

If They Endorse It, I Can't Trust It: How Out-Group Leader Endorsements Undercut Public Support for Civil War Peace Settlements

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Abstract

Civil wars are a greater source of violence than any other type of conflict, yet little is known about one of the key determinants of civil war peace settlement success: civilian support. We evaluate how a core component of nearly all peace settlements, leader endorsements, affect public support. We predict that individuals in conflict settings will view settlements endorsed by out-group leaders as less trustworthy and that they will become less supportive. We conduct an endorsement experiment with nearly 1,000 respondents in South Sudan in 2016, taking advantage of a brief cessation in a devastating civil war. Public support for a tentative settlement drops precipitously when it is endorsed by an out-group leader but does not increase when it is endorsed by an in-group leader. We find suggestive evidence that effects are strongest for individuals with the greatest reason to fear out-group leaders: those whose communities were targeted most violently by that out-group.

Keywords: Civil War · Africa · Peace · South Sudan · Endorsement Experiment · Ethnicity

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1 Introduction

Over the past half-century, intrastate conflict has become a markedly more frequent phenomenon and today far outpaces interstate conflict as a source of violence (Pettersson, Hogbladh and Oberg, 2019). Scholars seeking to explain variation in the success of negotiated peace settlements to durably end civil conflicts have identified two key determinants.¹ First, settlement content matters: the presence of provisions that solve commitment problems for warring parties, or the ability of one group to credibly commit to the other that it will not renege on settlement terms once in power (Fearon, 1998), increases the likelihood of durable peace.² Second, settlement implementation can be a powerful predictor of settlement success (Hartzell and Hoddie, 2003; Joshi and Quinn, 2017). Implementation of useful provisions like those that solve commitment problems can have significant positive direct effects. Implementation can also serve as a costly signal of a commitment to long-term peace by groups in power (Hartzell and Hoddie, 2003; Joshi and Quinn, 2017).

In this paper, we investigate how leader endorsements shape public opinion toward peace settlements during ongoing conflicts. There is abundant evidence that public opinion affects the two primary drivers of settlement success, settlement content and implementation, but until recently civilian attitudes have not attracted significant scholarly attention (Matanock and Garcia-Sanchez, 2017; Matanock, Diaz and Garcia-Sanchez, 2018). Civilians most clearly weigh in on the peace process where terms or the settlement itself are subject to referendum. But public opinion can also shape settlement negotiations and implemen-

¹ Estimates of the percentage of settlements that fail (where there is a relapse in armed conflict) depend on the selection of cases and range from a low of 29% to a high of 40% (Joshi, Quinn and Regan, 2015).

² For example, commitment problems can be ameliorated through the presence of third-party guarantors such as U.N. peacekeepers (Hultman et al. 2013) or through power-sharing arrangements (Hartzell and Hoddie, 2003).

tation where no referenda are held, or where a settlement has already been approved, with important implications for settlement success (Nilsson 2012). Recent civilian-led protests in Sudan resulted both in changes in leadership and the terms of transition until planned democratic elections (AP, 2019). Leaders often use unfavorable public opinion polls and the threat of referenda to gain leverage in peace deal negotiations and to put constraints on possible settlement content. For instance, Israel in 2010 passed a law requiring a referendum to approve any peace deal in which territory was ceded. The referendum requirement was widely interpreted as an effort to take land-for-peace deals off the negotiating table, as most surveys showed a majority of citizens opposing such terms (Kershner, 2010). Peace deals that are passed without widespread civilian support or involvement, or for which support wanes following their passage, risk falling short of full implementation, as constituents are less likely to hold politicians accountable for renegeing on settlement terms they do not support or view as legitimate and may even pressure them to do so (Nilsson, 2012).³ Although Colombia’s Congress ultimately passed a peace deal in November 2016—bypassing a second referendum after the first settlement proposal was narrowly rejected by voters in October—its implementation has lagged in core areas and significant uncertainty looms (Casey, 2019).⁴ Kew and John (2008) find that indirect and direct civil society participation in peace negotiations are associated with greater durability of negotiated peace.

We experimentally evaluate how endorsements from real leaders of two parties engaged in an ethnic civil war in South Sudan affect civilian support for a tentative peace settle-

³ Put differently, without public support for a peace deal, there may not be any *audience costs* (Fearon, 1994) for a leader who reneges on peace terms he/she promised to support.

⁴ Although implementation in Colombia has advanced in some areas, the (Kroc Institute, 2018, 8) found that over two-thirds of stipulations had either been minimally implemented (31%) or not initiated at all (39%) and concluded that “serious concerns exist regarding the lack of progress in areas that are critical to the construction of a quality peace.”

ment. We specifically focus on how *leader endorsements* affect public opinion of a peace settlement for three key reasons. First, we study an aspect of an ongoing settlement process with relevance to a large number of cases. Endorsements by parties pursuant to the agreement accompany nearly all peace settlements: parties typically endorse the settlement not only through their signatures, but also through written statements and spoken words at signing ceremonies. Second, there is good reason to expect that endorsements are especially impactful in low-information conflict settings and concerning complicated peace provisions. Research shows that uninformed citizens often use political endorsements as a cognitive shortcut to decide which candidate or policy to support, and thus to act “as if” they were informed (Arceneaux and Kolodny, 2009; Broockman and Butler, 2017; Lenz, 2009; Lupia, 1994; Matanock, Diaz and Garcia-Sanchez, 2018; Minozzi et al., 2015). Further, citizens are likely to have strong feelings about different leaders, to whom they may alternatively attribute violent actions, heroic resistance, or gross incompetence. Third, endorsements of settlements are of theoretical interest. Scholars have found that conflict can change individuals’ priorities and emotions, but we lack knowledge regarding how these changes might interact with individuals’ interpretations of leader endorsements of peace settlements.

The extant literature indicates that effects of leader endorsements of complex peace provisions should differ depending on a respondent’s perception of the endorser. Individuals have been found to respond differently to cues from sources they trust and who they see as sharing common interests, values, and an identity, as compared with sources that do not have these characteristics (Arceneaux and Kolodny, 2009; Coan et al., 2008; Lupia, 1994). In the context we study, where individuals were targeted for violence based on ethnic markers (Civilians in Conflict, 2016), the ethnic identity of a leader is likely to condition how individuals respond to their endorsements. However, while the literature points us toward considering whether a leader and respondent share an ethnic identity, it does not offer clear predictions as to whether endorsements from in- and out-group leaders in conflict settings should increase, decrease, or not affect support (see Appendix table A23 for summarized

findings). We thus draw on the literature to propose two hypotheses but note that ex ante, effects from in- and out-group leaders could plausibly shift support in multiple directions.

A number of studies have found that endorsements from in-group political elites tend to increase support for a policy, particularly over complex issues (Brader and Tucker, 2012; Coan et al., 2008; Matanock, Diaz and Garcia-Sanchez, 2018; Minozzi et al., 2015). Violence can tighten group boundaries and lead to greater in-group cohesion and co-ethnic support (Hadzic, Carlson and Tavits, 2017; Rohner, Thoenig and Zilibotti, 2013); if individuals blame out-group leaders for the continuation of violence and believe that their in-group leaders are representing their interests the best they can under difficult circumstances, then we should expect in-group endorsements to have a positive effect on support for peace settlements. Our *in-group hypothesis* draws on these studies to propose that individuals should be more likely to support peace settlement terms endorsed by in-group political elites.

However, there is reason to question the applicability of these findings to the conflict setting we study. In contexts such as South Sudan, where both sides have been repeatedly blamed for relapses in violence and broken peace deals, in-group leaders may not emerge completely unscathed in the eyes of their co-ethnics (De Juan and Pierskalla, 2016; Lyall, Blair and Imai, 2013; de Vries and Schomerus, 2017). If people begin to question the ability of in-group leaders to deliver peace, then a non-credible but non-threatening in-group endorsement may not convey new information about the costs and benefits of the policy and may not lead individuals to update their level of support. In other contexts that feature high inter-group polarization and out-group distrust, scholars have found that out-group endorsements conveyed more information than did in-group endorsements, which had no or very little effect on policy preferences (Arceneaux and Kolodny, 2009; Lupia, 1994; Nicholson, 2012). Finally, an in-group endorsement could decrease support if individuals begin to question their leaders' intentions and interests.

Expectations regarding the effects of out-group leaders' endorsements are similarly mixed. Scholars have found that elites can be persuasive among the general population,

and even with out-group constituents (Broockman and Butler, 2017; Minozzi et al., 2015). If people feel that out-group leaders will represent them and their interests well, or if conflict increases altruism or social cohesion (Gilligan, Pasquale and Samii, 2014; Voors et al., 2012), then out-group leader endorsements could lead to increases in support. Where out-group leaders are not viewed as having expertise nor as being threatening, then their endorsements may have little effect on support. A third possibility that has found support in other contexts is that out-group leader endorsements will lead to decreases in support (Arceneaux and Kolodny, 2009; Lupia, 1994; Lyall, Blair and Imai, 2013; Matanock and Garbiras-Diaz, 2018; Nicholson, 2012). Out-group endorsements may especially decrease support in conflict settings. First, conflict can make individuals more distrustful of out-group leaders and individuals (Beber, Roessler and Scacco, 2014; Hetherington and Suhay, 2011; Hall et al., 2018). Second, studies have found that conflict and threat may lead individuals to put a greater priority on security, as opposed to other considerations such as equality, democracy, or the uncertain future that a peace deal promises (Berrebi and Klor, 2008; Huddy and Feldman, 2011; Phayal, 2016). Our *out-group hypothesis* posits that individuals should be less likely to support a peace deal endorsed by out-group political elites.

To evaluate these competing hypotheses, we conducted an endorsement experiment with a diverse array of nearly 1,000 respondents in South Sudan in early 2016, when there was a brief lull in civil war violence between the ethnically Dinka-associated Sudan People's Liberation Movement (SPLM), led by the incumbent President Salva Kiir, and the ethnically Nuer-associated SPLM-In Opposition (SPLM-IO), led by ousted Vice President Riek Machar. Participants were randomly assigned to receive policy questions with no endorsement or with an endorsement by a political actor of interest, either SPLM/Kiir or SPLM-IO/Machar. We estimate the effects of in- and out-group leader endorsements on support by considering Dinka and Nuer respondents (n=491). We supplement these results with analyses of two minority ethnic groups, the Shilluk (n=59) and Luo (n=330), that had vastly different wartime experiences.

We find support for the *out-group hypothesis* but not the *in-group hypothesis*. For both Dinka and Nuer subjects, support drops significantly for peace deals when they are endorsed by an ethnic out-group leader, but does not change significantly following the endorsement of an in-group leader. We find suggestive evidence that the negative effect of an out-group endorsement is strongest for individuals whose communities were targeted most violently by that out-group. There is inconsistent evidence that the out-group effect is moderated by the effect of being displaced among Nuer respondents. Where a group (Shilluk respondents) has been targeted by one side in the dispute, an endorsement from that side’s leader decreases support for the peace deal, but endorsements from leaders who have not targeted the group do not significantly alter support. Where a group (Luo respondents) has faced similar levels of violence from both leaders, endorsements do not significantly change support.

Our study makes a number of contributions to extant literature. First, it advances a nascent literature on public opinion toward peace deals—and the role that leaders’ endorsements play in swaying views (Matanock and Garcia-Sanchez, 2017; Matanock, Diaz and Garcia-Sanchez, 2018; Matanock and Garbiras-Diaz, 2018). Second, it elucidates how conflict may affect individuals’ responses to endorsements in particular ways. Third, we take a different tack from much excellent previous work on ethnic conflict, focusing on the determinants of support for *policies* that may result in peace, rather than on how *candidate selection* can contribute to or alternatively damage prospects for peace.⁵ Fourth, we extend research on how conflict and fear affect attitudes and preferences to consider how they can shape views toward peace deals.

⁵ An extensive literature considers under what conditions individuals support ethnic candidates or political parties (e.g., Chandra (2004)).

2 Theory and Hypotheses

How should we expect citizens to respond to leaders' endorsements of peace settlements? An extensive literature has found that citizens often utilize political endorsements as information shortcuts, or heuristics, to make decisions about a wide range of outcomes, including preferred policies and candidates (Arceneaux and Kolodny, 2009; Broockman and Butler, 2017; Lenz, 2009; Lupia, 1994; Matanock, Diaz and Garcia-Sanchez, 2018; Minozzi et al., 2015). These heuristics allow citizens to reduce the costs of making complex decisions which would otherwise be cognitively taxing both in terms of effort (information collection) and capacity (processing) (Chaiken, Liberman and Eagly, 1989). Political endorsements from trusted and familiar sources indicate that the policy or candidate under consideration is good and would advance the respondent's interests; endorsements from distrusted sources may indicate the opposite. Through adopting informational shortcuts, uninformed citizens may cheaply emulate the behavior of more knowledgeable individuals (Lupia, 1994).

Scholars have often found that individuals respond differently to endorsements from elites with a shared identity. However, the literature does not provide clear predictions as to how endorsements of peace settlements from in- and out-group leaders should affect public support in conflict settings (see Appendix table A23, also Bullock (2011)). In what follows, we review the literatures on in- and out-group endorsement effects and derive two hypotheses for how they might operate in conflict settings.

2.1 In-Group Endorsements

A number of studies have found that in-group endorsements can significantly increase support for policies and candidates (Brader and Tucker, 2012; Coan et al., 2008; Matanock, Diaz and Garcia-Sanchez, 2018; Minozzi et al., 2015).⁶ Coan et al. (2008) conduct a lab

⁶ Other studies have identified movement toward an in-group elite's position, but because respondents received endorsements from both in- and out-group leaders, and because

experiment in the U.S. where they randomly assign subjects to receive endorsements from either the Republican Party, one of two smaller parties, Green or Reform, or no party, on issues ranging from abortion (least complex or new) to class action lawsuits (most difficult and unexplored). They find that individuals are significantly more likely to adopt the issue positions of parties with which they are familiar and trust, and where the issue area is complex. Brader and Tucker (2012) conduct party cue endorsement experiments with subjects from three countries: Britain, Hungary, and Poland. They find that in-group endorsements increase support, and that effects are stronger in countries with more established party systems, where partisanship is a salient identity and parties have established clear reputations.

To our knowledge, Matanock, Diaz and Garcia-Sanchez (2018) and Matanock and Garbiras-Diaz (2018) present the only other experimental evidence on peace policy endorsements, in Colombia where there was an extended civil war between the government and a rebel group, FARC. While the former study includes endorsements from two government officials and distinguishes between in- and out-groups on the basis of stated affinity with each leader, the latter study only includes endorsements from FARC, which due to its widespread unpopularity the authors treat as an “out-group” for all respondents. Matanock, Diaz and Garcia-Sanchez (2018) find that an endorsement from one politician (former President Uribe) significantly increases support among affiliating respondents, but do not find parallel results for the other (President Santos). Research has shown that out-group violence can lead individuals to support an in-group, but that in-group violence does not result in out-group gains; this “home team discount” suggests that in-group leaders may largely avoid blame despite the continuation of violence (Lyall, Blair and Imai, 2013, 696). If people blame the out-group for violence but not the in-group, and if conflict increases ethnic identification and co-ethnic support (Hadzic, Carlson and Tavits, 2017; Rohner, Thoenig and Zilibotti, 2013),

supporting one side’s position necessarily meant opposing the other’s, it is unclear whether movement was driven by the in-group endorsement, the out-group endorsement, or by both (Abramowitz, 1978; Bullock, 2011; Lenz, 2009; Matanock and Garcia-Sanchez, 2017).

then positive in-group endorsement effects may even be greater in conflict settings.

In-group hypothesis: individuals should be more likely to support peace settlement terms that are endorsed by in-group political elites. Endorsements from out-group political elites may increase, decrease, or not have an effect on support.

There are a number of reasons why in-group endorsements may not generate increases in support for peace provisions in conflict settings. In non-conflict settings characterized by inter-group polarization or higher out-group distrust than in-group trust – two features we expect to be strongly present in many conflict settings, as we discuss below – scholars have found that in-group endorsements have little to no effect on support for policies, possibly because they convey less information than out-group endorsements (Arceneaux and Kolodny, 2009; Lupia, 1994; Nicholson, 2012). Additionally, in conflict settings blame for persistent violence may permeate individuals’ perceptions of in-group leaders, whose continued failures to deliver peace could make their subsequent promises to do so seem non-credible. If in-group endorsements appear both non-credible and non-threatening, then they may not convey new information about costs and benefits of a policy or lead individuals to update their level of support. (De Juan and Pierskalla, 2016, 71) argue that the failure of a group to protect its supporters “communicates low competence”; in South Sudan, there is evidence that civilians do not view as credible calls for peace from either side (de Vries and Schomerus, 2017).

We believe that this theory could be consistent with at least two possible interpretations of results from Matanock, Diaz and Garcia-Sanchez (2018). First, the authors find that an in-group endorsement in 2017 from Uribe, who was last president in 2010, increased support, but that an in-group endorsement from President Santos, who served until 2018, did not. These asymmetric results may be explained by individuals attributing greater blame for failures to the in-group leader currently in power, Santos, but not to an ex-President, Uribe. Second, as Matanock and Garbiras-Diaz (2018) show, in the Colombian context FARC was very unpopular with the vast majority of citizens. Where everyone agrees that one group is responsible for violence, alternative elites, in this case both Santos and Uribe, may to

a large degree escape blame for violence. The findings from Matanock and Garbiras-Diaz (2018) thus suggest possible bounds on the theory proposed above. First, for individuals to attribute blame to in-group leaders, those leaders should be seen as recently making decisions that impacted the peace process. Second, there must be some uncertainty over who is responsible for violence: in settings such a Colombia where a guerrilla group waged an insurgent campaign against the government, individuals on one side (the government) may largely avoid blame.⁷

Finally, an in-group endorsement could decrease support if blame for continued violence leads individuals to doubt both in- and out-group leaders' intentions. If an in-group leader is seen as advancing interests contrary to one's own, then just as with an out-group leader their endorsement of a policy may signal that it is costly. Although (Lyall, Blair and Imai, 2013, 692) find that people respond asymmetrically to violence perpetrated by in- and out-groups, they still find that in the aggregate, neither side is popular; in a number of regions, endorsements from both sides decrease support for policies, which the authors attribute to a "backdrop of war weariness in which neither combatant is especially favored."

2.2 Out-Group Endorsements

As with in-group endorsements, the literature indicates that out-group endorsements in conflict settings could shift support of peace provisions in multiple directions. Scholars have found that politicians' endorsements can shift policy support in the intended direction with the general population, including out-group constituents. Minozzi et al. (2015) show that co-partisans and other constituents find their U.S. members of Congress similarly persuasive. Broockman and Butler (2017) do not observe that Democratic state legislators are less persuasive with constituents who do not approve of Democratic President Barack Obama.

⁷ Similarly, people may attribute an out-group responsibility for violence where the group is seen as a foreign occupying force, as in the context Lyall, Blair and Imai (2013) study.

