

## 6 Individual Peace

---

### Experimental Tests on Beliefs about Cooperation

I trust the UN because it is ready to help us without a second thought.  
23-year-old Mandé man from Segou  
Author interview, February 20, 2016

France supports the Tuareg because they are as white as them.  
25-year-old Mandé man from rural Bamako  
Author interview, March 2, 2016

I prefer the UN over France because its job is to manage conflicts around the world.  
27-year-old Mandé man from Kayes  
Author interview, February 21, 2016.

This chapter presents the motivation, design, and results of experimental tests of how UN peacekeepers shape the prospects of communal peace.<sup>1</sup> Chapter 3 outlined my localized peace enforcement theory, which posits that local perceptions of international actor bias shape peacekeepers' capacity to promote peace by influencing domestic beliefs about the risks of intergroup cooperation. Chapter 5 offered some preliminary qualitative evidence from a case study of Mali. However, observational analysis can sometimes introduce omitted variable bias; in this case, it could mean that an unmeasured (omitted) variable may be influencing the success of peacekeeping operations (PKOs) *and* the deployment of peacekeepers perceived as impartial. As a result, we cannot isolate the effect of impartial peacekeepers from all potential omitted variables. In general, it is difficult to identify the causal effect of peacekeeping using only observational data because patrols typically deploy to areas with limited prospects for intergroup cooperation to begin with. We cannot separate the effect of international patrols from the characteristics of these locations, such as whether they have a history of hostile intergroup interactions.

In this chapter, I tackle these empirical challenges head on. I test observable implications of my theory at the individual level of analysis by examining the relationship between the presence of peacekeepers

<sup>1</sup> This chapter draws in part on work published in *The Journal of Politics* (Nomikos 2022).

from different international actors and individuals' willingness to cooperate across social groups. In February and March 2016, I conducted a lab-in-the-field experiment in a controlled environment to directly observe individual behavior in a conflict setting and make causal inferences about the central mechanism underpinning my theory. The experiment was designed to elicit cooperative behavior from non-Tuareg Malians toward Tuareg partners. This approach represents an effective alternative empirical approach because it allows us to observe actual cooperative behavior without introducing additional factors that may bolster or undermine cooperation.

To measure willingness to cooperate, I recruited 512 Malians from rural neighborhoods of the capital, Bamako, to play a version of what behavioral economists call a trust game. The game instructed participants to send money to an anonymous partner from a different ethnic group. I randomly assigned participants to either the control group or one of two treatment groups; those in the treatment groups were told that two patrolling officers (from either the UN or France) would punish any low partner contributions with a fine. To identify the effect of peacekeeping, I compare the amount that participants sent in the control versus treatment groups. I also test additional observable implications of my main hypotheses by evaluating whether participants from some social groups displayed a greater willingness to cooperate (i.e., send more money) with a UN patrol than those from other groups.

The findings provide empirical support for the theoretical micro-foundations I presented in Chapter 3. The lab-in-the-field experiment illustrates that some, but not all, types of peacekeeping have a strong, positive effect on local residents' willingness to cooperate in a conflict setting. Whereas the UN treatment increased participants' willingness to cooperate relative to the control group, the France treatment had no substantive or statistically significant effect. I find that UN peacekeeping is especially effective among individuals who have few other reasons to cooperate – those with low social trust, little contact with members of other ethnic groups, and low trust in formal governance institutions. I also present evidence that the UN is more effective in the lab among individuals who have had previous interactions with peacekeepers outside of the lab than among those who have not. Follow-up interviews confirmed that the idea that the UN is impartial is the most important channel through which the UN increases individuals' willingness to cooperate.

To further test my theory's individual-level implications, I also conducted a survey experiment in July–December 2017. The survey presented respondents with a vignette describing a typical communal dispute over land that occurs frequently all over Mali. Respondents were then randomly assigned to a control group, UN treatment group, or

French treatment group. Respondents in the control group received no further information. Those in the UN and French treatment groups were told that two peacekeepers from the UN or France, respectively, discovered the communal dispute. After presenting respondents with the vignette and treatment, I asked them how likely they thought it was that violence would break out. I find that assignment to the UN treatment group – but not the French treatment group – reduced the likelihood that respondents said a communal dispute would escalate. To probe the plausibility of localized peace enforcement theory specifically, I conclude the survey with specific questions about individuals' perceptions of peacekeepers.

