALYSIS

We now turn to assessing our hypothesis that wartime sexual violence will increase social and political mobilization. We use linear regression models to estimate the relationship between household exposure to sexual violence and sociopolitical outcomes using both our direct and list experiment measures. We describe our model specifications using the list experiment in detail in the section below. We then describe our outcome measures, control variables, and approach to mitigating threats to causal inference.

#### **Model Specification**

New statistical estimation procedures allow researchers to move beyond a pure difference-in-means estimate of list experiments to predict each individual's likelihood of experiencing the sensitive item, in our case sexual violence, based on a set of covariates. Blair and Imai (2012) have offered a maximum likelihood estimation procedure that uses logistic regression to model the probability that a respondent has experienced a sensitive item or not. The procedure also accounts for the potential relationship between the covariates and the three nonsensitive items in the list experiment. The result is a more precise estimate of sexual violence with smaller confidence intervals, since each individual has a predicted value of experiencing sexual violence available for the analysis. It also appropriately models the sensitive item as a dichotomous outcome.

Imai, Park, and Greene (2015) propose a one-step maximum likelihood estimation procedure that estimates the sensitive item at the individual level taking into account the covariate distribution and nonsensitive items (as described above), and then estimates the effect of the sensitive item—considering uncertainty bounds—on the outcomes. The modeling strategy uses the same covariates to predict sexual violence as those within our sociopolitical outcome models: gender, age, household size, other forms of violence experienced, and pre-exposure social exchange (described in the Section "Mitigating Threats to Causal Inference").<sup>16</sup>

We implement this one-step estimation procedure to analyze the effects of household exposure to sexual violence on sociopolitical outcomes using the ictreg.joint function in the R package "list" (Blair et al. 2016; Imai, Park, and Greene 2015). This fully efficient one-step method requires making assumptions that there are no design effects and no strategic nondisclosers within the list experiment. We find no evidence for violations of these critical assumptions after conducting a range of state-of-the art statistical tests (see Section 9 of the Supplementary Material).<sup>17</sup>

#### **Outcome Variables**

We test our hypotheses on several outcome variables that reflect various dimensions of local social and political mobilization and engagement. Personal exchange reflects the frequency of how often a respondent meets with people in their community (mean = 1.29, SD =  $0.79, \min = 0, \max = 3$ ). Event engagements measures how frequently a respondent participates in communal work such as road cleaning, maintenance of irrigation channels or providing labor for communal construction projects (mean = 1.47, SD = 0.938, min = 0, max = 4). Donate amount is a behavioral measure which records the amount respondents donated to a school project in South Kivu (mean = 297, SD = 303, min = 0, max = 5,000).<sup>18</sup> As local political engagement, we asked respondents whether they were *leaders* of a local association including local councils, farmers' associations, savings groups, education and health committees (mean = 0.13, SD = 0.34, min = 0, max = 1). The membership variable measures the number of memberships instead of leadership roles in these organizations  $(\text{mean} = 0.54, \text{SD} = 0.83, \text{min} = 0, \text{max} = 4).^{19}$ 

The models include conventional controls for gender, age, education level, household size, and assets. Importantly, we also added measures for witnessing sexual violence and having lost a family member, relative or friend due to violence. We control for these

<sup>&</sup>lt;sup>15</sup> See Tables A22 and A23 in Section 8 of the Supplementary Material for correlations. Figure A1 and Tables A24–A28 in the Supplementary Material estimate the relationship between geospatial measures of sexual violence and our sociopolitical outcomes.

<sup>&</sup>lt;sup>16</sup> In Section 9.6 of the Supplementary Material, we show that the maximum likelihood logistic estimate of sexual violence using these covariates falls within the confidence interval of our linear differencein-means estimate and is comparable to the NLS estimate. We also conduct the Hausman test recommended by Blair, Chou, and Imai (2019) to validate the appropriateness of the methodology.

<sup>&</sup>lt;sup>17</sup> At most, we uncover a very small potential of floor effects. We conduct simulation analyses to show that their inclusion does not alter our findings.

<sup>&</sup>lt;sup>18</sup> Note that each respondent was given a compensation of 1,500 Congolese Francs for her/his time, equivalent to 60% of a daily wage. At the end of the survey, respondents were asked whether and how much they would be willing to donate to a school project. The full amount was then donated to a local organization in Bukavu and earmarked to support education projects.