Conflict has been shown to increase altruism and social cohesion (Gilligan, Pasquale and Samii, 2014; Voors et al., 2012). If a belief that national politicians represent *everyone's* interests is sufficient to override salient identity divisions, then out-group leader endorsements could result in increases in policy support. Out-group leader endorsements could also result in little to no shift in policy preferences if out-group leaders are seen as having different interests but are not viewed as particularly credible or threatening, or where they do not have an established reputation.

A third possibility is that out-group leader endorsements in conflict settings will signal that a policy is costly and will decrease support. Even in non-conflict settings, endorsements from distrusted out-group leaders have been found to result in substantial decreases in support for policies (Arceneaux and Kolodny, 2009; Lupia, 1994; Nicholson, 2012). We posit that negative out-group effects are likely to be even stronger in conflict settings for two reasons. First, conflict is likely to reduce trust in out-group leaders and individuals. Individuals with greater threat perception and who have been targeted for violence are more intolerant, less trusting, and seek more punitive measures against out-groups (Beber, Roessler and Scacco, 2014; Hetherington and Suhay, 2011; Hall et al., 2018). Blair et al. (2013) attribute lower support for militant groups among the urban poor to that group's greater exposure to terrorist violence and its negative externalities. Lyall, Blair and Imai (2013) similarly find that victimization from an out-group leads to a drop in support for that group. These studies suggest that individuals in conflict settings will be less trusting of out-group leaders and more fearful that an out-group endorsement of a policy indicates that the leader sees an opportunity for further exploitation.

Second, individuals in conflict settings may become more likely to prioritize security above other concerns. People who perceive a greater threat have been found to favor aggressive foreign policy (Hetherington and Suhay, 2011; Huddy and Feldman, 2011) and to be more willing to exchange personal liberties for security and for leaders who are punitive, conservative, or nationalist (Berrebi and Klor, 2008; Phayal, 2016). In sum, we propose that

conflict may significantly reduce individuals' trust in out-group leaders and shift their priorities toward security. These changes lead us to expect that individuals should be less likely to support peace settlement terms that are endorsed by out-group leaders. Where individuals' central concern is security, and where the central threat to that security comes from heavily distrusted out-group leaders, an out-group endorsement of peace terms vulnerable to exploitation may draw particular attention from respondents and reduce their support.

Out-group hypothesis: individuals should be less likely to support a peace deal when it is endorsed by out-group political elites. Effects should be strongest for those who perceive the most threat from the out-group. Endorsements from in-group political elites may increase, decrease, or not have an effect on support.

Divergent findings in Matanock, Diaz and Garcia-Sanchez (2018) and Matanock and Garbiras-Diaz (2018) in Colombia may highlight how endorsements from out-groups that have engaged in violence are perceived as particularly negative signals of a policy's merits. When the out-group elite is a politician one holds in low esteem (but who has not violently targeted supporters of the alternative elite), his endorsement does not result in decreases in support for peace provisions (Matanock, Diaz and Garcia-Sanchez, 2018). In contrast, when the out-group is a rebel group that engaged in guerrilla warfare, their endorsement results in a significant drop in support for provisions (Matanock and Garbiras-Diaz, 2018).

We posit that exposure to violence may moderate a negative out-group endorsement effect. Exposure to violence has been shown to increase fear and distrust of and lower support for out-groups (Beber, Roessler and Scacco, 2014; Blair et al., 2013; Grossman, Manekin and Miodownik, 2015; Hadzic, Carlson and Tavits, 2017). De Juan and Pierskalla (2016) find that those exposed to greater violence have less trust in leaders who failed to protect them. (Berrebi and Klor, 2008, 289) argue that Israeli voters become more supportive of far-right political parties following terror attacks because those parties place "more weight on security-related issues."

Findings pointing to the negative effects of exposure to violence notably contrast with

studies showing positive outcomes related to exposure to violence such as increased altruism (Voors et al., 2012) and social cohesion (Gilligan, Pasquale and Samii, 2014), and with studies indicating that the effects of exposure to violence may differ depending on local context and institutions (Hall et al., 2018). We expect negative effects for two main reasons. First, many positive social outcomes have been limited to in-groups and did not spillover to out-groups (Grossman, Manekin and Miodownik, 2015; Hadzic, Carlson and Tavits, 2017; Voors et al., 2012). Second, studies on the effects of exposure to violence typically take place long after the conclusion of violence, providing time for changes in context and institutions that might increase intra- and inter-group trust but which are not realized in our study (De Juan and Pierskalla, 2016; Hadzic, Carlson and Tavits, 2017; Hall et al., 2018). (De Juan and Pierskalla, 2016, 71) note that “the stage of postwar recovery at which trust is measured may play a pivotal role” and that negative short-term effects of violence on trust might dissipate, or even reverse, over time.

Our selection of South Sudan as a case provides a number of potential advantages. Most important, our study was conducted at a time when both sides had recently agreed to a tentative settlement. We are able to show subjects *real* endorsements of a settlement deal that was highly salient and the fate of which had yet to be determined. Second, we believe that this setting provides a particularly strong test of the *out-group hypothesis*. In South Sudan, militia frequently identify individuals by their ethnicity using either visual markers or language tests, and single them out for violence (Civilians in Conflict, 2016): especially in this context, we expect individuals to be distrusting of out-group leaders and to be particularly focused on security. In addition, it is a low-information environment and thus endorsements should convey information: the majority of our respondents are of low educational attainment and socio-economic status, and only a minority owned a cell phone (see table 3). People overwhelmingly want peace, and any result showing that an endorsement decreases support for a peace deal is meaningful, but we believe that if such a response exists, we are likely to capture it in this context. The targeted violence and low-

information environment in South Sudan are also representative of many civil wars, giving us confidence that our findings would be generalizable to other conflict settings.

3 An Uncertain Peace in South Sudan

The South Sudanese civil war started in earnest on December 16, 2013, when Dinka militias loyal to President Salva Kiir, an ethnic Dinka, started killing ethnic Nuers while patrolling Juba, the nation’s capital (see table 1 and Appendix figure A1).⁸ Most accounts attribute the outbreak of violence to elite maneuvering for power and control over a dwindling pot of resources. In July, Kiir had dismissed the majority of his cabinet, led by Vice President Riek Machar, an ethnic Nuer. The cabinet members’ increasing rent demands coupled with a breakdown in negotiations with Sudan that had temporarily shut down oil production meant that Kiir could no longer afford to divert funds to his colleagues, and he accordingly replaced them with cheaper alternatives (de Waal, 2014). On December 15 the fragile arrangement crumbled when Kiir accused Machar and 10 others of trying to unseat him in a coup (Radon and Logan, 2014). Machar fled Juba the following day and became the de facto leader of the Sudan People’s Liberation Movement-In Opposition (SPLM-IO).

Despite numerous attempts at peace brokering by the international community, including one that culminated in a lengthy peace agreement to which both sides formally agreed in August 2015, fighting has continued. This study exploits a brief period of de-escalation in conflict between February and late summer 2016 during which time Machar, in accordance with one of the terms of the 2015 peace accords, returned to the nation’s capital for the first time since the outbreak of the civil war to again assume the role of vice president.⁹ In late

⁸ Ethnic Dinkas (36% of the country’s population) and Nuers (16%) comprise the two largest ethnic groups in South Sudan, with Shilluks and Luo, who are also represented in this study, the third-largest at an estimated 9% together (Izady, 2011).

⁹ Many other provisions were never implemented, and there was significant uncertainty

TABLE 1 Timeline of Events

July 2013	•	President Kiir dismisses cabinet, Vice President Riek Machar.
Dec 15 & 16 2013	•	Kiir accuses Machar, 10 others of coup. Kiir-allied forces patrol Juba, killing Nuers; Machar flees Juba, ethnic civil war begins .
August 2015	•	Peace accords signed, with transitional government until elections in 2018.
April 2016	•	Machar returns with troops to Juba, is sworn in as Vice President in accordance with deal.
July 2016	•	Fighting breaks out between Dinka/Nuer-allied troops, Machar flees Juba. Civil war resumes.

July, most hope for peace in the near future disappeared when Kiir again dismissed Machar, who fled the capital as he had before.¹⁰ Appendix figure A1 shows how violence increased soon after this period.

From the start, the prevailing view was that violence was caused by elites and not by ethnic hostilities between civilians (Radon and Logan, 2014).¹¹ Even Kiir’s claim of a coup on December 15 did not necessarily imply an ethnic dimension: only two of the 11 politicians accused were Nuer, fewer than the six Dinka (Radon and Logan, 2014). However, the costs of the civil war have been largely concentrated on civilians. Over 2.3 million civilians—approximately one in every five people—have been displaced and an estimated 50-300,000 have lost their lives (Kristof, 2016). Of the over 2,800 violent events in South Sudan

if they would be.

¹⁰ Controlling for surveys conducted before and after Machar’s return does not alter results. Surveys just following Machar’s departure from Juba in July 2016 were only conducted with a portion of Luo respondents.

¹¹ See de Waal (2014) for more on why violence took on an ethnic dimension.

TABLE 2 Type of Conflict Event Since Civil War Outbreak (South Sudan)

Event Type	Frequency	Percent
Battle-No change of territory	1,231	43.9%
Violence Against Civilians	889	31.7%
Strategic development	213	7.6%
Riots/Protests	186	6.6%
Remote Violence	129	4.6%
Battle-Non-state Actor Overtakes Territory	79	2.8%
Battle-Government Regains Territory	59	2.1%
Other	16	0.6%
Total	2,802	100%

Source: ACLED (Raleigh et al., 2010). December 15, 2013, through December 3, 2016.

compiled in the Armed Conflict Location and Event Data Project (ACLED, Raleigh et al. (2010)) from the start of the war on December 15, 2013 to December 3, 2016, nearly 32% were coded as violence against civilians (see table 2). Even that is a heavy underestimation of the costs faced by civilians, as it overlooks more local-level and small-scale violence against civilians, anticipation of violence that has led millions to flee their homes, and economic and social costs (de Waal, 2014).

4 Research Design

4.1 Endorsement Experiment

To isolate the effects of leader endorsements on support for the tentative peace settlement, we conducted an experiment similar in design to party and group cueing studies conducted in the U.S. (e.g., Nicholson (2012)) and to work on the peace settlement in Colombia (Matanock, Diaz and Garcia-Sanchez, 2018; Matanock and Garbiras-Diaz, 2018). Our experiment also draws significantly on the endorsement designs of two studies conducted in Afghanistan and Pakistan (Blair et al., 2013; Lyall, Blair and Imai, 2013). However, these latter studies

interpret changes in support due to an endorsing party as solely indicating individuals' underlying support for that party, independent of the policies that parties are said to endorse. In our context—one characterized by a high degree of violence, distrust, and low information—we echo (Matanock, Diaz and Garcia-Sanchez, 2018; Matanock and Garbiras-Diaz, 2018) in our expectation that endorsements of policies will change individuals' support for those policies not solely because of the endorser's identity but also because their endorsements of policies convey information about the costs and benefits of those policies.

Figure 1 displays our experiment design. Participants were randomly assigned to a control or one of two treatment conditions. In each, they were asked how much they agreed with six different policies taken from 2015 peace accords signed by Kiir and Machar.¹² In treatment conditions, the policies were preceded by either the endorsement of Kiir/SPLM or Machar/SPLM-IO.¹³ Because the policies are the same in every respect except for the

¹² The first five policies come directly from August 2015 peace accords (Intergovernmental Authority Development, 2015), and the sixth from an earlier 2015 accord (Tribune, 2015).

¹³ We followed convention by providing no endorsement in our control group or including endorsements in our two treatment groups from either SPLM *or* SPLM-IO (Blair et al., 2013; Lyall, Blair and Imai, 2013; Matanock, Diaz and Garcia-Sanchez, 2018; Nicholson, 2012). Our expectation is that respondents in the control group will view policies as being implicitly endorsed by both parties (given that they are sourced from a peace deal), and that our treatments capture the real-world dynamic whereby individuals would be more supportive of peace settlements if not for the explicit endorsements from threatening out-group politicians—through the attachment of their names to the deal. An interesting question, particularly in the case of peace settlements, is whether the explicit joint endorsement of a deal from opposing groups would meaningfully alter how individuals interpret the settlement. Given that an in-group endorsement does not increase support, we are doubtful that a joint endorsement could completely overcome the deleterious effects of an explicit out-group endorsement. However, we cannot rule out this possibility without the addition of a fourth

endorsement of the policy by a political actor in a treatment group, any difference in support for settlement policies between a treatment group and the control group is interpreted as representing the effect of information conveyed about the policy’s costs and benefits due to the political actor’s endorsement. If support increases, then this suggests that citizens learn from that endorsement that there are greater benefits to the policy. If support drops, this indicates that the leader’s endorsement suggests greater costs.

We chose six domestic peace policy reforms: a power sharing arrangement, national bank reform, the establishment of a trust and reconciliation commission, a new constitution, a unified military force, and the democratization of the SPLM political party (see Appendix Section 2.2 for experiment materials). The policy question on power sharing, along with the changes in wording corresponding to treatment assignment, is reproduced below.

[Control Group / Treatment 1 (SPLM/Kiir) / Treatment 2 (SPLM-IO/Machar)]

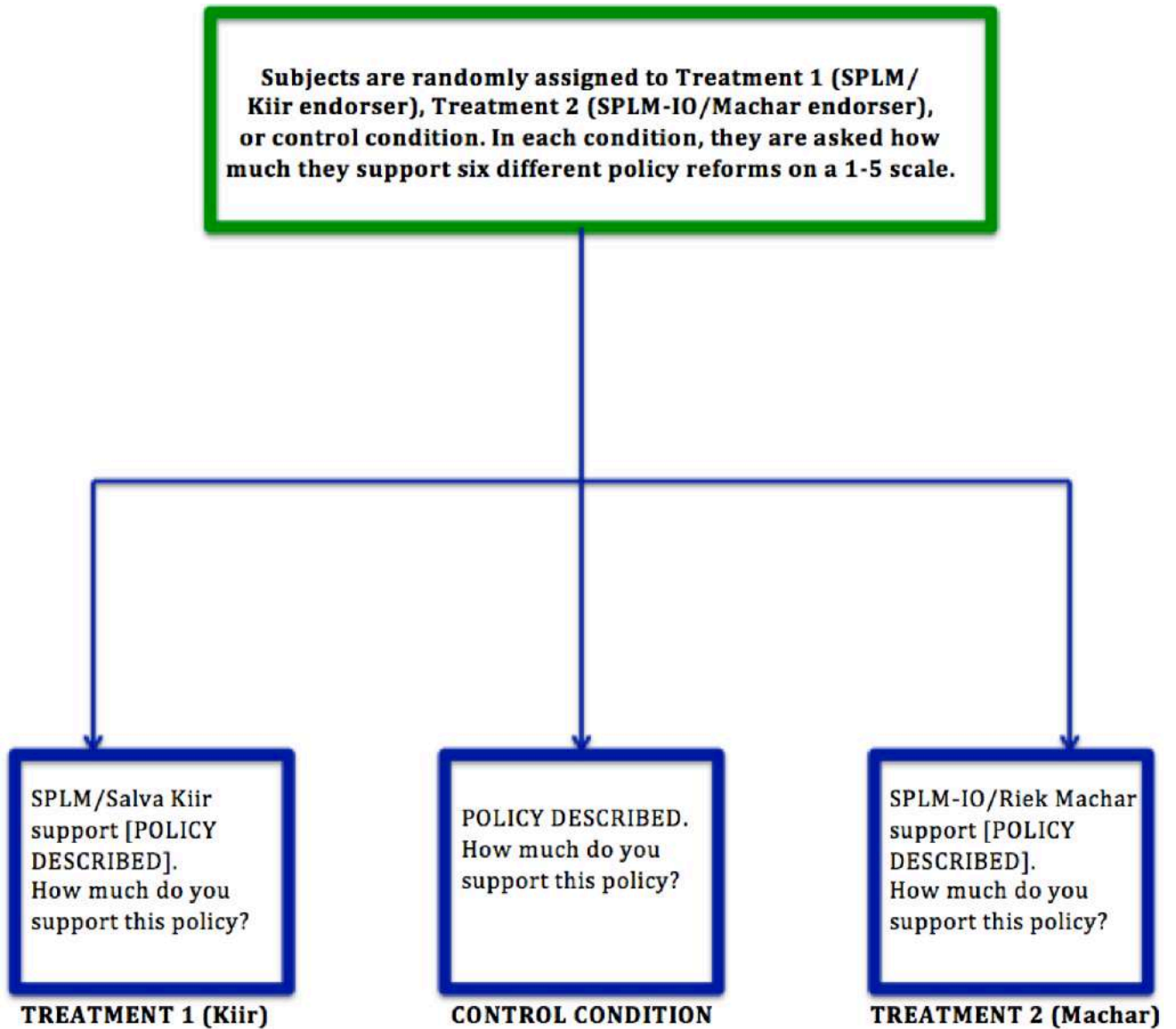
[It has been proposed/The ruling Government under President Kiir proposed/The opposition under Riek Machar proposed] that the new First Vice President of South Sudan be from the South Sudan Armed Opposition and the President be from the SPLM/current ruling party. This arrangement is expected to be a good way to bridge differences between these two warring groups. How much do you support this proposal?

Respondents rated their level of support on each proposal on a 1-5 Likert scale ranging from “not at all” to “a great deal” (Blair et al., 2013).¹⁴ These responses were combined into a standardized “support index” for the six peace policy reforms using inverse covariance weighting (ICW) as outlined by Anderson (2008). ICW increases the statistical power of our tests and addresses concerns about multiple comparisons (Mvukiyehe and Samii, 2017). The

treatment. We acknowledge this omission in our paper and in the literature more generally and we encourage future work to consider simultaneous endorsement treatments.

¹⁴ We can thus evaluate *changes* in support due to information conveyed by endorsements.

FIGURE 1 Endorsement Experiment Structure



index is reported in pooled outcome standard deviations (Cohen’s d statistic). Following Mvukiyehe and Samii (2017), for all tests we report both index outcomes with nominal p -values and individual endorsement question outcomes that make up the index with false discovery rate (FDR)-controlled p -values (Benjamini and Hochberg, 1995). In Appendix Sections 8.3 and 6 we also show robustness of results to, respectively, using simple policy support averages and to factor analysis.

4.2 Site Implementation and Execution

The endorsement experiment was first administered to Dinka and Nuer respondents and later expanded to include Shilluk and Luo respondents. Surveys were conducted by two experienced teams: the Danish Refugee Council (DRC)’s mine risk education (MRE) team and a private survey company.¹⁵ MRE teams educate villagers on the risks of unexploded ordnance and elicit information from them through surveys to identify the density and locations of explosive remnants of war. Teams were accordingly well-versed in obtaining permissions from village chiefs and local authorities and earning the trust of village locals. Most critically, MRE teams allowed us to reach additional rural areas that would otherwise be inaccessible to civilian enumerators due to the outbreak of violence. Our private survey team, which had experience conducting surveys for the World Bank and United Nations, was utilized primarily in safer urban areas and in locations where MRE teams were not operating. Survey team members worked in groups that included a leader and if necessary a translator.¹⁶ Surveys were then translated into English and sent to the researchers. To ensure the safety of enumerators, overcome language barriers, and increase the comfort of respondents, where

¹⁵ Controlling for whether surveys were collected by MRE or private survey teams does not alter results. Results do not appear to be driven by enumerator error and are robust to including enumerator fixed effects, see Appendix Section 8.4.