The survey experiment provides further micro-level evidence of the proposed mechanism that perceptions of bias shape the likelihood that a peacekeeper will succeed. While the lab experiment is well suited to identifying and testing the mechanism under controlled circumstances, it raises the potential concern that the findings are not generalizable outside the lab. However, the survey experiment allows me to vary the conditions under which a dispute breaks out, permitting a direct comparison of the various mechanisms hypothesized to explain what makes a dispute likely to turn violent. Finally, the survey allows me to measure broad outcomes related to perceptions rather than behavior alone. Specifically, the findings from the survey experiment indicate that Malians in a dispute will expect UN peacekeepers to prevent communal violence, and that those who encounter UN peacekeepers feel incentivized to find peaceful solutions. In line with the theory's expectations, UN peacekeepers change beliefs about the likelihood that a dispute between members of different social groups living in the same community will become violent.

I begin the chapter by reviewing the observable implications from localized peace enforcement theory at the individual level. I then discuss the results of each experiment in turn.

### **Observable Implications from Localized Peace Enforcement Theory at the Individual Level**

In Chapter 3 I introduced my localized peace enforcement theory and deduced three sets of hypotheses at different levels of analysis from that framework. The hypotheses imply that we should observe certain patterns of behavior at the individual as well as community levels of analysis. In this chapter, I focus on the individual level. I use the lab experiment to test Hypothesis 1a and Hypotheses 2a–c and the survey experiment to test Hypothesis 1b. In this section, I review each hypothesis and outline the individual-level observable implications of the theoretical framework for peacekeeping in Mali. Especially important to the framework is the

idea that Malians from dominant groups tend to perceive UN peacekeepers as relatively impartial in disputes with minority ethnic groups, and to perceive French peacekeepers as relatively biased, particularly in favor of the Tuareg minority. We should expect to observe these individual-level behaviors if the theoretical micro-foundations of localized peace enforcement theory are sound. If we do, this should give us the confidence to test Hypotheses 1a–b and 2a–c, which were derived from those theoretical micro-foundations.

Hypothesis 1a states that impartial PKOs cause individuals in disputes to positively update their belief that others will reciprocate their attempts to cooperate. As applied to Mali, the presence of impartial peacekeepers makes Malians more likely to expect others to reciprocate cooperation. By contrast, biased peacekeepers do not change expectations at all, since Malians believe biased foreigners will do anything to help their favored group. We should therefore observe that Malians expect members of other social groups to be more willing to cooperate in the presence of impartial peacekeepers relative to biased peacekeepers. Hypothesis 1b states that impartial PKOs shape civilians' beliefs about whether others will resort to violence. It predicts that peacekeepers make civilians less likely to believe that parties will resolve a communal dispute with violence. Again, biased peacekeepers do not change beliefs, since Malians believe biased foreigners will do anything to help their favored group.

Hypotheses 2a–c focus on how impartial peacekeepers shape disputants' willingness to cooperate. Applied to Mali, UN peacekeepers increase individuals' willingness to cooperate across social groups relative to no peacekeepers (H2a). These implications follow from the argument that impartial peacekeepers will be able to credibly signal their commitment to enforce cooperation from all parties, regardless of their background. The UN is able to do so because Malians perceive the broader international organization as relatively impartial: They do not think UN peacekeepers favor members of any domestic groups. By contrast, French peacekeepers do *not* increase individuals' willingness to cooperate across social groups. As Chapter 5 described, Malians perceive the French as biased in favor of members of the Tuareg ethnic group due to French favoritism during the colonial period. French air strikes and other indiscriminate violence during the military intervention in 2013 and in later operations have worsened Malian attitudes toward the French.

Relatedly, the theory implies that UN peacekeeping will be most effective when baseline levels of intergroup and social trust are low (H2b). Under these conditions, enforcement is needed the most since members of different social groups will have little reason to trust each other

enough to cooperate. Moreover, if an individual trusts a potential partner enough, external retribution for uncooperative behavior might not be necessary since they believe the partner will reciprocate any attempts to cooperate. Peacekeepers are unlikely to have a significant effect on such interactions. In sum, UN peacekeepers increase Malians' willingness to cooperate with members of other groups more among individuals with low levels of trust than among those with high levels of trust.

Finally, I posit that the more individuals interact with peacekeepers, the more likely they are to trust their enforcement commitment and to believe that any potential interactions with members of other groups will be policed (H2c). Although there is limited data on interactions between civilians and peacekeepers, past research suggests that UN bases may increase economic activity (Mvukiyehe and Samii 2010) and that UN peacekeeping patrols may strengthen perceptions of state authority (Blair 2019). Prominent critiques argue that UN peacekeepers should interact *more* with local populations (Autesserre 2015). Prior work has demonstrated that international peacekeepers can build fruitful relationships with local populations through increased contact and communication (Gordon and Young 2017; Bove, Ruffa and Ruggeri 2020). Put otherwise, my theory predicts that UN peacekeepers increase Malians' willingness to cooperate with members of other groups more among individuals with whom they have frequent contact than among those with whom they have infrequent contact.