<sup>&</sup>lt;sup>19</sup> We excluded women's organizations from the leadership and membership measure as this gives priority to women compared to men, and may also specifically focus on violence-affected women.

conflict experiences in order to convincingly disentangle the effect of sexual violence from other experiences of violence, which may co-occur but have different sociopolitical effects. We also control for the level of pre-exposure social exchange to reduce the risk of reverse causation and include *territoire* fixed effects (ADM2) to account for unobserved spatial heterogeneity.<sup>20</sup>

#### Mitigating Threats to Causal Inference

One important empirical limitation of our study is that we cannot claim to estimate causal effects. Causal claims are inherently difficult to make, in particular for our theory. Our approach is to transparently assess and mitigate risks to causal inference. While our list experiment measure relies on respondents' random assignment to a treatment and control condition, the estimation of the effect of wartime sexual violence on social and political outcomes is correlational.

Our strategy is to plausibly reduce the main threats to causal inference, confounding bias and reverse causality. Apart from standard confounding variables such as gender, age, assets, and household size, our analyses also control for other types of violence (witnessing sexual violence, homicide in family) that could confound the effect of sexual violence. We also specify local-level fixed effects at the territoire level (ADM2) to control for unobserved heterogeneity. Importantly, as described above we include a measure of respondents' pre-exposure level of social exchange through recall questions to reduce the potential risk of reverse causality. While acknowledging the limitations of this recall question, it is reassuring to see in the outcome models in Tables A17-A20 in the Supplementary Material that this variable previous exchange is indeed a significant predictor of sociopolitical engagement.

In addition to empirical risk reduction, various pieces of evidence indicate that wartime sexual violence is not systematically targeted. For instance, Bartels et al. (2010) examined 1,021 patient records from Panzi Hospital in Bukavu and found no distinct patterns, noting that it affected women of diverse backgrounds. Similarly, Imai et al. (2011) analyzed DHS data and concluded that reports of sexual violence were unrelated to individual characteristics.

As an additional source of information, our survey asked the chiefs and heads of the one hundred sampled villages in South Kivu which households they believed were usually targeted in attacks involving rape by armed groups. A total of 61% answered that it is "almost random," 34% said "those along the road," 18% agreed with "those near the center of the village," whereas 21% answered "those far away from the center." A total of 44% said that "rich households" are targeted and 12% said "poor households" are targeted. (Multiple responses were allowed.)

Finally, to further explore potential selection effects, we regressed the list experiment on education and wealth. We find that these measures are not significantly associated with sexual violence victimization measured with the list experiment measure or the direct measure of sexual violence (Tables A5 and A6 in the Supplementary Material).

#### Results

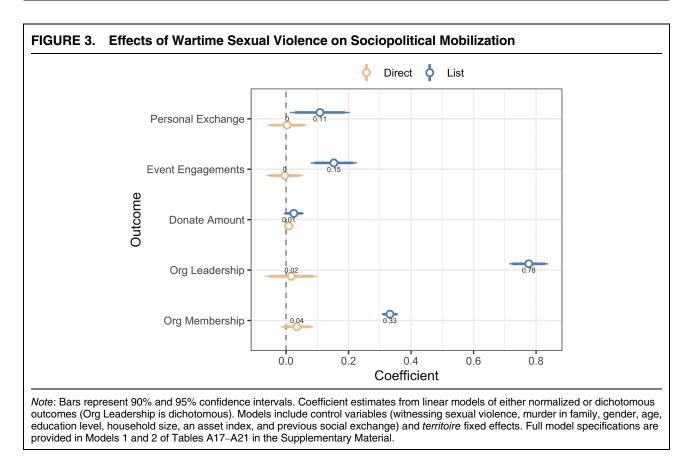
We now turn to the empirical results. Figure 3 shows the marginal effect of wartime sexual violence on each of the five sociopolitical outcome measures. We find that the list experiment significantly increases the frequency of personal exchange within communities, cooperative engagement in events and, to a modest degree, donating behavior, the behavioral outcome. For forms of local political engagement, we find large effects for leadership and membership in local associations.<sup>21</sup>

These results provide strong support for our hypothesis that sexual violence increases social and political mobilization when using the anonymity-providing list experiment. The direct measure of sexual violence is not significantly associated with any of the sociopolitical outcomes in either the positive or negative direction. These findings highlight that using survey techniques that grant respondents anonymity and reduce disclosure bias-alongside new analysis techniques-have profound implications for understanding the impact of sexual violence, and potentially other types of violence. If we had relied only on direct questions of sexual violence or conflict exposure based on violent event data,<sup>22</sup> we would have completely missed an important nuance in understanding how sexual violence affects social and political action in eastern DR Congo.