¹⁶ Different languages included Arabic, and Dinka, Luo, and Nuer dialects.

possible enumerators' ethnicities were matched to respondent ethnicity.

One of the PIs for this project had previously worked as a DRC Quality Assurance Officer and had conducted in-person data collection trainings with MRE and private survey team leaders. We conducted additional training sessions with team leaders for this project remotely. Team leaders then trained and oversaw data collection administered by their team members. Teams followed a three-step process: first, they randomly selected villages from those accessible in the area, as they did not have the capacity to visit them all; second, they divided villages into blocks to ensure that respondents were evenly geographically distributed across the village; third, they randomly selected an equal number of households within each block and verbally administered the demographic and endorsement surveys, the latter of which was randomized to be either the control or one of the two treatment conditions.¹⁷ See Appendix tables A1-A4 for evidence that random assignment was effectively implemented, and Appendix Section 2.3 for more information on data collection. Surveys were administered in 42 villages across 8 counties and 5 of South Sudan's 10 states (see figure 2).¹⁸

The dearth of reliable demographic data in South Sudan makes it difficult to make inferences about the representativeness of our sample (Caruso et al., 2017). In table 3, we compare our overall and state-by-state sample characteristics with data from waves 1 (2015) and 2 (2016) of the World Bank's High Frequency survey.¹⁹ Though the World Bank's survey was designed to be representative for all of South Sudan, four states were excluded for security reasons: Jonglei, Unity, Upper Nile, and Warrap. MRE teams were active

¹⁷ We take the village as our lowest geographical unit, as blocks did not have defined boundaries.

¹⁸ 15 Murle respondents are excluded from analysis due to their small sample size. Our final sample thus includes respondents from 41 villages across 7 counties and 4 states.

¹⁹ World bank data and reports are available at <http://microdata.worldbank.org/index.php/catalog/2778>.

and collected data for our study in three of these states (Unity, Upper Nile, and Warrap), highlighting the unique value of our data.

TABLE 3 Comparison of Study Sample with World Bank’s High Frequency Survey

Covariates	<i>Endorsement sample-2016</i>					<i>World Bank-2015</i>		<i>World Bank-2016</i>	
	All	NBG	Unity	Upper Nile	Warrap	WB All	WB NBG	WB All	WB NBG
Female	43.8%	40.3%	47.2%	51.8%	46.5%	51.8%	48.9%	54.1%	53.1%
Age (avg.)	37.6	36.7	39.2	39.2	36.9	32.3	32.2	33.3	34.1
Christian	99.6%	99.6%	99.2%	100%	100%				
Experienced “great deal” or “a lot” ..									
..of violence since Dec 2013	80%	70.2%	100%	100%	65.9%				
..of violence present day	73.2%	60.3%	99.2%	98.1%	59.1%				
Ever IDP	42.1%	25%	66.6%	70.3%	73.3%				
Some Education	66.8%	84.1%	40.9%	35.1%	53.3%	56.1%	42.3%	57.3%	51.4%
Some Education (Father)	48.6%	69.7%	12.8%	10.9%	40%				
Poorer than Others	52.6%	66.9%	21.9%	26.1%	68.1%	41%	58.3%	30%	12%
Household Size (avg.)	8.9	7.9	10.5	10.5	10.1	8.6	10.4	9.2	8.5
Own Cell Phone	45.6%	48.9%	31.1%	46.6%	45.4%				
Years in Current Village (avg.)	22.4	27.3	14	15	13				

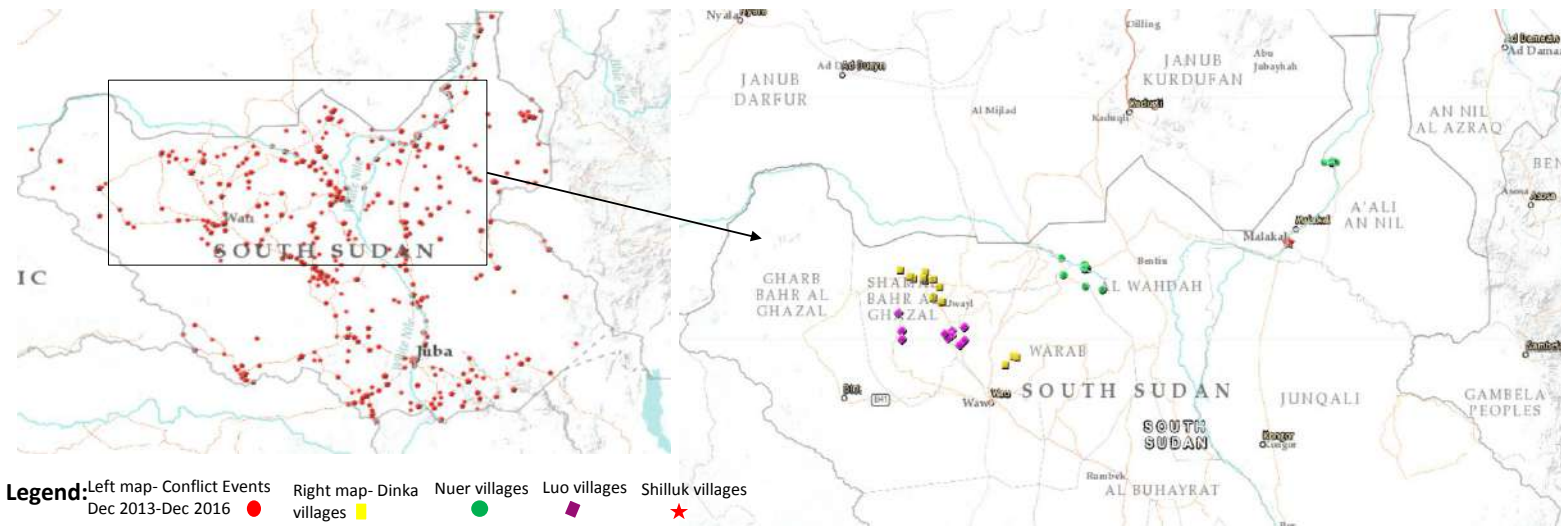
IDP: internally-displaced person; some education (father): any formal education (obtained by father); poorer than others: respondent said their household was poorer as compared with others in community; WB: World Bank; NBG: Northern Bahr el Ghazal state.

We expect that our data will be skewed toward conflict. Indeed, Unity and Upper Nile, and Warrap to a lesser extent, fare much worse than Northern Bahr el Ghazal on a host of demographic characteristics, including exposure to violence and educational attainment. Our sample is a little older, perhaps due to greater displacement or deaths of younger civilians, and villages in our sample are almost entirely ethnically homogenous. The negative out-group endorsement effect we identify may not generalize, at least as strongly, to less conflict-prone or to post-conflict areas. See Appendix table A9 for demographic summary statistics. In the Appendix, we report robustness to demographic controls (Section 8.1) and state fixed effects (Section 8.2).

5 Results

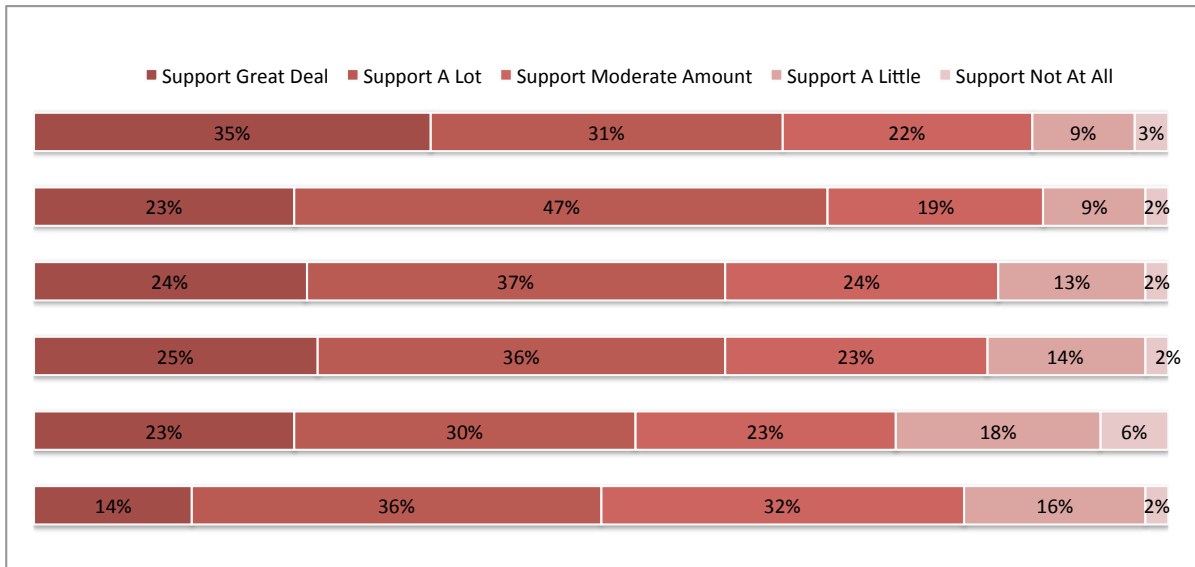
Citizens across ethnic groups are widely supportive of peace policies (see figure 3 and Appendix Section 4.2).

FIGURE 2 Data Collection



Left map source: ACLED (Raleigh et al., 2010). Certain villages, while distinct, were nevertheless too proximate to distinguish on this map.

FIGURE 3 Distribution of Answers to Endorsement Questions



Row order corresponds to endorsement question number (#1-#6).

A. Nuer and Dinka Respondents

We begin by restricting the sample to Dinka and Nuer respondents. First, we present point estimates of the mean levels of standardized indexed support for policies with 95% confidence

intervals across treatment conditions, and split by respondent ethnicity (see figure 4).²⁰ We report difference in means tests using the standard two-tailed t-test. We do not find evidence that an in-group endorsement shifts support for Dinka ($\mu_{DinkaEndorser} - \mu_{control} = 0.07$, 95% confidence interval [-0.15, 0.30]) or Nuer ($\mu_{NuerEndorser} - \mu_{control} = -0.14$, 95% confidence interval [-0.29, 0.01]) respondents. However, out-group endorsements result in substantively and statistically significant decreases in support, of 1.21 standard deviations for Dinka respondents (95% confidence interval [-1.45, -0.98]) and 1.89 standard deviations for Nuer respondents (95% confidence interval [-2.04, -1.75]). These decreases exceed the standard “large” effect size of $d=0.8$ (Lakens, 2014).

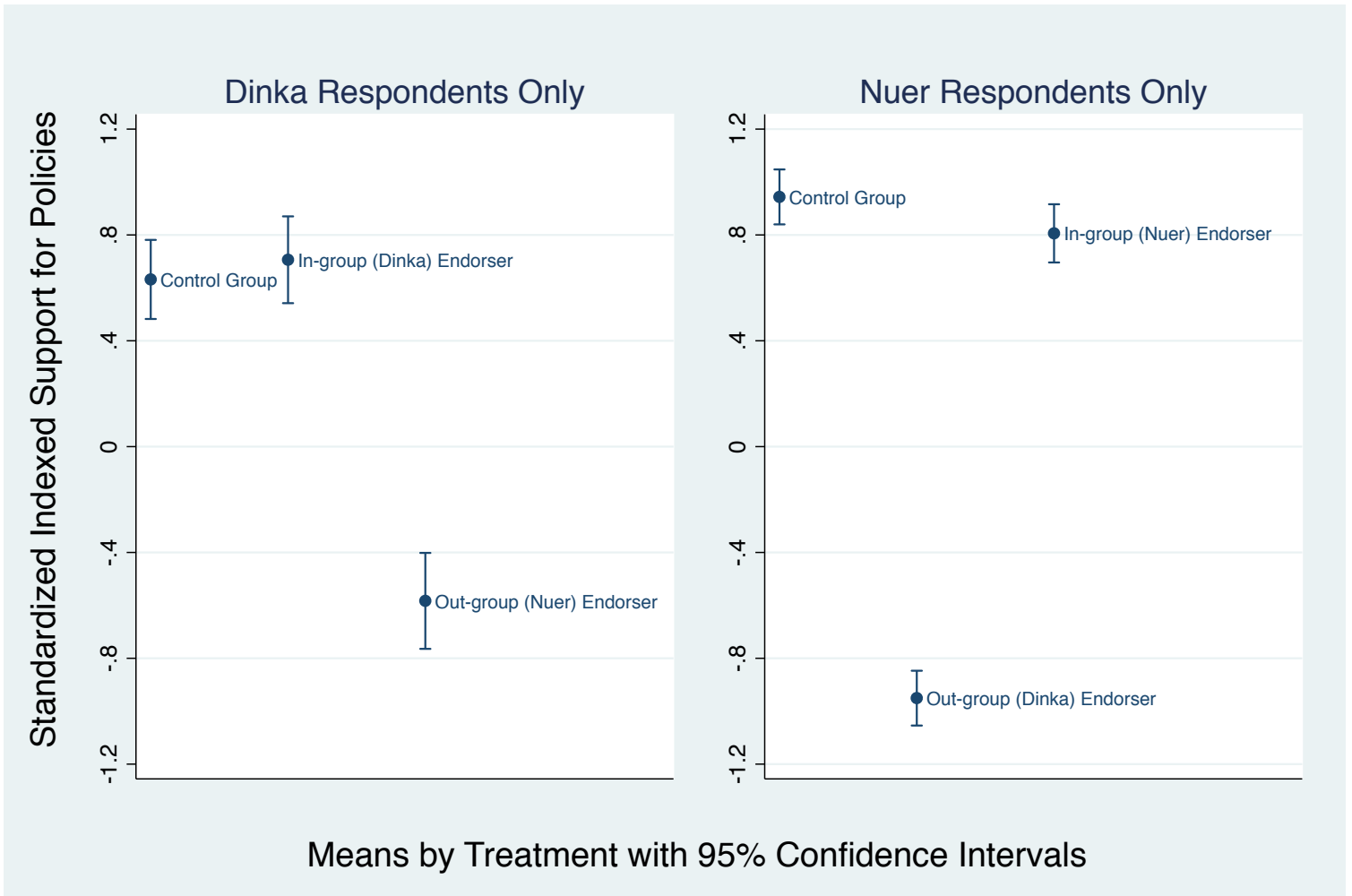
Appendix Section 7 reports Bayesian estimates and minimum detectable effect sizes (MDEs) given our sample sizes. Our results indicate that the true effect of an in-group endorsement for Dinka respondents is zero. Results for Nuer respondents are mixed—we find some support for a true effect of zero, and some support for a negative effect—and thus we do not find the evidence sufficient to accept or reject the null hypothesis of no true effect. In sum, these results support the *out-group hypothesis* but not the *in-group hypothesis*. We find evidence that out-group politician endorsements substantially reduce support for peace policies. As regards in-group endorsements, results either indicate no true effect (Dinka respondents) or insufficient evidence to reject the null of no true effect (Nuer respondents).

Table 4 provides evidence that subjects’ responses to leaders’ endorsements are conditioned by their ethnicity.²¹ The fourth row (DinkaEndorserXXDinkaRespondent) shows that an endorsement from a Dinka politician increases support among Dinka respondents, compared against Nuer respondents and relative to the control, 1.98 standard deviations (95% confidence interval [1.63, 2.33]). In contrast, the fifth row (NuerEndorserXXDinkaRespondent) shows that an endorsement from a Nuer politician decreases support among Dinka

²⁰ See Appendix figure A7 for the same figure with simple support averages.

²¹ See Appendix Section 5 for our regression models.

FIGURE 4 Mean Standardized Indexed Support by Treatment and Respondent Ethnicity



This figure reports the mean levels of standardized indexed support by treatment for Dinka respondents only (left panel), and Nuer respondents only (right panel).

TABLE 4 Does Ethnicity Condition Responses to Endorsements?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Index	Power sharing	National bank	Truth commission	New constitution	Armed forces	SPLM democratization
Endorser: Dinka Pol/Party	-1.91*	-1.05*	-1.52*	-2.04*	-1.74*	-0.74*	-0.63*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.01)	(0.01)
Endorser: Nuer Pol/Party	-0.16	0.05	0.02	-0.34*	0.07	-0.32	0.06
	(0.08)	(0.48)	(0.79)	(0.04)	(0.46)	(0.07)	(0.70)
Dinka Respondent Dummy	-1.06	-1.14	-0.81	-1.31	-1.31	0.05	-0.52
	(0.48)	(0.48)	(0.53)	(0.48)	(0.48)	(0.80)	(0.57)
DinkaEndorserXXDinkaRespondent	1.98*	1.01*	1.52*	2.38*	1.75*	0.50*	0.80*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.02)	(0.00)
NuerEndorserXXDinkaRespondent	-1.07*	-0.94*	-0.58*	-0.29	-0.96*	-0.67*	-0.79*
	(0.00)	(0.01)	(0.02)	(0.19)	(0.01)	(0.02)	(0.00)
Constant	1.16*	4.95*	4.26*	4.66*	4.15*	4.87*	3.74*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	490	490	490	490	490	490	490
R-squared	0.64	0.46	0.53	0.57	0.51	0.49	0.35

p-value in parentheses

* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters, here 26 villages. XX indicates interacted variables. First column outcome is a standardized, inverse-covariance-weighted average of the other columns' outcomes. Significance levels for non-index outcomes are based on FDR-controlled p-values. All regressions include village fixed effects.

respondents, compared against Nuer respondents and relative to the control, 1.07 standard deviations (95% confidence interval [-1.44, -0.68]). Substituting average support for endorsement policies for the indexed support measure results in an estimated increase of 1.33 points (95% confidence interval [1.12, 1.53]) for the fourth row and a decrease of 0.71 points (95% confidence interval [-0.96, -0.45]) for the fifth row, on a five-point scale. For comparison, Matanock, Diaz and Garcia-Sanchez (2018) find that endorsements from favored politicians increase support for peace policies by 0.43 and 0.88 points on a seven-point scale. Interaction effects are driven by decreases in support caused by out-group endorsements (table 5). The negative out-group endorsement effect is consistent across *all six policies* both for Nuer and for Dinka respondents. Findings are robust to the inclusion of controls (Appendix table A18) and state fixed effects (Appendix table A20).