### **Lab-in-the-Field Experiment**

I test these implications using a lab-in-the-field experiment implemented in Mali in February–March 2016 (see Chapter 4 for a description of the research design). I begin by presenting the lab protocol and the structure of the game. I then present the main results of the experiment before discussing the implications of the findings for my theory as well as alternative explanations.

#### *Lab Protocol*

The protocol of the game was as follows:

1. Enumerators gave participants 1,000 West African francs (FCFA) in an envelope (equivalent to the average daily wage, approximately \$1.72), some of which they were tasked to donate ( $y$  in Figure 6.1).
2. Enumerators showed each participant a picture of their partner in the game – a Tuareg man – and told them his name and ethnicity to make sure they understood they were interacting with someone from the

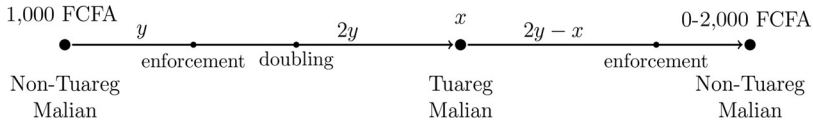


Figure 6.1 The structure of the game

Tuareg ethnic group. Although participants thought their partner was human, I preprogrammed the Tuareg partner's behavior in advance.

3. Participants were randomly assigned to one of three groups: No enforcement (control), UN peacekeeping, or French enforcement.
4. Enumerators told the participants that the study organizers would double the amount they chose to give their partner, meaning the partner would receive (and have the choice to share with them) a maximum of 2,000 FCFA ( $2y$ ).
5. Participants were told the Tuareg partner would choose to keep 0–2,000 FCFA for themselves ( $x$ ) and send back only the remainder ( $2y - x$ ).
6. Enumerators explained to participants in the treatment groups that two peacekeepers in another room in the building would look at both contributions and assess a fine of 500 FCFA if they considered either amount to be low.
7. Enumerators left the participants alone in cubicles to decide how much to send.
8. Enumerators returned to collect the envelope and the game ended.

The principal outcome of interest in the lab experiment is the amount (out of 1,000 FCFA) the non-Tuareg Malian participant decided to send to her Tuareg partner: Higher amounts indicate a greater willingness to cooperate across group boundaries. The initial doubling of the amount that participants send provides a material incentive to cooperate. Although altruistic motivations likely factored into the decision-making calculus of some participants, randomization ensures that these motives are balanced across treatment groups. However, the willingness to send that amount depends on whether participants believe the Tuareg partner will reciprocate their efforts, making cooperation worth their while. The presence of third-party enforcement affects beliefs about the partner's willingness to participate. Comparing how much participants sent in the treatment groups versus the control group allows me to quantify, in a controlled environment, the degree to which peacekeepers increase individuals' willingness to cooperate.

Balance tests do not indicate any failures in the randomization procedure. One exception is that participants assigned to the French treatment

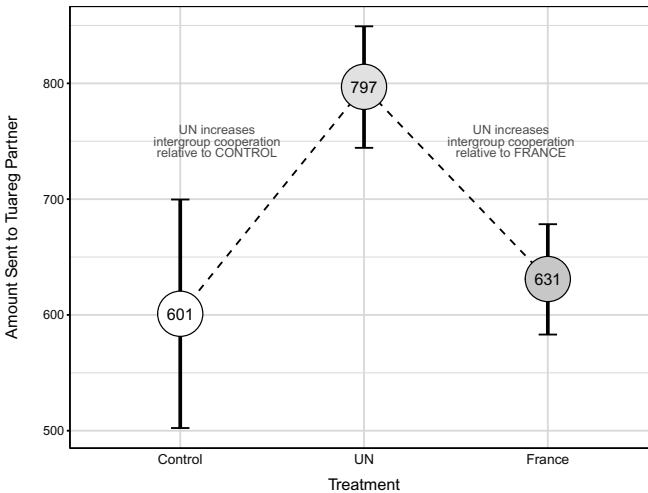


Figure 6.2 UN treatment increases willingness to cooperate

group said they come into contact with UN patrols more frequently than those in the UN treatment group. Adjusting for this imbalance does not affect the main results.