The consistency of the findings across five different measures of sociopolitical engagement provides strong evidence for our mobilization hypothesis and against the conventional wisdom that wartime sexual violence primarily results in social marginalization and ostracization. These results are indicative of how courageous, resilient, and powerful survivor households can be in the midst of insecurity and violence. It is also important to emphasize that the outcomes reflect behavior and not only attitudes. Relying solely on attitudinal questions could have raised questions about social desirability bias in our outcome measures. Notably, the positive changes occur across both social and political dimensions. The frequency of interpersonal

<sup>&</sup>lt;sup>20</sup> Descriptive statistics are included in Tables A2 and A3 in the Supplementary Material. Variable descriptions are provided in the Codebook. Descriptive statistics show non-normalized variable constructions. Outcome variables in Figures 3–5 are normalized for comparability. Tables A17–A21 in the Supplementary Material include both normalized and non-normalized constructions to facilitate interpretation. While all models use the same control variables to facilitate comparison, we do not explicitly compare the magnitude of effects. We focus on direction and significance of each outcome.

<sup>&</sup>lt;sup>21</sup> In addition to normalized outcomes in Figure 3, we report nonnormalized linear models or logistic models (as appropriate) in Models 3 and 4 of Tables A17–A21 in the Supplementary Material. <sup>22</sup> Our analyses using spatial measures in Tables A24–A38 and Figure A1 in the Supplementary Material show largely null, sometimes negative effects on sociopolitical outcomes.



interactions, (*personal exchange*), participation in collective works such as cleaning, maintenance, and construction of local public infrastructure (*event engagements*), and altruistic behavior (*donate amount*) reflect significant increases in survivors social embeddedness and desire to be part of their communities.

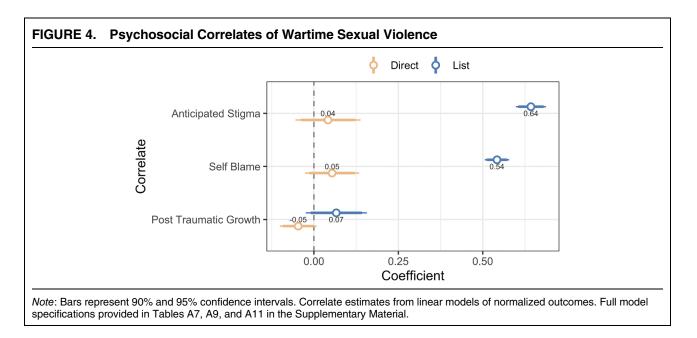
A higher probability of assuming leadership roles (org leadership) and participating in local associations and organizations (org membership) reflects substantively higher local political engagement in local councils, development committees, education and water committees, farmers' and village savings associations. Note that leadership in local associations does not always come with great privileges and power. For instance, leaders of local water committees are responsible for unlocking and guarding hand pumps in the mornings and evenings and are in charge of maintenance. Leaders of school committees, savings groups, or farmers' associations are often responsible for calling in meetings, preparing a venue, refreshments, and organizing clean up. Despite heterogeneity in power and privilege, all of these local institutions are central to producing local public goods.

### **MECHANISMS**

We have shown that the evidence supports our theoretical prediction that sexual violence is associated with heightened engagement and mobilization. We now turn to assessing the proposed psychosocial mechanisms introduced in our theoretical argument: stigma, self-blame, and post-traumatic growth. We then assess an alternative factor that may also increase survivor sociopolitical engagement and describe its relationship to our theory.

### **Approach to Analysis**

Given strong modeling assumptions (such as sequential ignorability) required for formal mediation analysis (Green, Ha, and Bullock 2010; Imai et al. 2011) and the complexity of our modeling approach for using the list experiment as an explanatory variable, we assess the plausibility of our mechanisms by examining two sets of correlations. Recall our consistent finding that the list experiment measure, but not the direct measure, revealed that sexual violence affected sociopolitical outcomes. This suggests that the positive relationship between sexual violence and sociopolitical engagement is primarily driven by the share of respondents who disclosed to the list experiment but not to the direct question. Based on this understanding, we argue that the plausibility of a mechanism is strengthened if we find both a positive and significant correlation between the list experiment and the proposed mechanism; and no correlation between the direct question and the proposed mechanism. Our approach thus leads us to pay substantive attention to the determinants of respondent disclosure of sexual violence in surveys.