Investigating the Moderating Effect of Exposure to Violence

TABLE 5 Considering Effects of In- and Out-Group Leader Endorsements

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Index	Power sharing	National bank	Truth commission	New constitution	Armed forces	SPLM democratization
Dinka Respondents							
Endorser: Dinka Pol/Party	0.10 (0.53)	-0.01 (0.95)	0.01 (0.91)	0.37 (0.05)	0.03 (0.92)	-0.23 (0.08)	0.18 (0.41)
Endorser: Nuer Pol/Party	-1.21* (0.00)	-0.87* (0.01)	-0.55* (0.01)	-0.61* (0.01)	-0.89* (0.00)	-0.99* (0.00)	-0.73* (0.00)
Constant	-1.57* (0.00)	2.01* (0.00)	2.99* (0.00)	1.63* (0.00)	1.97* (0.00)	4.23* (0.00)	1.82* (0.00)
Observations	256	256	256	256	256	256	256
R-squared	0.46	0.35	0.23	0.33	0.29	0.40	0.23
Nuer Respondents							
Endorser: Dinka Pol/Party	-1.90* (0.00)	-1.05* (0.00)	-1.52* (0.00)	-2.04* (0.00)	-1.74* (0.00)	-0.74* (0.00)	-0.63* (0.01)
Endorser: Nuer Pol/Party	-0.15 (0.09)	0.06 (0.38)	0.02 (0.85)	-0.33* (0.02)	0.07 (0.44)	-0.32 (0.09)	0.06 (0.73)
Constant	0.88* (0.00)	4.56* (0.00)	4.28* (0.00)	4.84* (0.00)	4.61* (0.00)	4.97* (0.00)	2.80* (0.00)
Observations	234	234	234	234	234	234	234
R-squared	0.83	0.59	0.70	0.76	0.74	0.28	0.49

p-value in parentheses

* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. First column outcome is a standardized, inverse-covariance-weighted average of the other columns' outcomes. Significance levels for non-index outcomes are based on FDR-controlled p-values. All regressions include village fixed effects.

Next, we consider whether exposure to violence moderates individuals’ reactions to out-group leaders’ endorsements. The violent nature of the war means there is little variation in exposure to violence among the respondent population.²² We present analyses in table 6 by respondent ethnicity and including proxies for exposure to violence for which there is variation among the respondent population. We do not find evidence that self-reported exposure to violence moderates the out-group endorsement effect (columns 1 and 2, rows 4 and 5). However, one may not need to personally witness violence to feel threatened (Hadzic, Carlson and Tavits, 2017); alternatively, personal exposure may matter but the differences we focus on may be too granular: there may not be a difference for those who experience “a little” or “a moderate amount” of violence as compared with those who experience “a lot” or “a great deal”. We do find some evidence for a moderating effect of having been internally displaced, but it is sensitive to the regression specification (Hadzic, Carlson and Tavits, 2017; Matanock, Diaz and Garcia-Sanchez, 2018).²³

B. Shilluk and Luo Respondents

To further investigate the moderating effect of exposure to violence and to test the robustness of our findings, the experiment was expanded to include two minority ethnic groups: the

²² See Appendix tables A9 and A16. Matanock, Diaz and Garcia-Sanchez (2018) cite a similar challenge. ACLED (Raleigh et al., 2010) data is not sufficiently disaggregated to provide variation between villages in our dataset.

²³ The negative interaction effect for Nuer respondents between displacement and receiving a Dinka politician endorsement (table 6, column 4; $\beta = -0.18$, 95% confidence interval [-0.32, -0.02]) becomes statistically significant when demographic controls ($\beta = -0.18$, 95% confidence interval [-0.30, -0.05]) and state fixed effects ($\beta = -0.21$, 95% confidence interval [-0.36, -0.05]) are included, and in our factor analysis. See Appendix tables A19 (column 4) A20 (column 6), and A14 (columns 7 and 8), respectively.

TABLE 6 Does Exposure to Violence Moderate Effects?

DV: Standardized Support Index	(1) Dinkas Only, Violence Post	(2) Dinkas Only, Violence Current	(3) Dinkas Only, IDP	(4) Nuers Only, IDP
Endorser: Dinka Pol/Party	-0.10 (0.76)	-0.01 (0.96)	0.09 (0.57)	-1.79* (0.00)
Endorser: Nuer Pol/Party	-1.15* (0.02)	-1.47* (0.00)	-1.27* (0.00)	-0.18 (0.23)
ViolencePostDec	-0.12 (0.56)			
ViolencePostXXDinkaEnd	0.29 (0.45)			
ViolencePostXXNuerEnd	-0.08 (0.81)			
ViolenceCurr		-0.28 (0.11)		
ViolenceCurrXXDinkaEnd		0.20 (0.53)		
ViolenceCurrXXNuerEnd		0.47 (0.16)		
EverIDP			-0.66 (0.13)	0.05 (0.32)
IDPXXDinkaEnd			0.34 (0.43)	-0.18 (0.06)
IDPXXNuerEnd			0.60 (0.15)	0.04 (0.78)
Constant	1.42* (0.00)	1.59* (0.00)	-1.24* (0.00)	0.32* (0.00)
Observations	255	255	256	234
R-squared	0.47	0.47	0.47	0.83

p-value in parentheses

* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron, Gelbach and Miller, 2008), 1,000 replications, used to account for low number of clusters. ViolencePostDec (Current): Dummy for experienced “a lot” or “a great deal” of violence since December 2013 (currently).

Shilluk and Luo. These groups can shed additional light on our findings because they have been exposed to violence from different combinations of ethnic out-groups over the course of the civil war. While the Shilluk in our sample had only recently faced extreme ethnically-targeted violence exclusively at the hands of SPLM and Dinka-allied groups, the Luo have faced indiscriminate violence from both SPLM-IO and SPLM-allied forces.²⁴

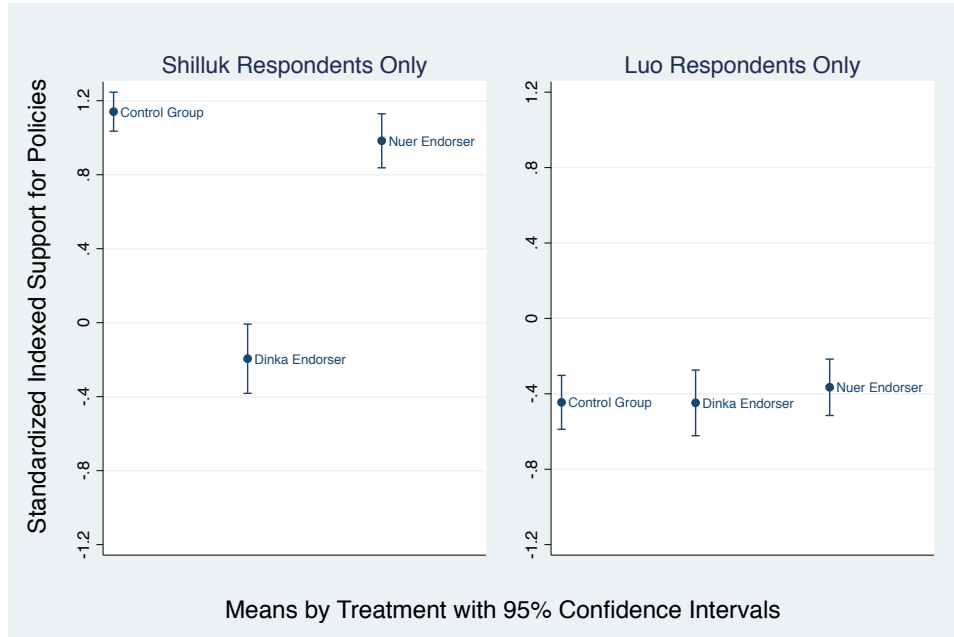
Our *out-group hypothesis* predicts that Shilluk respondents should, like Nuer respondents, respond negatively to Dinka endorsements of peace policies because exposure to violence from Dinka groups makes them trust Dinka leaders less and fear their possible exploitation of peace terms more. In contrast, because the Luo have faced indiscriminate violence from both sides, they should not fear one group more than the other. Our *out-group hypothesis* would accordingly expect them to react similarly to Dinka and Nuer politician endorsements but does not offer a clear expectation as to whether endorsements will reduce or not change their support.

Figure 5 displays point estimates of the mean levels of standardized indexed support for policies with 95% confidence intervals.²⁵ We find evidence in favor of the *out-group hypothesis*. A Dinka endorsement leads to a substantively important and statistically significant decrease in support for policies among Shilluk respondents of 1.34 standard deviations (95% confidence interval [-1.56, -1.11]). We do not find evidence that a Nuer endorsement shifts support either for Shilluk ($\mu_{NuerEndorser} - \mu_{control} = -0.16$, 95% confidence interval [-0.35, 0.03]) or Luo ($\mu_{NuerEndorser} - \mu_{control} = 0.08$, 95% confidence interval [-0.13, 0.29]) respondents, nor that a Dinka endorsement shifts support for Luo respondents ($\mu_{DinkaEndorser} - \mu_{control} = -0.00$, 95% confidence interval [-0.23, 0.22]). Bayesian estimation and MDE analysis (Appendix Section 7) indicate that the true effect of Nuer and Dinka

²⁴ See Appendix Section 2.4 for descriptions of each group’s experience during the war.

²⁵ See Appendix figure A7 for simple support averages, tables A5-A7 for regression (including exposure to violence) results, and tables A18 and A19 for robustness tests.

FIGURE 5 Mean Indexed Support Levels by Treatment and Respondent Ethnicity



This figure reports the mean levels of standardized indexed support by treatment for Shilluk respondents only (left panel), and Luo respondents only (right panel).

politician endorsements is zero for Luo respondents. Evidence on the true effect of a Nuer politician endorsement on Shilluk respondents is inconclusive.

6 Discussion

6.1 Interpretation of In-group Endorsement Effect

We do not find any evidence of a positive in-group endorsement effect for Nuer and Dinka respondents; to the contrary, our analysis in Appendix Section 7 suggests a true in-group endorsement effect of zero for Dinka respondents. We interpret the lack of an in-group endorsement effect as being attributable to a decrease in the perceived competence or shared interests of in-group leaders due to years of prolonged conflict and failed peace deals. However, it is possible that our null finding is instead attributable to ceiling effects or to citizens' greater familiarity with in-group politicians' stances, which could make in-group endorse-

ments less informative.

We think that these alternative explanations are unlikely. First, the raw average levels of support for policies in figure A7 show that support has not reached a ceiling and there is still room for it to increase. In such a low information environment, it is unlikely that respondents were very knowledgeable about the peace policies, let alone politicians' policy stances. Further, if differential knowledge prior to the experiment was driving results, we would expect that Shilluk and Luo respondents, who have no co-ethnic politician at the national level and thus should not have a high degree of knowledge about either politician's stances prior to the study, should be swayed either positively or negatively by both politicians' endorsements, which we do not observe.

6.2 Interpretation of Out-group Endorsement Effect

In this Section, we consider two alternative mechanisms for our negative out-group endorsement effect findings. First, conflict could increase social polarization, leading individuals to update downward after an out-group endorsement not because of security or trust (*instrumental*) concerns but rather because of out-group enmity. Scholars have found that identity-based differences can drive political behavior even where groups' issue-based differences are moderate and in-group candidates are unpopular (Abramowitz and Webster, 2018; Iyengar and Westwood, 2015; Mason, 2015). Distinguishing between instrumental and affect-based mechanisms has important normative implications: if people care only about which side wins, compromise is unlikely; further, the aim of using heuristics is not to act as if one was informed, undermining its central theorized benefit (Lupia, 1994; Iyengar and Westwood, 2015).

Conflict is likely to increase social polarization, but we do not think it is the sole driver of our results. First, we would expect that Luo respondents who faced violence from both sides would respond negatively to endorsements from both Dinka and Nuer politicians. In contrast, individuals appear to respond negatively to endorsements only from out-groups

that constitute a particular threat to their personal safety (e.g., when they are only targeted by that group for violence and not by the alternative group). Second, given the overwhelming desire for peace, we believe that people will be instrumentally motivated to support whichever policies they believe are most likely to deliver peace. Third, while most studies on social polarization emphasize the role of out-group enmity, they still anticipate and observe a positive in-group effect and high in-group loyalty, which we do not observe (Abramowitz and Webster, 2018; Mason, 2015; Iyengar and Westwood, 2015). Fourth, a factor analysis (Appendix Section 6) shows that the six endorsement questions load on two factors. Importantly, the two questions for which security concerns are likely to be most pressing, one on power sharing and the second on joint control of security forces, most clearly load on one factor, while the remaining four endorsement questions most define the other. Analysis is robust to using either factor as the dependent variable.

A second alternative explanation of our results is that people respond negatively to endorsements from out-group leaders not due to security concerns, but because they fear that out-group leaders will exclude them from government patronage. A factor analysis indicates that the endorsement question most likely to pick up on fear of capture of material benefits, on revisions to the national bank, does not load on a different factor than the others. We also added a question to the survey with Luo respondents to measure perceived ethnic bias in the distribution of public goods. We do observe that a Nuer endorsement increases support among Luo respondents who believe that leaders are ethnically biased by 0.47 standard deviations (95% confidence interval [0.24, 0.71]).²⁶ This effect appears to be driven primarily by an increase in support for the banking endorsement question. Results reported in this paper are robust to excluding this question.

In summary, both alternative mechanisms may have some validity: we argue that security concerns play a key role in how individuals interpret endorsements, but out-group animus and material concerns may also explain some component of our observed effect.

²⁶ See Appendix table A8.

6.3 Focus Group Discussions with Dinka and Nuer Political Elites

To better evaluate our understanding of the peace process in South Sudan, in November-December 2018 we conducted focus group discussions with Dinka (n=7) and Nuer (n=10) political elites. Kiir and Machar in September 2018 had signed a very similar but as-yet not implemented peace agreement to the one we study in this paper, allowing us to ask about four of the endorsement policies (1, 3, 4, and 5) included in this study and the peace process more generally.

Our claims largely found support. Leaders and citizens appeared fearful of exploitation of the peace deal by the other side. A Dinka police commander blamed SPLM-IO's true intention of "taking over" the government for past breakdowns in deals; similarly, a Nuer officer argued that "SPLM always wanted to dominate non-Dinkas and rule the government with Dinkas only." Nuer civilians were said to be "scared to trust the [SPLM] government in fulfilling the peace deal." Leaders insisted that their fears of the other side were not due to hate, but rather to a deep distrust.²⁷ One Dinka village chief said, "We don't hate the opposition but they have to be more loyal and...fulfill their commitments as regards this peace deal." Both groups listed guaranteeing security among their top three priorities for achieving peace in South Sudan.

Leaders described a low information environment. They said that they only learned about peace deal provisions during briefings from leadership, a source of information unavailable to civilians. A SPLM-IO deputy commander observed that "some of the things [in

²⁷ Potentially consistent with this account are answers from the World Bank's High Frequency survey which asked people to choose from among 15 options what most needed to be done to bring peace to South Sudan. Civilians in the aggregate, and both Nuer and Dinka respondent sub-samples, were most likely to list an end to fighting as the top priority (32%), and were second most likely to choose facilitating reconciliation and healing between communities (21%). The high import given to healing may indicate strong out-group distrust.

the peace deal] are not understandable to [the people].” There was also evidence that some followers had grown weary of in-group leaders’ promises due to years of violence and the slow pace of peace agreement implementation, which could be one reason we do not observe a positive in-group endorsement effect. A Dinka village chief noted, “This peace process is significant because the South Sudanese citizens are tired with prolonged years of war.”

Finally, though we do not have any empirical evidence to answer how lower public support for peace settlements affects elite decision-making in South Sudan, focus groups did provide some potential answers. Leaders insisted that followers had the capacity to hold them accountable, indicating that if support for the peace deal (and trust in out-group leaders) was sufficiently high, civilians could force in-group elites to comply with settlement terms. A Nuer governor, the highest state-level public office, claimed, “If civilians withdraw their support, then Kiir and Machar both will be out from their current positions.” Leaders highlighted that civilians had “an equal role” in making the peace deal successful and that civilian action (or inaction) had the potential to affect both settlement content and implementation. Leaders remembered being advised and pressured by civilians to adopt certain priorities or actions. Consistent with this account, a SPLM-IO military commander recalled a few instances where “people forced us to oblige with implementation of the agreements on time [and] improvement of security in some areas.” A Dinka village chief stated that the key role of civilians was to “spread the positive message” of the peace deal by not engaging in inter-communal violence or cattle raiding which could imperil on-the-ground settlement implementation. In summary, lower civilian support for peace deals may translate into civilians applying less pressure on in-group elites and on communities to comply with settlement terms.

7 Conclusion

We present results from a large-scale survey experiment conducted during a brief pause in civil war violence in South Sudan in 2016. We find that support for a tentative peace deal

drops precipitously when policies are endorsed by out-group leaders who have targeted an individual's community for violence. We find suggestive evidence that negative effects of an out-group endorsement are greatest for those whose communities were targeted most violently by that out-group. In-group politician endorsements do not significantly alter individuals' support for the peace settlement. We conclude that an endorsement of a policy by a distrusted out-group leader conveys information—namely, that the leader sees a way to exploit the policy—and makes individuals valuing security above all else less likely to support that policy. Out-group animus and material motivations may also play roles in depressing support for policies endorsed by out-group leaders.

How can public support for peace settlements signed by leaders from warring groups be increased?²⁸ Accounts detail how leaders on both sides in South Sudan were able to rely on critical support from co-ethnic communities even as they escalated violence and violated the peace deal, indicating that followers did not consistently hold in-group leaders or others in their communities accountable for reneging on settlement terms (Berger, 2014; Santora, 2015). Solely providing more information about peace policies may not alter individuals' reliance on endorsements as heuristics (Matanock, Diaz and Garcia-Sanchez, 2018). We posit that information may not be sufficient to overcome citizens' fears of out-group leaders. Our study suggests that building safeguards into peace deals that protect against potential exploitation by out-group leaders – and communicating these safeguards to citizens – could ameliorate commitment problems in the public and increase civilian support for peace deals. Such an approach would address citizens' increased prioritization of security and may increase their faith in a peace deal without necessitating changes in trust of in- and out-group leaders that would likely take more time to be realized.

²⁸ The South Sudanese government approved a 35 million South Sudanese Pound campaign to increase public support for the peace deal (Miraya, 2015).

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If They Endorse It, I Can't Trust It: How Out-Group
Leader Endorsements Undercut Public Support for Civil
War Peace Settlements

Online Supplemental Appendix (Not for Publication)

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1 Balance

TABLE A1 Balance Test, Full Sample: T1 (Dinka/Kiir Endorser) vs. Control

Covariates	T1	N	Control	N	p -value [$H_0: T1=Control$]
Female	42.0%	295	43.8%	299	0.66
Age (avg.)	37.7	299	37.2	298	0.67
Christian	100%	296	99.7%	298	0.32
Experienced “great deal” or “a lot” of violence..					
..since December 2013	80.5%	297	80.1%	297	0.92
..present day	71.9%	299	72.9%	299	0.78
Ever IDP	41.8%	299	43.5%	299	0.68
Some Education	66.2%	299	68.5%	298	0.56
Some Education (Father)	48.5%	299	47.8%	297	0.87
Poorer than Others	54.5%	299	53.8%	299	0.87
Household Size (avg.)	9.01	298	8.88	296	0.68
Own Cell Phone	42.8%	299	44.1%	299	0.74
Years in Current Village (avg.)	22.6	296	21.4	297	0.23

Note: p -values are from independent two sample t -test. IDP: internally-displaced person, some education (father): any formal education (obtained by father), poorer than others: respondent said their household was poorer as compared with others in community.