### Results

I estimate the treatment effects using an ordinary least squares estimator given by  $Y_i = \beta_0 + \beta_j Z_{i,j} + \alpha_n + \alpha_e + \epsilon_i$ , where  $Y_i$  is the amount sent by the non-Tuareg Malian participant  $i$  to their Tuareg partner and  $Z_{i,j}$  indexes the  $j$  treatment groups (with control as the reference group). Randomization occurred at the cluster level, where the cluster was the enumerator day. For this reason, I use robust cluster standard errors, which allows the error terms within clusters to be related while assuming that those from different clusters are independent (Angrist and Pischke 2008; Samii and Aronow 2012). To recuperate the efficiency losses created by clustering and the inability to block randomize the treatments, I estimate the average treatment effect with neighborhood ( $\alpha_n$ ) and enumerator ( $\alpha_e$ ) fixed effects. This estimation strategy generates a conservative, theory-based improvement in precision without needing to include further covariates or alternative model specifications that may introduce bias due to overfitting (Gerber and Green 2012).

Figure 6.2 displays the main results. The numbers in circles indicate the estimated amount sent to the Tuareg participants in each of the three treatment conditions (control, UN peacekeeping, and French

enforcement). Participants assigned to the control group sent an average of 601 FCFA (about 60 percent of their initial endowments) to their Tuareg partners, demonstrating a high level of baseline generosity. Those assigned to the UN peacekeeping group sent 797 FCFA (almost 80 percent) to their Tuareg partners – an increase of 196 FCFA (33 percent) compared to the control group and 166 FCFA (26 percent) compared to the French treatment group; both are substantively and statistically significant. Participants in the French treatment group sent 631 FCFA to their partners, which corresponds to an increase of 30 FCFA or 5 percent compared to the control; this difference is not statistically distinguishable from zero.

The main results are in line with the primary observable implications of the main hypothesis. First, in line with Hypothesis 2a, UN peacekeeping increases individuals' willingness to cooperate relative to the control group. Second, French enforcement does *not* increase participants' willingness to cooperate relative to the control group, which provides additional support for the hypothesis. Combined, these results suggest that local-level peacekeeping by the UN – but not France – increases the willingness of non-Tuareg Malians to cooperate with Tuareg Malians. These findings should increase our confidence in the micro-foundations of localized peace enforcement theory.

The lab-in-the-field experiment indirectly measures the mechanism underlying the theory, which argues that non-Tuareg Malians hold beliefs about how international actors, namely France and the UN, will punish Tuareg who do not reciprocate their cooperation. To directly test the proposed mechanism, also summarized in Hypothesis 1a, I asked each participant after they had decided how much to send to their partner – but before telling them how much their partner had sent back – to predict how much their Tuareg partner had sent back to them. According to the theoretical mechanisms underlying the main hypotheses, individuals perceive French enforcement as biased in favor of the Tuareg. As a result, they would expect Tuareg Malians to cooperate less under French enforcement. Thus, subjects in the French enforcement condition should expect their Tuareg partners to return less than those who received UN enforcement since they would not believe French soldiers would punish low contributions by the Tuareg.

The results demonstrate that subjects indeed believe the Tuareg partners will send back less under French enforcement compared to UN enforcement. Their expectations aligned with the predictions of the main mechanism underlying my theory. When assigned to French enforcement, respondents predicted that their Tuareg partner would return an average of 452 FCFA. However, those assigned to UN enforcement predicted that their Tuareg partner would return an average of 556 FCFA,



Table 6.1 *Measures of social and institutional trust*

Question	Low Trust	High Trust
How many Tuareg Malians do you think share the opinions of [separatist] groups like the MNLA?	“About half” OR “More than half” OR “Almost all”	“Only a few” OR “Less than half”
How many Tuareg Malians do you think discriminate against other Malians?	“About half” OR “More than half” OR “Almost all”	“Only a few” OR “Less than half”
Do you know any Malian Tuareg that you would consider a close personal friend?	“No”	“Yes”
How do you feel about politicians in the national government?	“I don’t really trust them”	“I trust them a lot” OR “I trust them a little”

a difference of 104 FCFA or about 20 percent ( $p = 0.0518$ ). To explore the possibility that respondents believed the Tuareg would send more in the UN condition simply because they had sent more in the UN condition themselves, as a robustness check I looked at how much subjects believed the Tuareg Malians sent back *as a proportion of what was available to them*. That is, if the non-Tuareg participant sent 500 and believed the Tuareg partner would send back 250, the subject believed the Tuareg would send back 25 percent of the 1,000 that was available to him. Subjects in the French treatment condition believed the Tuareg sent back, on average, 42 percent of the amount available to them. Subjects in the UN treatment condition believed the Tuareg sent back 51 percent of the available amount, a substantively and statistically significant difference ( $p = 0.069$ ).