#### **Measurement of Mechanisms**

The first mechanism we have emphasized in our theory is the role of stigma. While many theories suggest that stigma leads to ostracization and exclusion, we suggested—building on social psychological research (Molden and Maner 2013; Shih 2004)—that it leads survivors and their families to (re)engage, (re)connect and embed themselves in their communities to reduce the likelihood of exclusion. We measure *anticipated stigma* with the standardized mean of the sum of three binary questions that ask whether respondents are fearful of being gossiped about, verbally insulted or harassed, and physically harassed or threatened (mean = 0.32, SD = 0.37, min = 0, max = 1).<sup>23</sup>

A second psychosocial mechanism that we have emphasized in our theory is self-blame. When people blame themselves they feel that they deserve to be ostracized, will sense a greater likelihood of being ostracized, and will thus seek reconnection with their community to mitigate this perceived risk of exclusion. In weak, conflict-affected contexts, self-blame may therefore promote mobilization and engagement. This mechanism resonates with psychological studies that have shown self-blame to be associated with selfefficacy and perceived control over situations (Foster, Matheson, and Poole 1994). We measure self-blame as the standardized mean of five binary questions including feeling ashamed, feeling guilty, blaming oneself, low self-esteem, and feelings of self-punishment (mean = 0.30, SD = 0.33, min = 0, max = 1).

Our third psychosocial mechanism is often posited in the literature as a mechanism for increased political participation but rarely examined empirically. Posttraumatic growth is a psychosocial response that drives survivors and their families to engage with their communities because of a change in their outlook on life as a result of traumas experienced. To measure, *posttraumatic growth*, we draw on a 10-item battery including, for instance, changed life priorities, understanding of spiritual matters, closeness with others, and ability to handle difficulties (mean = 1.51, SD = 0.70, min = 0, max = 3).<sup>24</sup>

#### Expectations and Results

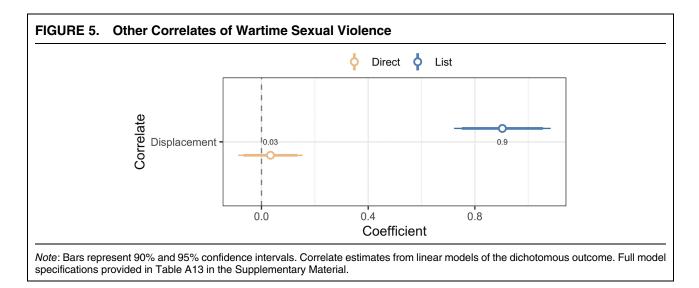
Our theory emphasized that anticipated stigmatization, self-blame, and post-traumatic growth lead sexual violence survivors to further embed themselves within their communities by engaging in sociopolitical action. Therefore, as discussed above, we expect a positive and significant correlation between these three factors and the list experiment. Figure 4 shows the results of the correlations between each of the described mechanisms, the list experiment measure of sexual violence exposure, and the direct measure of sexual violence exposure. The correlations are derived from a full model with control variables and *territoire* fixed effects as implemented in our main analyses.<sup>25</sup> We describe how we interpret the relationships for each variable in turn.

Sexual violence-affected households (as measured in the list experiment) have significantly higher levels of anticipated stigma (+0.64 standard deviations,  $\pm 0.02$ 

<sup>&</sup>lt;sup>23</sup> Note that this measure of stigma does not suggest complete ostracization by society but rather anticipated social harms. We also conduct analyses replacing anticipated stigma with experienced stigma in Tables A15 and A16 in the Supplementary Material.

<sup>&</sup>lt;sup>24</sup> For variable descriptions, see the Codebook; for descriptive statistics, see Table A3 in the Supplementary Material.

<sup>&</sup>lt;sup>25</sup> See Tables A7–A12 in the Supplementary Material for both list experiment (indirect) estimates and direction question estimates of correlations. Non-normalized estimates or logistic models are also provided following each normalized linear or dichotomous linear model as appropriate.



standard errors) and self-blame (+0.54 SD,  $\pm 0.02$  SE). Combined with the finding that the list experiment measure of sexual violence is associated with increased sociopolitical mobilization, these correlations lend plausibility to our claim that stigma and self-blame are mechanisms that lead people to re-engage rather than become or remain ostracized.

This interpretation is further strengthened by the absence of a correlation between the direct measure of sexual violence and anticipated stigma and selfblame, respectively. Again, this is based on our understanding that the share of respondents who disclose sexual violence in the list experiment but not in the direct question appears to drive the observed relationship between sexual violence and sociopolitical mobilization in our main analysis.