TABLE A2 Balance, Dinka and Nuer Respondents Only: T1 (Dinka/Kiir Endorser) vs. Control

Covariates	T1	N	Control	N	p -value [$H_0: T1=Control$]
Female	47.2%	159	47.6%	164	0.94
Age (avg.)	40.0	163	39.2	164	0.60
Christian	100%	162	99.4%	164	0.32
Experienced “great deal” or “a lot” of violence..					
..since December 2013	84.7%	163	82.3%	164	0.57
..present day	70.6%	163	75.6%	164	0.30
Ever IDP	39.3%	163	37.2%	164	0.70
Some Education	49.1%	163	53.7%	164	0.41
Some Education (Father)	19.6%	163	17.8%	163	0.67
Poorer than Others	42.9%	163	41.5%	164	0.79
Household Size (avg.)	9.59	162	9.26	164	0.42
Own Cell Phone	41.1%	163	39.0%	164	0.70
Years in Current Village (avg.)	20.2	163	18.8	163	0.24

Note: p -values are from independent two sample t -test. IDP: internally-displaced person, some education (father): any formal education (obtained by father), poorer than others: respondent said their household was poorer as compared with others in community.

TABLE A3 Balance, Full Sample: T2 (Nuer/Machar Endorser) vs. Control

Covariates	T2	N	Control	N	p -value [$H_0: T2=Control$]
Female	44.7%	295	43.8%	299	0.82
Age (avg.)	37.7	299	37.2	298	0.61
Christian	99.3%	295	99.7%	298	0.56
Experienced “great deal” or “a lot” of violence..					
..since December 2013	80.5%	298	80.1%	297	0.90
..present day	75.5%	298	72.9%	299	0.47
Ever IDP	42.8%	299	43.5%	299	0.87
Some Education	65.2%	299	68.5%	298	0.40
Some Education (Father)	49.8%	299	47.8%	297	0.62
Poorer than Others	50.8%	297	53.8%	299	0.46
Household Size (avg.)	8.89	297	8.88	296	0.99
Own Cell Phone	49.1%	283	44.1%	299	0.23
Years in Current Village (avg.)	22.4	297	21.4	297	0.27

Note: p -values are from independent two sample t -test. IDP: internally-displaced person, some education (father): any formal education (obtained by father), poorer than others: respondent said their household was poorer as compared with others in community.

TABLE A4 Balance, Dinka and Nuer Respondents Only: T2 (Nuer/Machar Endorser) vs. Control

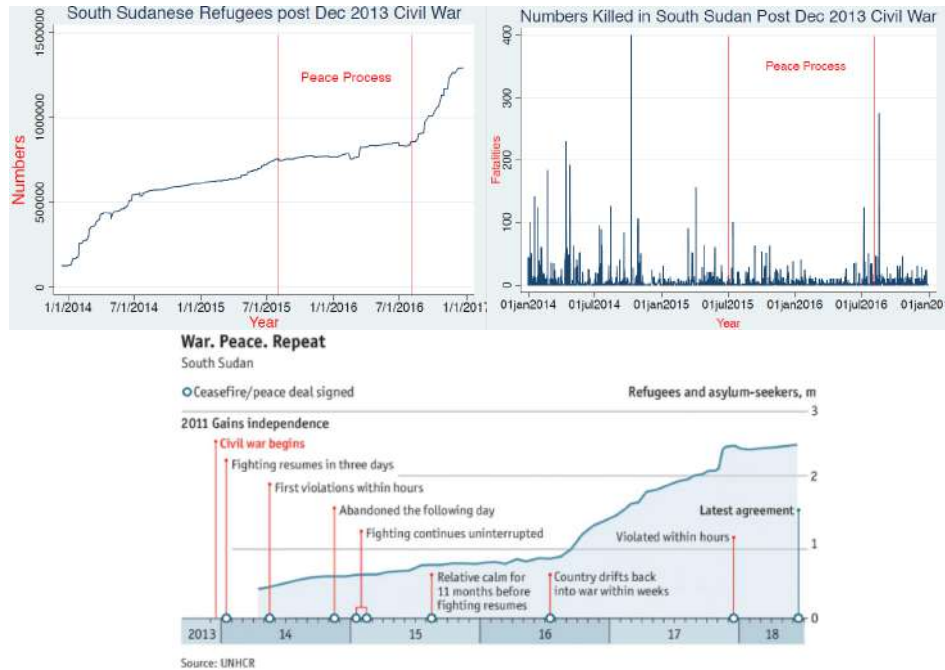
Covariates	T2	N	Control	N	p-value [H ₀ : T2=Control]
Female	47.2%	161	47.6%	164	0.95
Age (avg.)	39.1	164	39.2	164	0.95
Christian	100%	161	99.4%	164	0.32
Experienced “great deal” or “a lot” of violence..					
..since December 2013	84.7%	163	82.3%	164	0.57
..present day	77.9%	163	75.6%	164	0.62
Ever IDP	40.9%	164	37.2%	164	0.50
Some Education	47.0%	164	53.7%	164	0.23
Some Education (Father)	20.1%	164	17.8%	163	0.59
Poorer than Others	40.1%	162	41.5%	164	0.81
Household Size (avg.)	9.27	162	9.26	164	0.98
Own Cell Phone	46.7%	163	39.0%	164	0.17
Years in Current Village (avg.)	20.1	164	18.8	163	0.25

Note: p-values are from independent two sample t-test. IDP: internally-displaced person, some education (father): any formal education (obtained by father), poorer than others: respondent said their household was poorer as compared with others in community.

2 Background

2.1 Timeline of Conflict

FIGURE A1 Timeline of Conflict



Top left (right) graph shows refugee flows (fatalities) during civil war and peace negotiations. Bottom graph details timeline of conflict. Sources: United Nations High Commissioner for Refugees; ACLED (Raleigh et al. 2010); The Economist, “Daily Chart” (7/10/2018) (<https://www.economist.com/graphic-detail/2018/07/10/ceasefires-in-south-sudan-seldom-last>).

2.2 Experiment Materials

See endorsement questions below. We followed convention by providing no endorsement in our control group or including endorsements in our two treatment groups from either SPLM or SPLM-IO (Blair et al. 2013, Lyall et al. 2013, Matanock et al. 2018, Nicholson 2012). Our expectation is that respondents in the control group will view policies as being implicitly endorsed by both parties (given that they are sourced from a peace deal), and that our treatments capture the real-world dynamic whereby individuals would be more supportive of peace settlements if not for the explicit endorsements from threatening out-group politicians—through the attachment of their names to the deal. An interesting question, particularly in the case of peace settlements, is whether the explicit joint endorsement of a deal from opposing groups would alter how individuals interpret the settlement. Given that an in-group endorsement does not increase support, we are doubtful that a joint endorsement could completely overcome the deleterious effects of an explicit out-group endorsement. However, we cannot rule out this possibility without the addition of a fourth treatment. We acknowledge this omission in our paper and in the literature more generally and we encourage future work to consider simultaneous endorsement treatments.

FIGURE A2 Endorsement Questions

Endorsement Questions:

[Control/Dinka Endorser (Treatment1)/Nuer Endorser (Treatment 2)]

1. [It has been/The ruling Government under President Kiir/The opposition under Riek Machar] proposed that the new First Vice President of South Sudan be from the South Sudan Armed Opposition and the President be from the SPLM/current ruling party. This arrangement is expected to be a good way to bridge differences between these two warring groups. How much do you support this proposal?

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all

2. In order to control corruption, [It has been proposed/the ruling Government under President Kiir has agreed/the opposition under Riek Machar has agreed] to review legislation governing the Bank of South Sudan (BoSS) with a view to restructure and enable it to render efficient and effective service. This restructuring shall include, but is not limited to, leadership, composition, powers, functions and operations. How much do you support this proposal?

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all

3. [There has been an agreement/The ruling Government under President Kiir has agreed/ The opposition under Riek Machar has agreed] to establish the Commission for Truth, Reconciliation and Healing (CTRH) as a critical part of the peace building process in South Sudan, and to spearhead efforts to address the legacy of conflicts, promote peace, national reconciliation and healing. How much do you support this proposal?

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all

4. [There has been an agreement/The ruling Government under President Kiir has agreed/The opposition under Riek Machar has agreed] to make a new constitution to guarantee peace and stability, national unity and territorial integrity of the Republic of South Sudan. How much do you support this proposal?

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all

5. [The Peace Agreement states/The ruling Government under President Kiir supports/The opposition under Riek Machar supports] that the Unified Government shall establish joint control of the National Defense Forces of South Sudan (NDFSS)—comprising both the warring factions, and its complete unification shall be completed within eighteen (18) months. How much do you support this proposal?

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all

6. [The 2015 August peace accord/The ruling Government under President Kiir/The opposition under Riek Machar] has acknowledged that SPLM has failed to “institutionalise and democratise the exercise of power in the party,” and immediate measures to rectify the current situation is urgent. How much do you support this proposal?

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all

CONTROL GROUP ONLY (7-8):

7. How much do you think the ruling Government under President Kiir supports the 2015 August peace accord?

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all

8. How much do you think the opposition under Riek Machar supports the 2015 August peace accord?

(1) A great deal (2) A lot (3) A moderate amount (4) A little (5) None at all

FIGURE A3 Survey Questionnaire: Left for Dinka, Nuer, Shilluk respondents. Right for Luo respondents.

Code:		GPS co-ordinates:		Community Pop in numbers:	
Village/Boma :		State:		Dist to County Hq:	
1	Your age years	2. Your Occupation	.....	
3	Marital status now: Please write below	<input type="radio"/> Never married <input type="radio"/> currently married / living with a partner <input type="radio"/> Not married but divorced <input type="radio"/> Not married but widowed			
4	Ethnicity: Dinka O Nuer O Other	5. Sex	Male O	Female O	
6	Your religion:	Christian O	Muslim O	Animist O	Other
8	Your education	<input type="radio"/> Primary <input type="radio"/> Secondary <input type="radio"/> High School/ Technical <input type="radio"/> University			
9	Your father's education	<input type="radio"/> Primary <input type="radio"/> Secondary <input type="radio"/> High School/ Technical <input type="radio"/> University			
10	Your father's occupation	.....		
11	Were you ever an IDP?	Yes O No O			
12	If Yes, which dates? From..... To.....	Which county/boma did you go to.....			
13	If Yes, which county/boma did you leave.....	Which county/boma did you go to.....			
14	Level of violence you community faced after December 2013? (Circle ONE only)	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
15	How long have you been in this current boma/county for.....months.....yrs	.....		
16	Place of Birth : Country.....Boma.....	.....		
17	Size of your household	.....		
18	Do you own a cell phone?	Yes O No O			
19	Economic State of your household in comparison to other households in your community?	Poor Same Better 1 ← 2 3 →			
20	What is the current level of violence in your community? (Circle ONE only)	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
21	Current Population of Boma	<input type="radio"/> Majority Dinka O <input type="radio"/> Majority Nuer O <input type="radio"/> Majority Luo O <input type="radio"/> Similar Numbers of Dinka/Nuer/Luo O <input type="radio"/> Majority are other tribe: O			
22	The government does a satisfactory job providing public services (healthcare, roads, etc.) Do you support this statement: (tick any one ONLY)	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
23	Political leaders only provide benefits to their own people. Do you support this statement:	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
24	I am satisfied with the system of government and how well it works. Do you support this statement:	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
Additional Questions.					
25a.	Suppose your town is under threat of attack from invaders. You are not sure that you can defend your town. There is ONLY ONE group that has volunteered to help you; with their help, you think you might be able to defend the town. The group is made up of individuals from outside your town who promise to help you defeat the invaders and then leave. How much would you support accepting the group's offer of help?	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
25b.	How much would you support accepting the offer of help if the group was the SPLA-IO under President Kiir?	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
25c.	How much would you support accepting the offer of help if the group was the SPLA-IO under Riek Machar?	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
26a.	Suppose refugees displaced due to violence are looking for temporary housing. How much would you support housing a refugee in your home?	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
26b.	How much would you support hosting a Dinka refugee?	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
26c.	How much would you support hosting a Nuer refugee?	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
27.	How much do you trust each of the following groups or types of people?	<input type="radio"/> (1) A great deal <input type="radio"/> (2) A lot <input type="radio"/> (3) A moderate amount <input type="radio"/> (4) A little <input type="radio"/> (5) None at all			
27a.	Political leaders	.....		
27b.	SPLA-IO under President Kiir	.....		
27c.	SPLA-IO under Riek Machar	.....		
27d.	All people	.....		
27e.	Members of your own ethnic group	.....		
27f.	Dinka people	.....		
27g.	Nuer people	.....		
27h.	Other ethnic groups	.....		
28.	Of the violence you have experienced, the perpetrators were (Write in all groups, i.e. SPLA, SPLA-IO, Arab Misseriyah):	.....		
29.	Among perpetrators, the worst (those that inflicted the most damage on you or your family) were (Write in all groups):	.....		
30.	With the recent events in Juba, how hopeful are you for peace?	.....		

FIGURE A4 Focus Group Discussion Questions

QUESTIONS FOR “ELITES/LEADERS” FOCUS GROUP DISCUSSION (EGD) QUESTIONS

1. What do you know about the peace process in South Sudan? **Questions:** what has happened? Why has peace not been reached? How do you get your information? From whom? How often do you discuss the peace process? Who do you discuss it with? Are the people you speak to mostly in agreement? What do they believe? Are your conversations with other political officers similar or different from your conversations with others?
2. Do you have a role in the peace process? What role do you have? Do non-pol elites, e.g. normal people have a role? IF YES, what?
3. Please think for a moment about the following policies: Agreement for the makeup of President from the SPLM and the First Vice President from the SPLM IO. The Joint Defense Board comprising of all warring factions will exercise command and control over all forces. Agreement to establish the Commission for Truth, Reconciliation and Healing (CTR/H) as a critical part of the peace building process in South Sudan. To spearhead efforts to address the legacy of conflicts, promote peace, national reconciliation and healing. Agreement to make a new constitution to guarantee peace and stability, national unity and territorial integrity of the Republic of South Sudan.

Now, **3a.** Would you support the above initiatives? Why or why not? Would others share your opinion? Would it differ for people political leaders like yourselves and for normal civilians? Why? **3b.** Would Kirr and Machar ever both sign out to support such initiatives? **NOTE for enumerators:** WE know that they have already signed on to support such initiatives. But we want to know if the people in the room also have this information. Ask this question, do NOT provide an answer to it.

4. We now want you to think about the latest Peace deal of September 2018 which actually calls for all of the above four points. Question: Now that you know these policies were part of a peace deal agreed to in September 2018, does it change your level of support for them? Why or why not? Who do you think out of the two groups, SPLM or SPLM IO, would benefit the most from this latest peace deal, or would they benefit equally? What are the costs and benefits from this peace deal to you and your community? When you say you support or do not support a policy, what are you thinking about as important or not? Do you think that this peace deal will successfully bring peace? Why or why not?

5. Now imagine you were told that this latest peace deal was supported by President Kirr and SPLM. **Question:** What are some of the thoughts that you want to share with us? (Would Kirr’s explicit support for the policy change how you think about it? Why or why not? After learning about Kirr’s support, would you be more, less, or equally confident that the peace deal would work? Why? After hearing about Kirr’s support, who do you think out of the two groups, SPLM or SPLM IO, would benefit the most from this latest peace deal, or would they benefit equally? Would it matter if you were told that SPLM supported the peace deal, as opposed to Kirr? Do you think of SPLM as different from Kirr? Would you believe Kirr when he said he supported it?

6. Imagine for a moment that you had not been told anything about Kirr’s support. Instead, imagine you were told that this latest peace deal was supported by the Opposition Leader, Risk Machar and SPLM IO. **Question:** What are some of the thoughts that you want to share with us? Would Machar’s explicit support for the policy change how you think about it? Why or why not? After learning about Machar’s support, would you be more, less, or equally confident that the peace deal would work? Why? After hearing about Machar’s support, who do you think out of the two groups, SPLM or SPLM IO, would benefit the most from this latest peace deal, or would they benefit equally? Would it matter if you were told that SPLM IO supported the peace deal, as opposed to Machar? Do you think of SPLM IO as different from Machar? Would you believe Machar when he said he supported it?

7. When (INSERT KIRR or MACHAR from answers to questions #5 and #6) is endorsing the peace deal, you shared with us that you feel it is less likely that this is going to work. **Question:** Why do you think it is less likely to work? (What is the number one thing that concerns you the most? What is the number two thing that concerns you the most? Are you concerned about how the deal could affect your personal security and safety? Are you concerned about how the deal could affect your access to income? Do you hate the opposition? (SPLM or SPLM IO) What about the endorsement is making you feel one way or another? What information is it conveying?)

8. If endorsements make others feel that they would support the deal more following an endorsement, similarly ask them why. When (INSERT KIRR or MACHAR from answers to questions #5 and #6) is endorsing the peace deal, you shared with us that you feel it is more likely that this is going to work. **Question:** Why do you think it is more likely to work? What is the number one thing that makes you most optimistic? What is the number two thing that makes you most optimistic? Are you optimistic about how the deal could affect your personal security and safety? Are you optimistic about how the deal could affect your access to income? Do you just really support your side? (SPLM or SPLM IO) What about the endorsement is making you feel one way or another? What information is it conveying?
9. Finally, imagine you were told that this latest peace deal was supported by BOTH President Kirr and the Opposition Leader Risk Machar. This is true: both signed it in Ethiopia. **Questions:** Would you have assumed upon hearing a peace deal had been signed that both Kirr and Machar supported the peace deal, or would being explicitly told this tell you something new? What are some of the thoughts that you want to share with us? Would Machar and Kirr’s explicit support for the policy change how you think about it? Why or why not? After learning about Machar and Kirr’s support, would you be more, less, or equally confident that the peace deal would work? Why? Who do you think out of the two groups, SPLM or SPLM IO, would benefit the most from this latest peace deal, or would they benefit equally? Would you believe Kirr and Machar when they said they both supported it?
10. Imagine that with the help of the international community, there is going to be a referendum to find out which areas should be prioritized for peace in South Sudan. From the list below, can you please provide THREE TOP rankings in terms of your priorities? (Controlling Criminal Activities, Presidential Elections, Forming new Government, Security Guarantee, Peace with North Sudan, Development, Ensure domination of your rival tribe/faction is controlled)
11. Since the break out of the civil war in Dec. 2013, no peace deal has survived yet. Who do you blame for this?
 12. Why do you blame XXXX for the breakdown of all peace deals?
 13. Why do you think XXXX did not stick to the peace deal?
 14. Do political leaders like yourselves and like Kirr and Machar rely on civilians for support? If so, what are some ways that civilians support them? What would happen if civilians withdrew their support? Would it matter?
 15. Do political leaders like yourselves know what the people want?
 16. Do you seek out the opinions of your supporters in the public on matters such as the peace deal? (If yes: follow up, how do you reach them? And: who do you care about their opinions? Do you get the sense from higher-ups in your party that this is important? Do some political leaders care more than others? Why?)
 17. Do you communicate political policies to the people? How?
 18. Could you ever imagine there being a disagreement between your stance on a peace agreement and your civilian supporters’ stances? (If yes, in what areas might there be disagreement?)
 19. Now imagine that you and your supporters in the public DID disagree on the peace deal: either you felt it should be enforced as currently written and they did not, or you felt it should not be enforced as currently written and they did. Or you disagreed over the content of the agreement. **Questions:** Would you feel like you needed to convince them about why your stance was the correct one? Why or why not?
 20. Do you think that most people are relatively well informed about the peace process? What about political leaders like yourselves?
 21. In your mind, what distinguishes SPLM from SPLM IO? Is it possible to distinguish between the political parties and violence?
 22. Do you feel similarly about SPLM/Kirr as you do about Dinkas? Do you feel similarly about SPLM IO/Machar as you do about Nuers?
 23. Has violence changed who you trust?
 24. Would you say that you know more about SPLM policies, more about SPLM IO policies, nothing about either, or the same about both? [choose one and explain how you receive this information]
 25. Do you feel that you will be held accountable for failures from any of the following groups: the people, your political supporters, your political party, your ethnic group. How?
 26. What are your career goals?
 27. What will help you to achieve your career goals?
 28. What could get in the way of you achieving your career goals?