*Heterogenous Treatment Effects: Trust and Contact* Next, I examine the evidence in favor of Hypothesis 2b – that peacekeeping will have a greater effect on individuals with lower levels of baseline trust. To test this, I evaluate participants’ responses to four pretreatment questions that measure social and institutional trust. For each of the four measures, I group all low-trust participants into one category and all high-trust participants into another (see Table 6.1). Because levels of trust are not randomly assigned, I adjust for observable imbalances between high- and low-trust groups.

Across all groups, the UN treatment increases the willingness to cooperate for low- (but not high-) trust individuals, which supports this

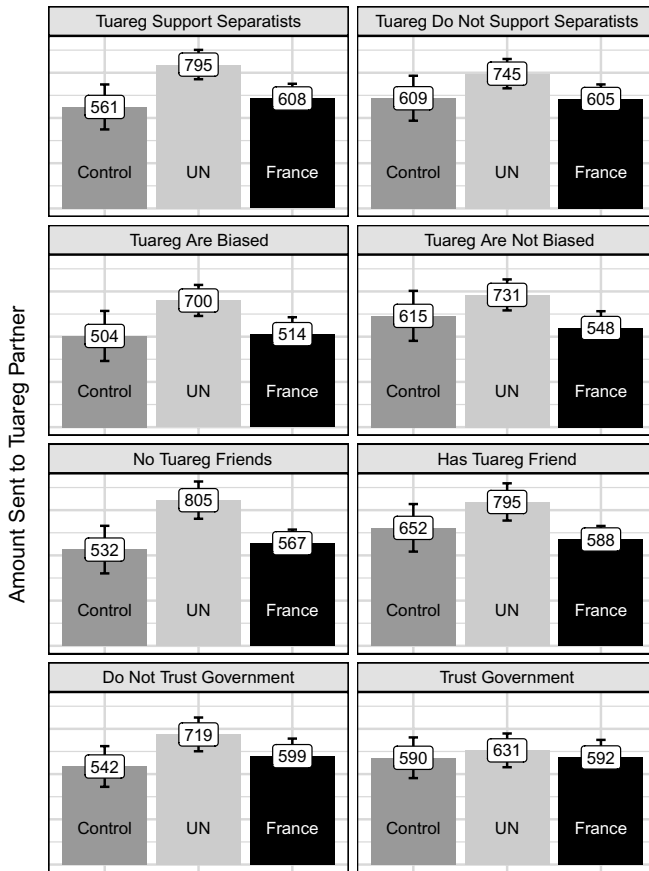


Figure 6.3 UN treatment increases willingness to cooperate for low-trust individuals

hypothesis. The French treatment effect is statistically indistinguishable from zero across subgroups. To illustrate the differences in effects between low- and high-trust groups, Figure 6.3 depicts the estimated amount participants sent to their non-Tuareg partners in each treatment condition (low-trust groups on the left and high-trust groups on the right). For example, among those who believe that the majority of Tuareg support separatist groups (the first set of panels), participants assigned to the UN peacekeeping treatment sent 795 out of 1,000 FCFA to their Tuareg partners. This represents an increase of 234 FCFA or 42 percent compared to the control group. However, among individuals who believe that most Tuareg do not support separatist groups, there is

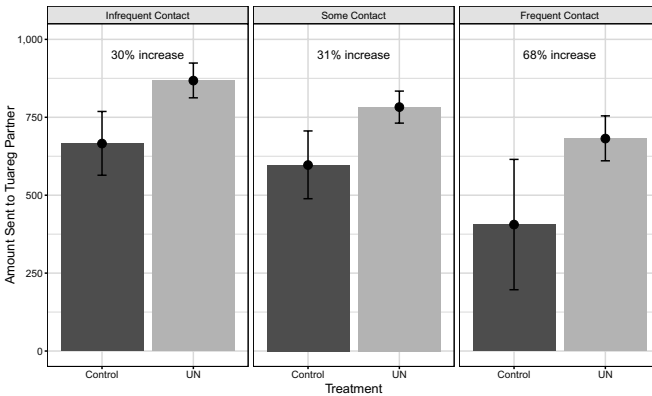


Figure 6.4 Amount sent to Tuareg partner, by treatment and contact with UN

no statistically significant difference in the amounts sent in each treatment group. These results suggest that the effectiveness of peacekeeping is localized to individuals with little trust in other groups and institutions. The results of this set of tests support what we would expect according to Hypothesis 2b.