Survivors and their families who disclose sexual violence in the direct measure of sexual violence are neither participating more in their communities nor anticipating stigma nor blaming themselves at higher levels than average. Rather, survivors and their families that choose not to disclose their experiences in the direct measure (likely due to the presence of stigma and feelings of self-blame) but *do* disclose in the list experiment measure are both feeling stigmatized and blame themselves—and as a result engage more in their communities politically and socially to mitigate risk of exclusion.

Our argument has also suggested post-traumatic growth as a potential psychosocial mechanism that can lead people to engage socially and politically (Bauer et al. 2016). However, post-traumatic growth is not supported as a mechanism. It is neither correlated with the list experiment measure of sexual violence nor the direct measure of sexual violence. The absence of difference in disclosure in the list experiment and the direct question is theoretically logical because changed outlook on life is not plausibly related to disclosure or nondisclosure (+0.07 SD,  $\pm 0.05$  SE).

We acknowledge that psychosocial factors are not the only mechanisms that can lead survivors and their families to engage more with their communities. One important implication of extreme violence such as sexual violence by armed actors is that people often flee and seek refuge in safer areas. *Displacement* (mean = 0.608, SD = 0.488, min = 0, max = 1) may make it more important to connect with the social communities in which one lives because of broken ties and to ensure basic needs for one's family. Accordingly, we find in Figure 5 that having been displaced is strongly associated with sexual violence as measured in the list experiment but not in the direct question-suggesting its importance for understanding sociopolitical mobilization. Again, this pattern lends suggestive support to the notion that displacement and the need to connect to new and old social networks may partially explain the relationship between wartime sexual violence and sociopolitical mobilization.

Overall, the evidence presented here resonates with our theoretical argument and the proposed mechanisms, stigma and self-blame, that drive sociopolitical engagement and mobilization. We emphasize however, that these mechanisms suggest a mode of mobilization that fails to challenge the very gender norms that perpetuate victim-blaming and stigmatization.

#### LIMITATIONS AND FUTURE RESEARCH

Our integrated theory and analyses of psychosocial mechanisms related to the mobilization of survivors and their families provide novel contributions to the empirical study of sexual violence and its sociopolitical consequences. We also recognize several limitations of this work that may be addressed in future research.

First, we caution against an overly optimistic or reductionist view of the findings put forth. Without a doubt, sexual violence in any form, and particularly in war, has grave psychosocial consequences (Amowitz et al. 2002; Dumke et al. 2021; Koos and Lindsey 2022; Peterman, Palermo, and Bredenkamp 2011). While highlighting the agency of survivors and their households, the theory and evidence of sociopolitical activity describes survivor households engaging in efforts to *overcome* the threat posed by social ostracization. Our interpretation is that survivors internalize these gendered norms of victim blaming and shape their behavior accordingly. Additional qualitative work will be useful for understanding whether community norms undergo simultaneously broader changes and become more open to and integrate survivors in local politics and society.

Second, we emphasize again that our data capture sexual violence exposure at the household level building on prior research on secondary effects of wartime sexual violence (Woldetsadik 2018). Future research may further probe mechanisms by looking at social and political engagement solely among affected survivors themselves. This study also leaves open the question of how different members of the household vary in their differential willingness to disclose sexual violence exposure in the household. We do not interpret the respondent characteristics used as controls substantively because of potential differences in knowledge of sexual violence and who the survivor is within the household. Researchers may design questionnaires to specifically address these questions.

Third, what about survivors who were rejected from their households and sent away from their homes? These individuals are included in our sample if they were accepted in another household, but not if they were hospitalized or in a psychosocial clinic. Instances of victim rejection have been described in interviews with victims (Finnbakk and Nordås 2019; Kelly et al. 2017). However, survey estimates of people's willingness to accept victims back into their households in South Kivu, DR Congo range from 87% to 100% depending on the location.<sup>26</sup>

Fourth, our analyses demonstrate that list experiments can uncover important effects of sensitive experiences, such as sexual violence, on sociopolitical outcomes. Yet, we also recognize the complexity of list experiment analyses, which involve important design considerations, assumptions, and validation checks to interpret the estimates. We thoroughly assess these in Section 9 of the Supplementary Material. Our study of the effects of sexual violence is observational and aims to approximate a causal interpretation by including control variables and a measure of social exchange prior to exposure to reduce the risk of omitted variable bias. Our theorized mechanisms suggest that the findings will generalize to other weak conflict-affected states; however, this claim is subject to future research on psychosocial consequences of sexual violence in similar contexts.