Notes: Questions for focus group discussions which were conducted with two groups of elites – Dinkas in Bor in November 2018 and Nuers in New Fangak in December 2018. Elites from a variety of positions were represented, including state governor, commander, county commissioner, village chief, and barracks commander. Kirr and Machar in September 2018 had signed a very similar but as-yet not implemented peace agreement to the one we study in this paper, allowing us to ask about four of the endorsement policies (1, 3, 4, and 5) included in this study and the peace process more generally.

2.3 Data Collection

2.3.1 Enumerator Teams

We had two groups of enumerators. The first group consisted of enumerators from the Danish Refugee Council (DRC)'s mine risk education (MRE) teams. These teams visit rural communities to educate citizens of the threats posed by explosive remnants of war. Because of the nature of their work, the MRE teams also have members trained and well versed in proper survey methods to be able to correctly identify the most impacted communities for correct utilization of resources.¹ We used these teams in rural areas outside built up towns which otherwise would be impossible for civilian enumerators to access due to the outbreak of the civil war. Our second group of enumerators were freelance survey enumerators used by research firms and international organizations including the World Bank and the United Nations. This group was used where access was possible such as in built-up areas. Both groups were trained remotely, and for previous projects directly by our PI in the field who worked for the DRC as a Quality Assurance (QA) officer.

2.3.2 Randomization Process



The three steps of the randomization process.

The three maps above show the randomization process used to identify subjects for the endorsement experiment. Step 1 involved randomly choosing villages using a lottery system where enumerators numbered the villages accessible in the area and randomly picked numbers from a hat. On the leftmost map, two chosen villages are marked in red and two villages not chosen are in yellow. These two randomly picked villages are the two lower green dots representing Nuer villages southwest of Bentiu on the map in figure 2 of the main article. The middle map shows step 2 which involved dividing the randomly picked village into blocks so that each block on average had the same number of households represented in our sample. The right map shows step 3 which involved randomly picking 30 houses using a lottery system after consultation with the village chief on the number of houses in the village. The rightmost map is an example of 10 households selected from the middle block from the village in the middle map. The final randomization step included randomly picking an adult present in each of the thirty houses randomly selected. The survey took enumerators less time to conduct than they had anticipated, and we increased the number of respondents per village from 15 to 21 and finally to 30.

¹ See <https://drc.ngo/where-we-work/east-africa/south-sudan> on DRC's work in South Sudan.

2.4 Description of Luo, Shilluk Wartime Experience

Endorsement surveys conducted with Shilluk respondents in Malakal in April 2016 closely followed an episode in February dubbed by some “the Malakal Massacre” due to its violent nature, which led many to call for a formal war crimes investigation (Lynch 2016).² Ultimately, 30 IDPs in a United Nations Mission in South Sudan (UNMISS) camp were killed, more than 120 injured, and approximately one-third of the camp was destroyed by arson (CCC 2016).³ The conflict was for the most part an uneven match, with SPLA/M and Dinka-allied fighters pitted against Shilluk and Nuer civilians. Extensive field research by the Center for Civilians in Conflict led to the report, corroborated by other sources, that “the Dinka and SPLA fighters appear to have had free reign of much of the camp for at least several hours, firing on Nuer and Shilluk civilians and burning homes” (CCC 2016, p.5). Violence was clearly ethnically targeted, as “the Dinka area was completely untouched by the burning...the attackers who set the fire deliberately burned Nuer and Shilluk camp sections” (CCC 2016, 6). SPLA/M fighters were in “full military uniform firing guns inside the camp,” providing little doubt as to the perpetrators’ identity (CCC 2016, 17). Shilluk and Nuer civilians were targeted by Dinka-allied forces, and there is no evidence that they fought with each other; before the outbreak of violence in the camp, it was reported that “the Nuer and Shilluk were in a loose alliance” (CCC 2016, 4).

Accounts from a number of organizations provide additional support for the notion that Shilluk respondents were exposed to ethnically targeted violence from one side—SPLM and Dinka-allied forces—while not being exposed to very much from the other, SPLM-IO and Nuer-allied forces. Several reports and press releases by organizations including Amnesty International, the UN, and Medecins Sans Frontieres indicate that atrocities against the Shilluks were singlehandedly carried out by the Padang Dinkas.⁴ A recent comprehensive report on the Shilluk by the Small Arms Survey, a Geneva-based conflict research center, notes the severe consequences of the attacks, reporting that as much as 50% of Shilluk have left South Sudan and as much as 80% when including internally displaced people have been displaced as a result of the violence orchestrated by the Padang Dinkas (Craze 2019, 10).⁵ According to the same report, exposure to violence from Dinka forces has decreased Shilluk trust in Dinka leadership. The report notes that “attempting to build trust between the Padang Dinka and the Shilluk...is difficult enough” (Craze 2019, 97). The report further cites how the government’s failure to respond to attacks against the Shilluk “deepened the community’s distrust of the administration” (Craze 2019, 106). In summary, there is evidence

² Lynch, Justin. 2016. “After the Malakal Massacre, Investigating South Sudan War Crimes.” *The Daily Beast* (Feb 24). Retrieved May 26, 2017. (<http://www.thedailybeast.com/articles/2016/02/24/after-the-malakal-massacre-investigating-south-sudan-war-crimes>).

³ Center for Civilians in Conflict (CCC). 2016. “A Refuge in Flames: The February 17-18 Violence in Malakal POC.” *Center for Civilians in Conflict*. Retrieved May 26, 2017 (civiliansinconflict.org).

⁴ See for example: Amnesty International UK. 2017. “South Sudan: ‘Shocking’ Killing and Mass Displacement of Shilluk People By Government Forces - New Evidence.” *Press Release* (June 21). Retrieved August 11, 2019. (<https://www.amnesty.org.uk/press-releases/south-sudan-shocking-killing-and-mass-displacement-shilluk-people-government-forces>).

⁵ Craze, Joshua. 2019. “Displaced and Immiserated: The Shilluk of Upper Nile in South Sudan’s Civil War, 2014-19.” *Small Arms Survey* (September 2019). Retrieved September 20, 2019. (<http://www.smallarmssurveysudan.org/fileadmin/docs/reports/HSBA-Report-South-Sudan-Shilluk.pdf>).

not only that Shilluk respondents were primarily or entirely exposed to violence from one side, but further that exposure to violence reduced their trust in the out-group responsible for perpetrating violence: Dinka leadership.

The Luo in our sample, from Aweil Centre county in Northern Bahr El Ghazal state, have had a very different wartime experience. Although they have been exposed to a high level of violence, according to reports it has not been ethnically targeted and has come from both SPLM and SPLM-IO forces.⁶ Forces from both sides appear to attack and loot civilian Luo populations when passing through the region. For example, the South Sudan Humanitarian Project report for Aweil Centre County notes an incidence in July 2014 when 200 SPLM fighters “looted civilian homes and facilities” and displaced 258 households when they “moved through the County en route to Darfur” (SSHP 2016).⁷ In July 2015, similar reports emerged regarding SPLM-IO forces, which were said to have “attacked the county headquarters...looted shops and fired at the county commissioner’s house” (SSHP 2016). To confirm these reports, a question was added to the questionnaire for Luo respondents that asked them to list the worst perpetrators of the violence that they had experienced. Their answers lend support to reports of indiscriminate violence: 93% of respondents listed *both* SPLM and SPLM-IO among their worst perpetrators of violence. Thus, while the Luo have experienced violence, it does not appear to have been ethnically targeted, but rather indiscriminate, and it appears to have come from both sides in the conflict.

⁶ See table A9 for evidence of high exposure to violence for Luo and Shilluk respondents.

⁷ South Sudan Humanitarian Project (SSHP). 2016. “Aweil Centre County, Northern Bahr el Ghazal.” *South Sudan Humanitarian Project*. Retrieved May 26, 2017 (southsudanhumanitarianproject.com).

3 Additional Shilluk and Luo Results

TABLE A5 Considering Effects of In- and Out-Group Leader Endorsements: Shilluk and Luo

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Index	Power sharing	National bank	Truth commission	New constitution	Armed forces	SPLM democratization
Shilluk Respondents							
Endorser: Dinka Pol/Party	-1.33*	-1.03*	-0.75*	-1.17*	-1.18*	-1.00*	-0.42*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Endorser: Nuer Pol/Party	-0.15	0.17	-0.05	0.08	-0.33	-0.10	-0.12
	(0.12)	(0.29)	(0.79)	(0.51)	(0.12)	(0.12)	(0.71)
Constant	1.33*	4.96*	4.14*	4.56*	4.64*	4.97*	3.98*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	59	59	59	59	59	59	59
R-squared	0.80	0.78	0.52	0.63	0.52	0.77	0.26
Luo Respondents							
Endorser: Dinka Pol/Party	-0.01	-0.38	-0.09	0.09	-0.01	-0.14	0.15
	(0.98)	(0.11)	(0.81)	(0.54)	(0.96)	(0.52)	(0.37)
Endorser: Nuer Pol/Party	0.08	-0.21	0.02	-0.07	0.05	-0.08	0.24
	(0.17)	(0.22)	(0.81)	(0.54)	(0.96)	(0.52)	(0.37)
Constant	-0.75*	3.80*	3.96*	3.33*	3.52*	2.77*	3.27*
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Observations	328	330	330	329	329	330	330
R-squared	0.06	0.05	0.08	0.05	0.03	0.05	0.05

p-value in parentheses

* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. First column outcome is a standardized, inverse-covariance-weighted average of the other columns' outcomes. Significance levels for non-index outcomes are based on FDR-controlled p-values. All regressions include village fixed effects.

TABLE A6 Shilluk, Luo vs. Nuers, Dinkas

DV: Standardized Support Index	(1)	(2)	(3)	(4)
	Shilluk vs. Dinka	Shilluk vs. Nuer	Luo vs. Nuer	Luo vs. Dinka
Endorser: Dinka Pol/Party	0.10	-1.90*	-1.90*	0.10
	(0.58)	(0.00)	(0.00)	(0.56)
Endorser: Nuer Pol/Party	-1.21*	-0.15	-0.15	-1.21*
	(0.00)	(0.10)	(0.10)	(0.00)
Shilluk Respondent Dummy	-0.26*	-0.11		
	(0.00)	(0.08)		
DinkaEndorserXXShillukRespondent	-1.43*	0.58*		
	(0.00)	(0.00)		
NuerEndorserXXShillukRespondent	1.06*	0.00		
	(0.000)	(0.97)		
Luo Respondent Dummy			-1.91*	-1.89*
			(0.00)	(0.00)
DinkaEndorserXXLuoRespondent			1.90*	-0.11
			(0.00)	(0.60)
NuerEndorserXXLuoRespondent			0.23*	1.29*
			(0.03)	(0.00)
Constant	1.31*	1.16*	1.16*	1.31*
	(0.00)	(0.00)	(0.00)	(0.00)
Observations	315	293	562	584
R-squared	0.51	0.83	0.52	0.36

p-value in parentheses

* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. Dinka(Nuer) Endorser is a treatment indicator for whether a respondent was in a condition with a Dinka endorser (Nuer endorser). Outcome is a standardized, inverse-covariance-weighted average of the six endorsement questions. All regressions include village fixed effects.

TABLE A7 Does Exposure to Violence Moderate Effects? Shilluk and Luo Results

DV: Support Index	(1)	(2)	(3)	(4)
	Luo Only, Violence Post	Luo Only, Violence Current	Luo Only, IDP	Shilluk Only, IDP
DinkaEndorserDummy	0.09 (0.66)	0.05 (0.76)	0.04 (0.70)	-1.21* (0.00)
NuerEndorserDummy	0.01 (0.96)	0.35 (0.11)	0.01 (0.92)	0.03 (0.49)
ViolencePostDec	0.05 (0.76)			
ViolencePostXXDinkaEnd	-0.14 (0.53)			
ViolencePostXXNuerEnd	0.11 (0.62)			
ViolenceCurr		0.23 (0.17)		
ViolenceCurrXXDinkaEnd		-0.10 (0.71)		
ViolenceCurrXXNuerEnd		-0.42 (0.15)		
EverIDP			0.12 (0.57)	0.01 (0.88)
IDPXXDinkaEnd			-0.09 (0.61)	-0.15 (0.34)
IDPXXNuerEnd			0.21 (0.29)	-0.21 (0.36)
Constant	-0.62* (0.00)	-0.47* (0.02)	-0.79* (0.00)	1.32* (0.00)
Observations	325	328	328	59
R-squared	0.06	0.07	0.07	0.80

p-value in parentheses

* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters, which could otherwise lead to understatement of true standard errors. Columns 1-3 only consider Luo respondents, while column 4 only considers Shilluk respondents.

TABLE A8 Effects of Perceived Ethnic Bias in Goods Distribution on Support (Luo Respondents)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Index	Power sharing	National bank	Truth commission	New constitution	Armed forces	SPLM democratization
Endorser: Dinka Pol/Party	0.17 (0.40)	-0.21 (0.63)	-0.30 (0.34)	0.47 (0.18)	0.19 (0.68)	-0.05 (0.85)	0.35 (0.59)
Endorser: Nuer Pol/Party	-0.24 (0.09)	-0.11 (0.63)	-0.54 (0.21)	-0.07 (0.98)	-0.39 (0.52)	-0.34 (0.22)	0.32 (0.60)
Perceived Ethnic Bias	-0.03 (0.89)	0.12 (0.63)	-0.38 (0.28)	0.08 (0.98)	-0.08 (0.78)	0.03 (0.85)	0.17 (0.71)
EthnicBiasXXDinkaEnd	-0.28 (0.31)	-0.27 (0.63)	0.31 (0.34)	-0.60 (0.18)	-0.33 (0.52)	-0.13 (0.85)	-0.33 (0.60)
EthnicBiasXXNuerEnd	0.47* (0.00)	-0.15 (0.63)	0.83 (0.16)	-0.01 (1.00)	0.66 (0.27)	0.39 (0.45)	-0.13 (0.71)
Constant	-0.43* (0.00)	3.47* (0.00)	3.87* (0.00)	3.26* (0.00)	3.47* (0.00)	2.82* (0.00)	3.29* (0.00)
Observations	328	330	330	329	329	330	330
R-squared	0.03	0.02	0.02	0.02	0.03	0.01	0.01

p-value in parentheses

* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. First column outcome is a standardized, inverse-covariance-weighted average of the other columns' outcomes. Significance levels for non-index outcomes are based on FDR-controlled p-values. All regressions include village fixed effects. Ethnic bias coded as agreeing a great deal or a lot (1) or not (0) that politicians only provide benefits to their own people.

4 Summary Statistics

4.1 Demographic Covariates

TABLE A9 Summary Statistics

Covariates	(1) Overall	(2) N	(3) Dinka	(4) N	(5) Nuer	(6) N	(7) Shilluk	(8) N	(9) Luo	(10) N	p-value $H_0 : \mu_{(3)} - \mu_{(5)} = 0$
Female	44%	889	45%	253	49%	231	50%	58	37%	330	0.39
Age (avg.)	37.5	896	39.5	257	39.3	234	38.1	59	34.7	330	0.88
Christian	100%	889	100%	257	100%	230	100%	57	99%	330	0.29
Experienced “great deal” or “a lot”											
..of violence since December 2013	80%	892	69%	256	100%	234	100%	59	71%	327	0.00*
..of violence present day	73%	896	53%	256	98%	234	100%	59	66%	330	0.00*
Ever IDP	43%	897	15%	257	66%	234	78%	59	40%	330	0.00*
Some Education	67%	896	58%	257	41%	234	24%	59	100%	329	0.00*
Some Education (Father)	49%	895	25%	256	12%	234	7%	59	100%	330	0.00*
Poorer than Others	53%	895	68%	255	13%	234	71%	59	66%	330	0.00*
Household Size (avg.)	8.9	891	8.5	256	10.3	232	11.4	59	7.7	330	0.00*
Own Cell Phone	45%	881	46%	256	38%	234	46%	59	51%	315	0.11
Years in Current Village (avg.)	22.1	890	23.3	253	15.7	232	10.1	59	28.5	330	0.00*

* p<0.05

Note: p-values are from independent two sample t-test. IDP: internally-displaced person, some education (father): any formal education (attained by father), poorer than others: respondent said their household was poorer as compared with others in community. Differences between this table and table 3 are due to the inclusion in this table of Murle respondents (n=15).

4.2 Outcome Variables

TABLE A10 Outcome data summary statistics

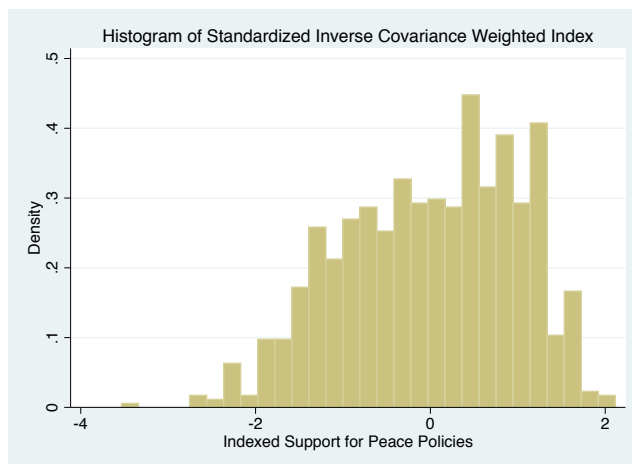
Variable	Mean	Std. Dev.	Min.	Max.	N
Standardized Inverse Covariance Weighted Mean Index	0.00	1.00	-3.53	2.12	894
Endorsement Question 1 (Division of Power Between Ethnic Groups)	3.87	1.07	1	5	896
Endorsement Question 2 (Bank of South Sudan Restructuring)	3.81	0.96	1	5	896
Endorsement Question 3 (Establishing Truth Commission)	3.66	1.05	1	5	895
Endorsement Question 4 (New Constitution)	3.68	1.06	1	5	895
Endorsement Question 5 (Joint Control of National Defense Forces)	3.45	1.2	1	5	896
Endorsement Question 6 (SPLM Failed to Democratize Power)	3.45	0.99	1	5	896

Note: Endorsement scale ranges from 1 (no support) to 5 (high support).