Finally, I examine Hypothesis 2c – that contact with peacekeepers will make individuals more likely to trust their enforcement capacity and commitment. Figure 6.4 displays the amount sent to the Tuareg partner as a function of the quantity and quality of participants’ self-reported contact with UN peacekeepers, which I divide into three categories: frequent (regularly see or speak to peacekeepers), some contact (occasionally see peacekeepers but do not speak to them), or infrequent contact (do not regularly see or speak to peacekeepers). Because contact with the UN is not randomly assigned, I adjust for observable imbalances between contact groups.

The results support Hypothesis 2c. Participants assigned to the UN treatment group are more willing to cooperate than those assigned to the control group in all three categories. The absolute magnitude of the UN treatment effect does not appear to be correlated with the degree of individual contact with UN peacekeepers. However, UN peacekeeping increases average contributions by 68 percent relative to the control group for individuals in frequent contact with the UN, compared to 30 percent for those with infrequent contact and 31 percent for those with some contact, which is in line with what the theory would expect. The difference in relative magnitude is due to the fact that individuals in frequent contact with the UN send less, on average, to Tuareg partners

in the control group, suggesting that these individuals are the least likely to want to cooperate with members of other ethnic groups in the first place.

*Alternative Explanations and Robustness Checks*

The experiment controls for all factors that are not associated with the change in the identity of the peacekeeper from French to UN. Thus, we can be confident that the difference in the level of willingness to cooperate is due to the change in the peacekeeper's identity. However, respondents may have certain prior beliefs about each international actor. How do we know these prior beliefs are about bias and not one of the other mechanisms? Namely, do respondents have views that shape how much they choose to cooperate with their Tuareg partner that do *not* relate to bias? In this section, I evaluate two possible ways in addition to my theoretical framework in which prior views could shape the outcomes I present here.

First, views about peacekeepers' capacity are unlikely to explain the observed differences in the lab experiment. As I outlined in Chapter 3, the central challenge associated with cooperation in conflict and postconflict settings is that disputing parties have an incentive to escalate rather than cooperate because there is typically no third-party enforcement to prevent violent escalation. Thus, as long as peacekeepers have sufficient capacity to enforce peaceful resolutions to communal disputes, they can help disputing parties overcome this challenge. On this basis we should expect peacekeepers from France and the UN to have similar effects on participants' willingness to cooperate in the experiment since both have sufficient capacity in Mali. The experiment's design further ensures that capacity can account for the difference in the size of the treatment effects between France and the UN. For example, one concern is that participants might believe the UN is better suited to mobilize local resources to punish communal violence. Indeed, Malians might believe that French soldiers, stationed in remote areas of the state, will not actually punish them. But the experiment controls for the peacekeepers' capacity by keeping constant across treatments the number of peacekeepers/soldiers (two), the distance from the individual ("in this building"), and their enforcement capability (imposing an identical fine). For similar reasons, participants are unlikely to believe the two types of peacekeepers have different levels of resolve. Scholars have conjectured that concerns about the resolve of international peacekeepers are related to whether they have enough local capacity to enforce the resolution of a dispute (Ruggeri, Gizelis and Dorussen 2013). In the lab experiment, the French and UN peacekeepers are present in equal numbers.

Second, it is also unlikely that beliefs about the information available to peacekeepers account for the main findings reported in this chapter. Scholars in the mediation literature have suggested that international actors can provide ethnic groups with information relevant to cooperation, and that their ability to do so may vary depending on whether they are perceived to be biased or not (Kydd 2003; Rauchhaus 2006; Savun 2008). Yet it is not clear that informational asymmetries are the key barrier to local-level intergroup cooperation. International peacekeepers do not generally give individuals information about the resolve or capabilities of other individuals with whom they seek to interact or trade. Nonetheless, it is plausible that participants believe the UN is somehow providing more credible information than France to non-Tuareg Malians in this experiment (Beber 2012). However, the wording of the treatment allowed me to control for the provision of information. Specifically, the treatments do not provide different types of information about the game, the Tuareg partner, or the peacekeepers enforcing intergroup cooperation. Nor do they provide any information about the Tuareg partner's resolve or capabilities. This allows me to control for the possibility that the treatment effects are due in part to new information arising from the treatments.