#### CONCLUSION

How does wartime sexual violence affect sociopolitical mobilization among survivors and their households?

Despite the growth in research on wartime sexual violence, systematic micro-level studies remain scarce. Using an original survey in eastern DR Congo and measurement of sexual violence through a list experiment, we find that, contrary to conventional wisdom, sexual violence and its attendant stigmatization do not lead to complete survivor exclusion, which is often extrapolated from existing research on the harmful effects of sexual violence (e.g., Amowitz et al. 2002; Johnson et al. 2010; Kelly et al. 2017; Koos and Lindsey 2022; Peterman, Palermo, and Bredenkamp 2011). Rather, survivor-households become more actively engaged in social life and political affairs within their villages. Our theory suggests that this effect is likely to occur in areas of state absence and ongoing insecurity, where community members have strong incentives to remain part of their communities to access locally produced public goods.

While scholars have highlighted the relevance of survivor resilience as a response to sexual violence (Koos 2018), how women respond to collective threats of sexual violence (Kreft 2019) or take action through new networks (González and Traunmüller 2023), our article has placed the reactions of survivors and their families to the harms of sexual violence at the center of the theoretical framework about why survivors and their families mobilize. We also demonstrate empirical support for our theoretical mechanisms by showing that psychosocial harms are correlated with our list experiment measure of sexual violence in ways consistent with the theory. In doing so, this article highlights an underexplored channel through which sexual violence can lead people to become more socially and politically active.

These findings add important nuance to existing research on wartime sexual violence. First and primarily, by drawing from social psychological research on stigmatization and social re-connection and mobilization (e.g., Molden and Maner 2013; Shih 2004), we have described how wartime sexual violence can result in previously unexpected effects: more social exchange, more leadership and membership in social and political associations. Future research should further probe the mechanisms driving the relationships between sexual violence, anticipated stigma and self-blame, and social and political engagement at the local level. Ethnographic work, interviews and focus group discussions would advance the depth of our understanding considerably. To that end, we hope to inspire fruitful exchange between quantitative, qualitative and critical scholarship in addressing questions about the nature of survivor responsiveness and agency in responding to social threats.

In terms of empirics, our analyses demonstrate that using a list experiment to measure wartime sexual violence is important when assessing sociopolitical outcomes. Studies have suggested that statistical precision should often be prioritized when there is no statistical difference between list experiment and direct measures (Blair, Coppock, and Moor 2020). Yet, despite a substantive but not statistical difference between our direct and list measures, our models only uncover

<sup>&</sup>lt;sup>26</sup> See PeacebuildingData.org (2008) for these estimates.

sociopolitical effects when the list experiment is used. To that end, our analyses demonstrate that carefully curated list experiments combined with advanced measurement techniques can be profoundly useful for advancing micro-level research in conflict-affected populations—and that this is true despite noise endemic to list experiment measures.

Questions remain about the extent to which list experiments should be used to assess the effects of other forms of conflict-related violence on sociopolitical outcomes. To the extent that stigma and self-blame are relevant to survey disclosure of other forms of violence, our findings suggest that careful measurement in a list experiment or comparable method will be paramount.

Finally, eastern DR Congo is a context that has received much academic and policy attention with regard to sexual violence. Yet, the predominant focus on harms has promoted a dominant narrative of victimhood in which survivors and their households seem to lack the position and agency to foster social cohesion and cooperative norms (e.g., Finnbakk and Nordås 2019; Kelly et al. 2017; United Nations Secretary-General 2014; 2021). While continuing to recognize the heavy burden that violence places on local communities, our article indicates that survivors and their households are also resilient and active agents—engaging with and likely shaping their communities even after experiencing such egregious, horrific harms.

## SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit https://doi.org/10.1017/S000305542400042X.

## DATA AVAILABILITY STATEMENT

Research documentation and data that support the findings of this study are openly available at the American Political Science Review Dataverse: https://doi.org/10.7910/DVN/QLTFXN.

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## **AUTHOR CONTRIBUTIONS**

Both authors contributed equally to this article.

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## **CONFLICT OF INTEREST**

The authors declare no ethical issues or conflicts of interest in this research.

## **ETHICAL STANDARDS**

The authors declare that the research on human subjects in this article was reviewed and approved by the Ethikkommission (ethics commission) of the University of Konstanz on 8 September 2015 (reference number: 14/2015). The authors affirm that this article adheres to the principles concerning research with human participants laid out in APSA's Principles and Guidance on Human Subject Research (2020).

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