TABLE A11 Correlations

	Power sharing	National bank	Truth commission	New constitution	Armed forces	SPLM democratization
Power sharing	1.00	0.21	0.32	0.30	0.41	0.12
National bank	0.21	1.00	0.27	0.36	0.10	0.17
Truth commission	0.32	0.27	1.00	0.37	0.24	0.11
New constitution	0.30	0.36	0.37	1.00	0.23	0.17
Armed forces	0.41	0.10	0.24	0.23	1.00	0.01
SPLM democratization	0.12	0.17	0.11	0.17	0.01	1.00

FIGURE A5 Histogram of Index



5 Empirical Analysis

We present both point estimates of the mean levels of standardized indexed support by respondent ethnicity and treatment as well as between- and within-ethnic group regression analyses. In our between-group analyses, the primary dependent variable is standardized indexed support for peace policies, and the central explanatory variable is the interaction between a respondent’s ethnicity and their treatment assignment (SPLM or SPLM-IO, with the control group serving as baseline). Standard errors are clustered at the village level, and the wild bootstrap method (Cameron et al. 2008) is used to account for low numbers of clusters in regressions, which could otherwise lead to understatement of true standard errors. We estimate the specification:

$$Y_{iv} = \beta_0 + \beta_1 T_i + \beta_2 Eth_i + \beta_3 T_i Eth_i + \beta_4 \mathbf{x}_i + p_i + \epsilon_i \quad (1)$$

where Y_{iv} is standardized indexed support for peace policies for individual i in village v , T_i is a treatment indicator for individual i , Eth_i is the ethnicity of individual i , \mathbf{x}_i is a vector of individual-level covariates, p_i is region fixed effects, and ϵ_i is random error.

We also present within-group regression analyses, in particular to test the additional prediction of the *out-group hypothesis* that exposure to violence will moderate the out-group endorsement effect. The key explanatory term is the interaction between a respondent’s treatment assignment and a proxy for their exposure to violence by the out-group:

$$Y_{ive} = \alpha_0 + \alpha_1 T_i + \alpha_2 \mathbf{x}_i + \alpha_3 T_i \mathbf{x}_i + p_i + \epsilon_i \quad (2)$$

where Y_{ive} is the indexed support for peace policies for individual i in village v of ethnicity e , T_i is a treatment indicator for individual i , \mathbf{x}_i is a vector of individual-level covariates including proxies for exposure to violence, p_i is region fixed effects, and ϵ_i is random error.

6 Factor Analysis

Table A11 shows that our endorsement questions are correlated; are they measuring one or multiple distinct concepts? Of particular interest to us was whether the two endorsement questions for which security concerns are likely to be greatest, one on power sharing and the second on joint control of armed forces, load on the same or distinct factors from the other questions. We follow Ryan (2017)⁸ and report factor analyses using the principal factor method with oblique oblimin rotation, excluding loadings with absolute values lesser than .10.⁹

TABLE A12 Rotated Factor Loadings

	Factor1	Factor2
Power sharing	0.14	0.50
National bank	0.54	
Truth commission	0.37	0.23
New constitution	0.52	0.12
Armed forces		0.57
SPLM democratization	0.37	-0.14

Table A12 suggests that the endorsement questions are measuring two distinct concepts. In particular, the security questions load most heavily on factor 2, while the other questions load most heavily on factor 1. Our factor analysis thus lends some support to the idea that security questions might highlight a distinct concern in citizens' minds. At the same time, the results indicate that security concerns might not be the only driving force behind individuals' interpretations of leaders' peace deal endorsements. In tables A13-A15, we present analyses reported in the text independently with each factor as the dependent variable.

TABLE A13 Factor Analysis Replication of Tables 5 and A5

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dinka	Dinka	Nuer	Nuer	Shilluk	Shilluk	Luo	Luo
	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
Endorser: Dinka Pol/Party	0.10 (0.43)	0.01 (0.93)	-1.69* (0.00)	-1.27* (0.00)	-1.11* (0.00)	-1.03* (0.00)	-0.07 (0.49)	-0.15 (0.07)
Endorser: Nuer Pol/Party	-0.86* (0.00)	-0.81* (0.00)	-0.05 (0.34)	-0.11* (0.03)	-0.09* (0.00)	-0.01 (0.49)	-0.00 (1.00)	-0.09 (0.32)
Constant	-1.68* (0.00)	-1.08* (0.00)	0.79* (0.00)	1.02* (0.00)	0.93* (0.00)	1.07* (0.00)	-0.52* (0.00)	-0.43* (0.00)
Observations	256	256	234	234	59	59	328	328
R-squared	0.48	0.54	0.90	0.86	0.89	0.94	0.07	0.04

p-value in parentheses
* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. Dependent variables are one of the two factors on which the six endorsement questions loaded: factor 1 or factor 2; questions most clearly addressing security concerns loaded on factor 2. All regressions include village fixed effects.

⁸ Ryan, Timothy J. (2017). "No Compromise: Political Consequences of Moralized Attitudes." *American Journal of Political Science* 61: 409-423.

⁹ Using orthogonal rotations or the principal-component factor method results in similar substantive interpretations.

TABLE A14 Factor Analysis Replication of Table 6

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dinka	Dinka	Dinka	Dinka	Dinka	Dinka	Nuer	Nuer
	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
	Post-2013	Post-2013	Current	Current	IDP	IDP	IDP	IDP
Endorser: Dinka Pol/Party	0.03 (0.92)	0.12 (0.56)	-0.00 (0.97)	-0.07 (0.67)	0.09 (0.44)	0.01 (0.95)	-1.56* (0.00)	-1.14* (0.00)
Endorser: Nuer Pol/Party	-0.79* (0.01)	-0.64* (0.01)	-1.03* (0.00)	-0.97* (0.00)	-0.90* (0.00)	-0.84* (0.00)	-0.05 (0.55)	-0.07 (0.08)
ViolencePostDec	-0.07 (0.68)	0.03 (0.90)						
ViolencePostXXDinkaEnd	0.11 (0.72)	-0.15 (0.49)						
ViolencePostXXNuerEnd	-0.09 (0.73)	-0.24 (0.29)						
ViolenceCurr			-0.25 (0.12)	-0.22 (0.11)				
ViolenceCurrXXDinkaEnd			0.19 (0.42)	0.14 (0.57)				
ViolenceCurrXXNuerEnd			0.32 (0.25)	0.29 (0.22)				
EverIDP					-0.47 (0.25)	-0.28 (0.39)	0.02 (0.75)	0.06 (0.35)
IDPXXDinkaEnd					0.24 (0.49)	0.12 (0.57)	-0.20* (0.00)	-0.21* (0.02)
IDPXXNuerEnd					0.42 (0.36)	0.29 (0.40)	0.00 (1.00)	-0.07 (0.27)
Constant	0.88* (0.00)	1.03* (0.00)	1.06* (0.00)	1.28* (0.00)	-1.44* (0.00)	-0.92* (0.00)	0.78* (0.00)	0.99* (0.00)
Observations	255	255	255	255	256	256	234	234
R-squared	0.49	0.55	0.50	0.55	0.50	0.55	0.90	0.87

p-value in parentheses
* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. Dinka(Nuer) Endorser is a treatment indicator for whether a respondent was in a condition with a Dinka endorser (Nuer endorser). Dependent variables are one of the two factors on which the six endorsement questions loaded: factor 1 or factor 2. Endorsement questions most clearly addressing security concerns loaded on factor 2. All regressions include village fixed effects.

TABLE A15 Factor Analysis Replication of Table A7

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Luo	Luo	Luo	Luo	Luo	Luo	Shilluk	Shilluk
	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2	Factor 1	Factor 2
	Post-2013	Post-2013	Current	Current	IDP	IDP	IDP	IDP
Endorser: Dinka Pol/Party	0.11 (0.59)	-0.00 (0.95)	-0.02 (0.95)	-0.14 (0.42)	-0.04 (0.67)	-0.13 (0.26)	-1.08* (0.00)	-1.06* (0.00)
Endorser: Nuer Pol/Party	0.10 (0.55)	-0.03 (0.88)	0.03 (0.82)	-0.16 (0.38)	-0.05 (0.54)	-0.16 (0.22)	-0.10 (0.15)	-0.07 (0.54)
ViolencePostDec	0.11 (0.56)	0.03 (0.89)						
ViolencePostXXDinkaEnd	-0.25 (0.22)	-0.22 (0.20)						
ViolencePostXXNuerEnd	-0.14 (0.55)	-0.09 (0.69)						
ViolenceCurr			0.15 (0.41)	0.10 (0.46)				
ViolenceCurrXXDinkaEnd			-0.08 (0.74)	-0.02 (0.86)				
ViolenceCurrXXNuerEnd			-0.06 (0.76)	0.09 (0.68)				
EverIDP					0.07 (0.60)	-0.01 (0.87)	-0.02 (0.90)	-0.03 (0.81)
IDPXXDinkaEnd					-0.06 (0.58)	-0.06 (0.77)	-0.04 (0.73)	0.04 (0.66)
IDPXXNuerEnd					0.14 (0.38)	0.18 (0.33)	0.02 (0.91)	0.07 (0.534)
Constant	-0.47* (0.02)	-0.46 (0.06)	-0.32 (0.11)	-0.56* (0.01)	-0.54* (0.00)	-0.42* (0.00)	0.94* (0.00)	1.09* (0.00)
Observations	325	325	328	328	328	328	59	59
R-squared	0.07	0.05	0.08	0.05	0.08	0.05	0.89	0.94

p-value in parentheses
* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. Dinka(Nuer) Endorser is a treatment indicator for whether a respondent was in a condition with a Dinka endorser (Nuer endorser). Dependent variables are one of the two factors on which the six endorsement questions loaded: factor 1 or factor 2. Endorsement questions most clearly addressing security concerns loaded on factor 2. All regressions include village fixed effects.

7 Interpretation of Statistical (Non-) Significance

In the main text of the paper, we report a number of statistically non-significant findings. In particular, we find that in-group leader endorsements do not lead to a significant increase in individuals' support for peace policies. In what cases should we conclude that the true effect is zero? In this section, we take two approaches to gain clarity on how to best interpret non-significant findings: Bayesian estimation for two groups (Kruschke 2013) and minimum detectable effect size calculations. Although the main aim of this section is to improve interpretation of *non-significant* findings, the Bayesian estimation analysis in particular also sheds additional light on the credibility of our *significant* findings.

7.1 Bayesian Posterior Distributions

Figure A6 displays the posterior distributions of the difference in means in standardized indexed support for each comparison of interest (*control* versus *Dinka politician endorsement* and *control* versus *Nuer politician endorsement*) and for each ethnic group (Dinka, Nuer, Shilluk, and Luo). We use the **BEST** R package (Meredith and Kruschke 2018). For each comparison for each ethnic group, the program generates a *Markov chain Monte Carlo* of sample size 100,000. We end up with a large representative sample of credible parameter values from the posterior distribution (Kruschke 2013). We entered two priors, a mean of 0 and a standard deviation of 1, and set all other priors to their default values.¹⁰ We then generated histograms displaying the posterior distributions of the difference in means in standardized indexed support.¹¹

We draw attention to a few notable findings from the Bayesian estimation results. First, the means of credible values closely align with the mean differences reported in our analysis. Second, results indicate that there are credible differences in mean standardized index support for all of the comparisons that we report as significant in the paper. Zero is not included in the 95% interval of credible values for the negative out-group endorsement effect for Dinka and Nuer respondents, and for the Dinka politician endorsement effect for Shilluk respondents; for each of these comparisons, the posterior probability that the true difference in means between treatment and control is less than 0 is shown as 100%. These findings provide additional support for our significant findings reported in the paper.

How should we interpret our non-significant findings? We take two approaches, first looking at the 95% HDI and posterior probabilities, and second by defining and considering a region of practical equivalence (ROPE). The 95% HDI includes zero for all of the comparisons we report as non-significant in the paper: endorsements from both politicians for Luo respondents, a Nuer politician endorsement for Nuer and Shilluk respondents, and a Dinka endorsement for Dinka respondents. The posterior probabilities of a true difference are under 80% for all comparisons except for Shilluk and Nuer respondents, for whom the posterior probability that the true difference in means between treatment (Nuer politician endorsement) and control is less than zero is 95%. Consideration of HDIs thus indicate that results we report as non-significant in the paper should indeed be considered non-significant.

¹⁰ Setting all priors to default values does not alter interpretation of results.

¹¹See Kruschke (2013) and Meredith and Kruschke (2018) for more on the BEST package and the potential advantages of Bayesian estimation for two groups as compared with null hypothesis significance testing.

Posterior probabilities result in the same conclusions for most comparisons but indicate that an endorsement from a Nuer politician may result in a true decrease in indexed support for Shilluk and Nuer respondents.

Our second approach is to define a ROPE (Kruschke 2013). Values within the ROPE are deemed too insignificant in magnitude to be of practical import, and thus are viewed as negligibly different from the null value. Defining a ROPE is not an easy task for an index of support for peace policies. Rather than propose a ROPE of our own making, we follow Lakens (2014) and adopt a minimum effect size of interest as Cohen’s $d = 0.3$, meaning that our ROPE is between the interval $(-0.3, 0.3)$. Kruschke (2013) adopts the criterion that the null value should be accepted if 95% of the most credible values fall within the ROPE. According to this criterion, figure A6 indicates that the null value should be accepted for both endorsers for Luo respondents, and for the in-group endorsers for both Dinka and Nuer respondents. However, these findings depend on our definition of the ROPE, which may be overly stringent.¹²

7.2 Minimum Detectable Effects for Reported Results

In this section, we compute the minimum detectable effect (MDE) size at 80% power and with a significance level of $p < 0.05$ for the different comparisons we report in the paper. This exercise is particularly useful for the interpretation of non-significant findings in the paper; given the sample size, were we sufficiently powered to identify an effect size of interest at a significance level of $p < 0.05$? If so and we still did not identify an effect, then we can feel more confident concluding that there was no true effect. We again follow Lakens (2014) in defining our smallest effect size of interest (SESOI) as Cohen’s $d = 0.3$.

Although this method is not perfect – in particular, we run the risk of making a Type 2 error (concluding no effect where a true effect does exist) if the true effect size is smaller than the SESOI – it offers important advantages over alternatives, such as post-hoc power analyses, which provides no new information due to “the one-to-one relationship between p values and observed power” (Hoenig and Heisey 2001, p. 20). In addition, we make special effort to report confidence intervals, rather than p values, throughout the paper, and we supplement this analysis with the Bayesian estimation analysis above.

For each comparison, we calculate the MDE for a two independent sample means z -test by inputting the sample size for the test, the desired power (0.8), the alpha (0.05), and the control group mean and the standard deviations for the control and treatment groups.¹³ We use the **power** command in Stata for our calculations. In table A16, we display the sample sizes used to compute the MDEs shown in table A17.¹⁴

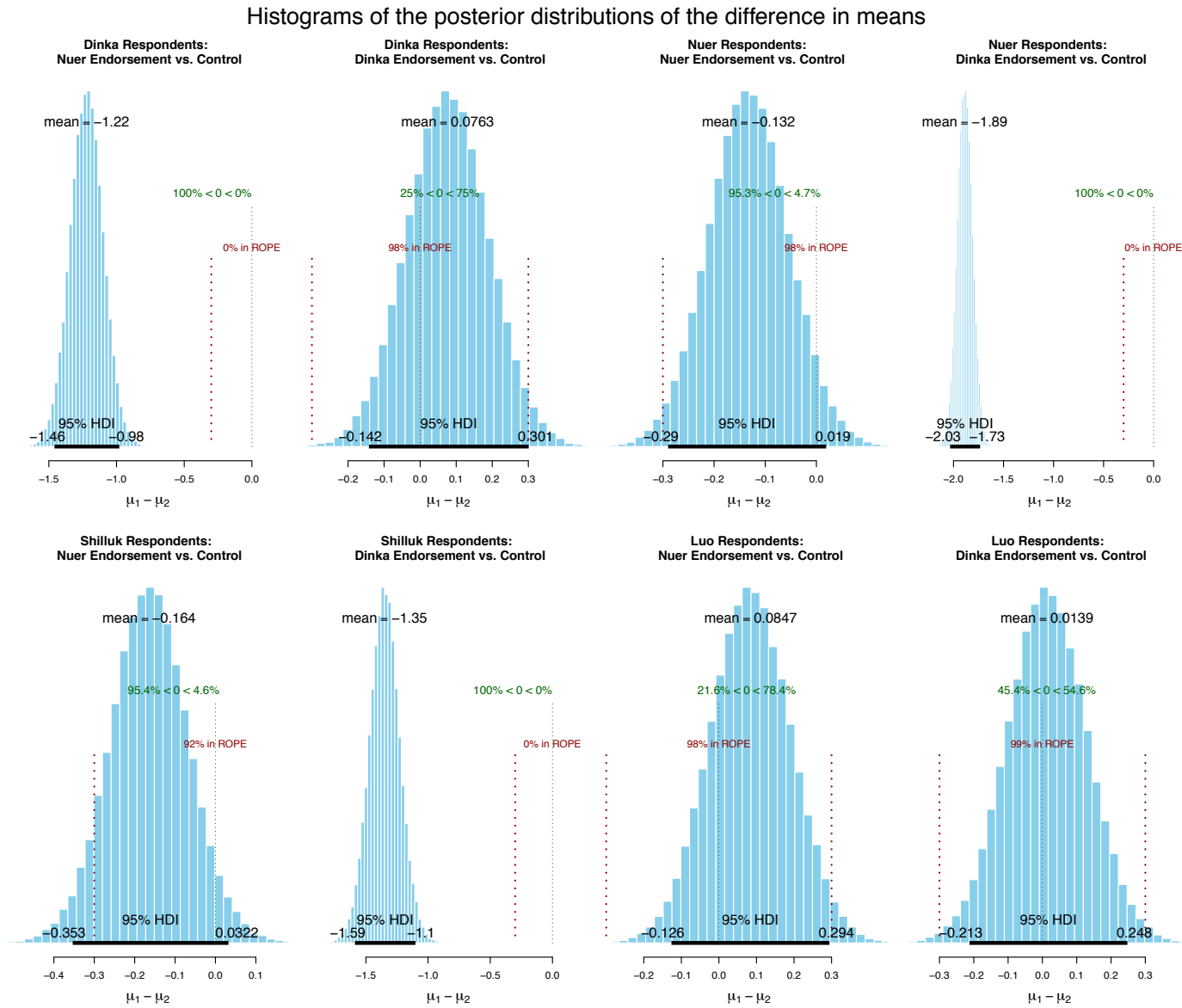
Table A17 displays the MDE as well as the observed effect size for each of the key comparisons reported in the paper. MDEs exceed 0.3 for three effects that we report as

¹² See for example Mvukiyeye and Samii (2017), who use the Anderson (2008) index presented in this paper, and Matanock, Diaz and Garcia-Sanchez (2018), who conduct an endorsement experiment on peace policies in Colombia.