#### *Discussion: Implications for the Theory*

I find robust evidence in line with all the observable implications of the hypotheses, which should increase our confidence in the broader theoretical framework. However, none of the evidence directly speaks to the core foundation of my theory, namely that colonial legacies, multilateralism, and the use of force explain why residents of post-conflict settings would perceive international actors in different ways and behave accordingly. To more accurately assess this element of the theory, I interviewed each participant of the lab experiment following the game.

The interviews demonstrate how domestic perceptions of international actors due to (a lack of) colonial legacies, multilateral action, and the (non)use of force manifest in individual motivations. Some participants contrasted the UN with a colonial intervener. For example, a 22-year-old male participant said he preferred the UN to France because "it did not colonize Mali and therefore will not target any interests" (Participant DI6). Others referenced the multinational nature of UN PKOs as a consideration. Another 22-year-old man, who was assigned to the UN treatment and sent his Tuareg partner 750 FCFA, said he preferred the UN "because it's an international institution specifically created to maintain peace" (Participant CF12). When asked whether he

considered the UN to be impartial and why, a 35-year-old male participant said he believes the UN is impartial because it is “supporting Mali, its role is to create an area of peace, dialogue, and reconciliation, and it’s doing the job well” (Participant BE21).

The interviews also provide further evidence that bias drove the results. For example, a 28-year-old man assigned to the French treatment said he did not think France is impartial because “it helps the Tuareg” (Participant AE20). He sent only 400 FCFA to his Tuareg partner. Some highlighted French alliances with Tuareg armed groups as a sign of persistent French bias. A 28-year-old man assigned to the French treatment who sent 450 FCFA doubted that France was impartial because “it supports the Tuareg rebels” (Participant CH10). A 51-year-old man assigned to the French treatment who sent the Tuareg 500 FCFA gave the same reason for not trusting France to manage the Malian crisis: “France supports the Tuareg rebels” (Participant AG15). Another participant, a 26-year-old man also assigned to the French treatment, identified French support of the Tuareg armed group Ansar Dine as a cause for concern (Participant DH13). He sent his partner only 350 FCFA.

### Survey Experiment

I further tested the theory using a survey experiment I implemented in July–December 2017 (Chapter 4 describes the sampling and research design). The survey began with a set of basic demographic questions and baseline questions about international actors that were identical for all respondents. Next, all respondents were presented with a vignette describing a typical communal dispute of the sort that occurs on an almost daily basis all over the country. Respondents were randomly assigned to either the control group or one of two treatment groups. Participants in the control group received no further information. Those in the UN treatment group were told that two UN peacekeepers in the area discovered the dispute between the two families. Those in the French treatment group were told that two French peacekeepers came across the dispute. After presenting respondents with the vignette and treatment, I asked them how likely they thought it was that violence would break out. Respondents could answer on a 5-point scale, but for ease of interpretation I recoded the outcome as a binary variable that codes “very likely” and “likely” as 1 and all other responses as 0.

### *Main Results*

In line with the expectations of Hypothesis 1b, the survey experiment strongly suggests that Malians in a dispute will expect UN peacekeepers to prevent communal violence, and that those who encounter UN

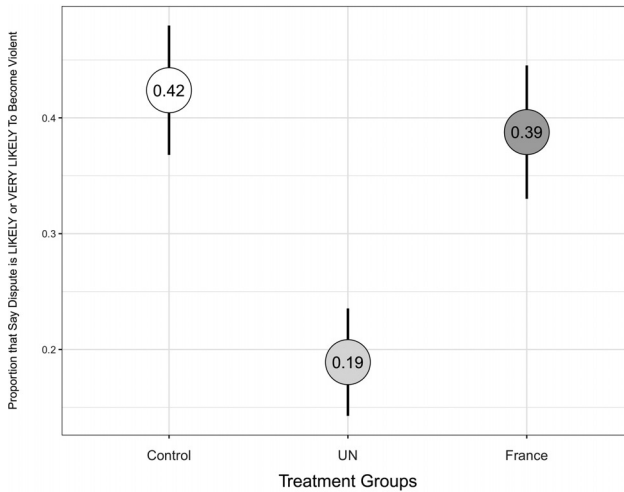


Figure 6.5 Assignment to UN treatment reduces the likelihood that respondents will predict that the dispute will escalate

Note: Points indicate means. Lines represent 95 percent confidence intervals. A total of 305 respondents were assigned to control, 282 to the French treatment group and 287 to the UN treatment group.

peacekeepers feel incentivized to find peaceful solutions – as localized peace enforcement theory predicts. It also implies that they do not expect French troops to be as effective.