¹³ If variances were not known, then the test would be referred to as a two-sample t test and the test statistic would have a t distribution under the null hypothesis, as opposed to a standard normal distribution. Specifications using a t distribution provide the same interpretation as given in this section.

¹⁴ We calculate MDEs using two-sided tests.

FIGURE A6 Posterior Distributions



This figure displays the posterior distributions of the difference in means. For each ethnic group (Dinka, Nuer, Shilluk, and Luo), we display the posterior distribution of the difference in mean standardized indexed support between each treatment group (Dinka politician endorsement or Nuer politician endorsement) and the control group. HDI = highest density interval; ROPE = region of practical equivalence, which we define as an effect size of 0.3 or greater (Lakens 2014). The HDI visualizes where the bulk of credible values lie and its range is marked with a black line: if 95% of credible values are greater (less) than zero, then we can conclude that the groups' means are credibly different (Kruschke 2013). Also displayed is the posterior probability that the true difference in means is greater (less) than zero. Kruschke (2013) suggests as a criterion for accepting the null value if 95% of the most credible values fall within the ROPE; accordingly, the percentage of credible values falling within the ROPE is also displayed.

TABLE A16 Comparison sample sizes

	N	A lot/great deal of post-2013 violence	None/little/moderate post-2013 violence	A lot/great deal of current violence	None/little/moderate current violence	Was Ever an IDP	Was Never an IDP
Dinka Respondents							
Control	86	57	29	46	40	10	76
Dinka Endorsement Treatment	86	61	25	40	46	14	72
Nuer Endorsement Treatment	85	59	25	50	34	14	71
Total	257	177	79	136	120	38	219
Nuer Respondents							
Control	78	78	0	78	0	51	27
Dinka Endorsement Treatment	77	77	0	75	2	50	27
Nuer Endorsement Treatment	79	79	0	77	2	53	26
Total	234	234	0	230	4	154	80
Total: Dinka and Nuer							
Control	164	135	29	124	40	61	103
Dinka Endorsement Treatment	163	138	25	115	48	64	99
Nuer Endorsement Treatment	164	138	25	127	36	67	97
Total	491	411	79	366	124	192	299
Shilluk Respondents							
Control	19	19	0	19	0	14	5
Dinka Endorsement Treatment	20	20	0	20	0	15	5
Nuer Endorsement Treatment	20	20	0	20	0	17	3
Total	59	59	0	59	0	46	13
Luo Respondents							
Control	110	79	30	71	39	51	59
Dinka Endorsement Treatment	110	75	33	74	36	40	70
Nuer Endorsement Treatment	110	77	33	73	37	41	69
Total	330	231	96	218	112	132	198
Total: All Respondents							
Control	299	238	59	218	81	130	169
Dinka Endorsement Treatment	299	239	58	215	84	125	174
Nuer Endorsement Treatment	299	240	58	225	73	128	171
Total	897	717	175	658	238	383	514

Total respondent calculations include 15 Murle respondents excluded from main analysis.

non-significant, indicating that we should feel more confident concluding that the true effect was zero. MDEs exceed 0.3 for both treatments for Luo respondents and for the Dinka endorsement treatment for Dinka respondents. MDEs are under 0.3 for the other non-significant effects we report in the paper, leaving open the possibility that there was a true effect of practical interest that we were nevertheless underpowered to observe. However, as noted in Section 7.1, a SESOI of 0.3 may be overly conservative for our study.

TABLE A17 Minimum Detectable Effect Sizes

	Dinka Respondents	Nuer Respondents	Shilluk Respondents	Luo Respondents
Control versus Dinka Endorser Treatment				
Minimum Detectable Effect (Δ)	0.32	0.21	0.31	0.32
Observed Effect (Δ)	0.07	1.89	1.34	0.00
N	171	155	39	218
Control versus Nuer Endorser Treatment				
Minimum Detectable Effect (Δ)	0.34	0.22	0.26	0.30
Observed Effect (Δ)	1.21	0.14	0.16	0.08
N	170	157	39	220

7.3 In Summary: Bayesian Estimation and MDE Analyses

We take away a few conclusions from our Bayesian estimation and MDE analyses. First, our Bayesian estimation results provide support for the findings that we report as statistically significant in the paper (negative out-group endorsement effects on Dinka and Nuer respondents, and a negative effect of a Dinka endorsement on Shilluk respondents). Second, we feel more comfortable concluding that the true effect of both endorsements on Luo respondents and of an in-group endorsement on Dinka respondents was zero. We find mixed support for different conclusions regarding the effects of Nuer politician endorsements on Shilluk and Nuer respondents. On the one hand, the posterior probability of a true negative effect of a Nuer politician endorsement exceeds 95% for both sets of respondents. On the other hand, the 95% HDI includes zero, our ROPE analysis for Nuer respondents suggests we should accept the null value, and our MDE analysis finds that we are not sufficiently powered to identify an effect size of 0.3. We thus do not find sufficient evidence to accept or reject the null hypothesis of no Nuer politician endorsement effect for Shilluk and Nuer respondents.

Additional Section References

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Kruschke, John K. (2013). “Bayesian estimation supersedes the t test.” *Journal of Experimental Psychology: General* 142(2): 573-603.

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8 Robustness Tests

8.1 Results Including Demographic Controls

TABLE A18 Robustness of Tables 5 and A5: Demographic Controls

DV: Standardized Support Index	(1)	(2)	(3)	(4)
	Dinka	Nuer	Shilluk	Luo
Endorser: Dinka Pol/Party	0.11 (0.47)	-1.89* (0.00)	-1.30* (0.00)	-0.01 (0.94)
Endorser: Nuer Pol/Party	-1.25* (0.00)	-0.13 (0.24)	-0.13 (0.24)	0.10 (0.24)
Constant	-1.17 (0.21)	2.28* (0.01)	0.55 (0.73)	-0.77 (0.56)
Observations	251	230	59	324
R-squared	0.52	0.84	0.84	0.09

p-value in parentheses
* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. Outcome is a standardized, inverse-covariance-weighted average of the six endorsement questions. All regressions include village fixed effects. Controls: age, village population, own and father's educational attainment, post-December 2013 and current exposure to violence, years lived in village, household size, relative economic status, ever IDP (internally displaced refugee).

TABLE A19 Robustness of Tables 6 and A7: Demographic Controls

DV: Standardized Support Index	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dinka Post-2013	Dinka Current	Dinka IDP	Nuer IDP	Luo Post-2013	Luo Current	Luo IDP	Shilluk IDP
Endorser: Dinka Pol/Party	-0.06 (0.87)	-0.03 (0.88)	0.11 (0.50)	-1.77* (0.00)	0.07 (0.71)	0.06 (0.84)	0.02 (0.91)	-1.11* (0.00)
Endorser: Nuer Pol/Party	-1.16* (0.01)	-1.49* (0.00)	-1.31* (0.00)	-0.16 (0.36)	0.02 (0.92)	0.40 (0.19)	0.01 (0.93)	-0.16 (0.60)
ViolencePostDec	-0.11 (0.626)				0.02 (0.86)			
ViolencePostXXDinkaEnd	0.12 (0.57)				-0.11 (0.55)			
ViolencePostXXNuerEnd	-0.13 (0.78)				0.12 (0.54)			
ViolenceCurr		-0.34* (0.03)				0.24 (0.27)		
ViolenceCurrXXDinkaEnd		0.27 (0.37)				-0.10 (0.71)		
ViolenceCurrXXNuerEnd		0.44 (0.14)				-0.43 (0.22)		
EverIDP			-0.64* (0.00)	0.05 (0.38)			0.14 (0.55)	-0.17 (0.51)
IDPXXDinkaEnd			0.20 (0.53)	-0.18* (0.04)			-0.09 (0.64)	-0.25 (0.49)
IDPXXNuerEnd			0.52* (0.02)	0.05 (0.73)			0.27 (0.23)	0.01 (0.87)
Constant	-1.56 (0.20)	-1.03 (0.30)	-1.31 (0.16)	2.22* (0.00)	-0.81 (0.48)	0.47 (0.85)	1.03 (0.59)	0.38 (0.74)
Observations	251	251	251	230	324	324	324	59
R-squared	0.52	0.53	0.52	0.84	0.09	0.09	0.09	0.85

p-value in parentheses
* p<0.05

Standard errors clustered at village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, accounts for low number of clusters. Regressions include village fixed effects. Controls: age, village population, own (father's) educational attainment, post-December 2013 and current exposure to violence, years lived in village, household size, relative economic status, ever IDP.

8.2 Results with State (or County) Fixed Effects

TABLE A20 Robustness of Tables 5 and 6: State Fixed Effects

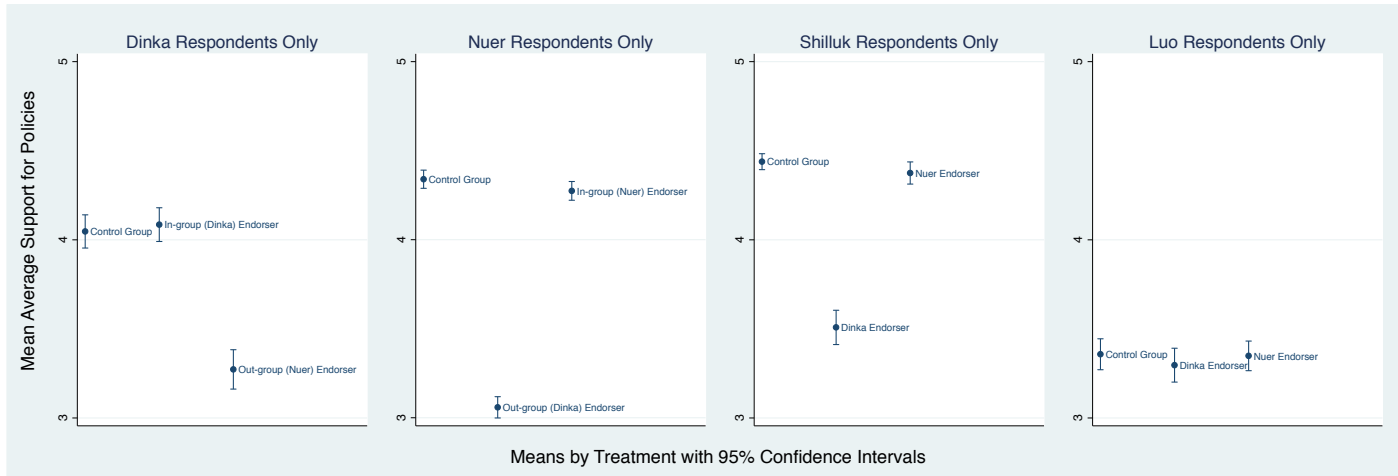
DV: Standardized Support Index	(1)	(2)	(3)	(4)	(5)	(6)
	Dinka	Nuer	Dinka Post-2013	Dinka Current	Dinka IDP	Nuer IDP
Endorser: Dinka Pol/Party	0.10 (0.54)	-1.90* (0.00)	-0.14 (0.67)	-0.02 (0.93)	0.09 (0.59)	-1.77* (0.00)
Endorser: Nuer Pol/Party	-1.21* (0.00)	-0.14 (0.10)	-1.17* (0.02)	-1.42* (0.00)	-1.27* (0.00)	-0.18 (0.22)
ViolencePostDec			-0.13 (0.41)			
ViolencePostXXDinkaEnd			0.35 (0.37)			
ViolencePostXXNuerEnd			-0.04 (0.91)			
ViolenceCurr				-0.28 (0.14)		
ViolenceCurrXXDinkaEnd				0.22 (0.42)		
ViolenceCurrXXNuerEnd				0.38 (0.22)		
EverIDP					-0.66 (0.11)	0.06 (0.27)
IDPXXDinkaEnd					0.34 (0.41)	-0.21* (0.04)
IDPXXNuerEnd					0.59 (0.13)	0.06 (0.70)
Constant	-1.58* (0.00)	1.14* (0.00)	1.44* (0.00)	1.59* (0.00)	1.97* (0.00)	1.11* (0.00)
Observations	256	234	255	255	256	234
R-squared	0.43	0.80	0.44	0.44	0.44	0.80

p-value in parentheses
* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. All regressions include state fixed effects; results are robust to using county fixed effects. Results are only shown for Dinka and Nuer respondents because Luo and Shilluk respondents are each from a single county and state.

8.3 Simple Mean Averages

FIGURE A7 Mean Support Levels by Treatment, Respondent Ethnicity



8.4 Enumerators

In this Section, we address the possibility of enumerator error. We do not find any evidence that such error is driving results. First, as shown in Appendix Section 1, there is pre-treatment balance across demographic covariates, which increases our confidence that there is no systematic enumerator error. Second, as we show in Appendix table A18, coefficients do not show much movement, no more than 0.05 standard deviations, once demographic controls are included. For enumerator error to affect our results, then, it would have to be the case that enumerator error explained results to a substantially greater degree than controlling for a battery of demographic variables, a prospect that we find unlikely. Third, we find that results are robust to the inclusion of enumerator fixed effects (see Table A21), as well as to dropping one enumerator at a time (results available upon request).

TABLE A21 Robustness of Table 5: Enumerator FE

DV: Standardized Support Index	(1)	(2)	(3)	(4)
	Dinka	Dinka	Nuer	Nuer
Endorser: Dinka Pol/Party	0.10 (0.53)	0.10 (0.54)	-1.90* (0.00)	-1.90* (0.00)
Endorser: Nuer Pol/Party	-1.21* (0.00)	-1.21* (0.00)	-0.15 (0.09)	-0.14 (0.10)
Constant	-1.57* (0.00)	-1.58* (0.00)	0.88* (0.00)	1.14* (0.00)
Observations	256	256	234	234
R-squared	0.46	0.43	0.83	0.80
FE	Village	Enumerator	Village	Enumerator

p-value in parentheses

* p<0.05

Standard errors clustered at the village level. Wild bootstrap method (Cameron et al. 2008), 1,000 replications, used to account for low number of clusters. Outcome is a standardized, inverse-covariance-weighted average of the six endorsement questions.

Fourth, we do not observe any signs in the data that would make us concerned that enumerators did a poor job. There is very little missing data (see Appendix table A22), and the data that is missing does not appear to follow any clear pattern: numbers are relatively consistent across covariates and they do not appear to be correlated with any enumerators or dates of collection. We do not find any evidence of satisficing: responses to endorsement and other questions do not appear to be clustered around any one answer for any enumerator, which might indicate that the enumerator was selecting the same option repeatedly instead of conducting the survey.

TABLE A22 Missingness

Covariates	# Non-Missing	# Missing
Gender	872	8
Age	880	0
Religion	874	6
post- December 2013 Violence	876	4
Current Violence	879	1
Ever IDP	880	0
Education	879	1
Father's Education	879	1
Wealth	878	2
Household Size	877	3
Own Cell Phone	864	16
Years in Current Village	874	6

9 Extant Literature

TABLE A23 Studies on Elite Endorsements and Persuasion

Paper	Location	Conflict	Identity	Outcome/Policy Area	Endorser(s)	In-Group Effect	Out-Group Effect	Neutral Effect	Method
Abramowitz (1978)*†	USA	No	Party	Unemployment	Carter (Dem), Ford (Rep)	Unclear: either pos (in) or neg (out)	(in) or neg (out)	-	Observational
Arceneaux and Kolodny (2009)	USA	No	Party	Candidate Preference	Liberal Advocacy Group	None	Negative	None	Field Exp
Blair et al. (2013)	Pakistan	Low	-	Vaccines, Border	Militant Organizations	-	-	Negative (Mixed)	Survey Exp
Brader and Tucker (2012)	Britain, EU	No	Party	Taxes, Education	Political Parties	Positive (Mixed)	-	-	Survey Exp
Broockman and Butler (2017)	USA	No	-	Drugs, Immigration	Dem State Legislators	-	-	Positive	Field Exp
Bullock (2011)†	USA	No	Party	Healthcare	Dem and Rep Legislators	Unclear: either pos (in) or neg (out)	(in) or neg (out)	-	Survey Exp
Coan et al. (2008)	USA	No	Party	Abortion, Spending	Rep, Green, Reform Parties	Positive	Mixed	-	Lab Exp
Lenz (2009)*†	Britain, USA	No	Party	EU, Spending	Britain/U.S. Parties	Unclear: either pos (in) or neg (out)	(in) or neg (out)	-	Observational
Lupia (1994)*	USA	No	-	Insurance Reform	Insurance, Lawyers, Consumers	None	Negative	-	Observational
Lyall, Blair and Imai (2013)	Afghanistan	Yes	Nation	Prisons, Corruption	ISAF and Taliban	Mixed	Negative	-	Survey Exp
Matanoek and Garcia-Sanchez (2017)*†	Colombia	Post	Party	Peace Settlement	Ex-President Uribe	Unclear: either pos (in) or neg (out)	(in) or neg (out)	-	Observational
Matanoek, Diaz, Garcia-Sanchez (2018)	Colombia	Post	Party	Peace Settlement	Santos, Uribe, Academics	Positive (Mixed)	Negative (Mixed)	Positive (Mixed)	Survey Exp
Matanoek and Garibras-Diaz (2018)	Colombia	Post	-	Peace Provisions	FARC (Rebel Group)	-	Negative	-	Survey Exp
Minozzi et al. (2015)*	USA	No	Party	Immigration, Torture	Dem/Rep Congress	Positive	Positive	Positive	Field Exp
Nicholson (2012)	USA	No	Party	Housing, Immigration	Obama, McCain/Bush	None	Negative	-	Survey Exp

* indicates that the study does not allow for disentangling of effect of source cue from persuasive messaging.

† indicates that endorsers were bundled in treatment, making it difficult to identify if movement toward preferred candidate's position was attributable to positive in-group effect or negative out-group effect.

Notes: Blair et al. (2013) and Broockman and Butler (2017) do not identify certain respondents as sharing or not sharing a group identity with the endorser and thus effects are categorized under “neutral”. As noted in the main text, Blair et al. (2013) and Lyall, Blair and Imai (2013) offer a different interpretation of endorsements as reflecting support for the endorser, not for the policy. “Negative” and “positive” effects do not refer to the direction of the effect on support for policies, but whether respondents’ policies moved in the direction of the endorser (positive) or moved in the opposite direction (negative). Listed outcomes/policy areas are meant to be representative of those chosen in a given study, but are often not exhaustive. Dem (Rep) indicates Democratic (Republican) Party, and Exp is short for Experiment.

Additional References:

- Abramowitz, Alan I. 1978. “The Impact of a Presidential Debate on Voter Rationality.” *American Journal of Political Science* 22(3):680-690.
- Bullock, John G. 2011. “Elite Influence on Public Opinion in an Informed Electorate.” *The American Political Science Review* 105(3):496-515.
- Lenz, Gabriel S. 2009. “Learning and Opinion Change, Not Priming: Reconsidering the Priming Hypothesis.” *American Journal of Political Science* 53(4):821-837.