Figure 6.5 visualizes the main results. The points indicate the mean proportion of respondents that said the communal dispute in the vignette was likely or very likely to become violent. More than two-fifths of those in the control group (0.42) believed it would become violent, which suggests how volatile Malians perceive communal disputes to be. A similar proportion of respondents assigned to the French treatment group predicted the dispute would become violent (0.39); the difference from the control group is not statistically significant at conventional levels. However, the proportion of respondents that was told UN peacekeepers discovered the dispute who thought violence was likely was less than half that of the control group (0.19). This 0.23 difference is statistically significant at the 95 percent level. The figure thus illustrates that UN (but not French) peacekeepers make respondents think a dispute is less likely to become violent.

#### *Discussion: Investigating the Mechanisms*

As localized peace enforcement theory predicts, the results so far demonstrate that the presence of UN (but not French) peacekeepers makes

Maliens believe a dispute is less likely to escalate. Thus, perceptions of peacekeepers’ bias (or lack thereof) appear to shape their ability to prevent disputes from escalating. I now examine this argument in closer detail.

To investigate perceptions of peacekeepers in greater depth, I asked respondents in the second round of the survey a series of questions about the characteristics of UN peacekeepers and French soldiers. I chose these characteristics based on the proposed mechanism of localized peace enforcement theory, which involves perceptions of bias, and the two dominant alternative sets of explanations, which relate to capacity and information. I also included questions about peacekeeper characteristics that prior research suggests may be salient (Karim and Beardsley 2017; Bove, Ruffa and Ruggeri 2020). Figure 6.6 illustrates the mean proportion of respondents that said a given characteristic applies to either French or UN peacekeepers.

The results suggest that perceptions that the UN is impartial is the key driver of UN peacekeepers’ ability to prevent communal conflicts from escalating. The only statistically and substantively significant difference across all characteristics is the proportion of respondents that said UN peacekeepers or French soldiers “do not favor any ethnic group.” Whereas nearly 80 percent of respondents perceived UN peacekeepers as impartial, fewer than 40 percent said the same about French soldiers.

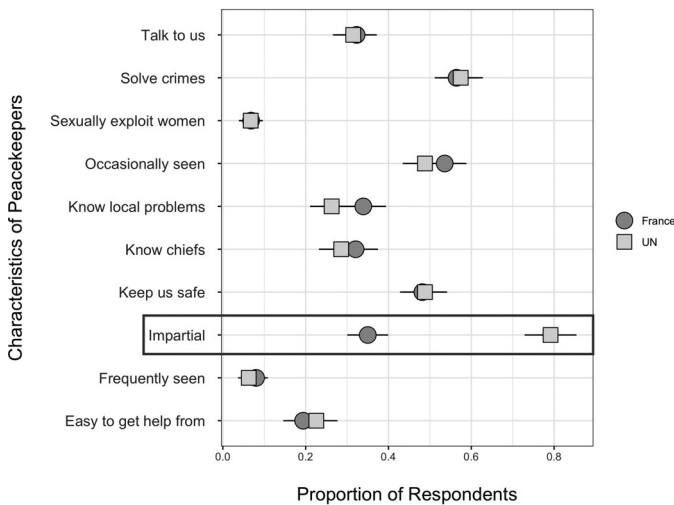


Figure 6.6 Perceptions of UN peacekeepers vs. French soldiers in Central Mali  
 Note: Points indicate means. Lines represent 95 percent confidence intervals.



The results also indicate that nearly half of the respondents see peacekeepers patrolling and about a quarter have conversations with them, which supports arguments that contact with populations helps international actors resolve local disputes (Blair 2020). This pattern also aligns with the finding from the lab experiment that UN peacekeepers are especially effective among individuals with whom they have had more contact. However, the survey does not indicate that peacekeepers, especially those from the UN, have any specific localized knowledge. Less than a third of respondents said that peacekeepers knew about their specific local disputes or had formed relationships with their traditional leaders.

Not all reported perceptions were positive: 7 percent of respondents said UN peacekeepers had sexually exploited women in their village, and the same percentage claimed French troops had done so. These numbers are highly concerning; they also suggest that social desirability bias is not driving the results in favor of the UN. In addition, they might at least partly explain why 19 percent of those in the UN peacekeeping treatment group thought violence would break out *even in the presence of the UN*. Respondents who believe UN peacekeepers sexually exploit women will likely have a harder time believing they will help peacefully resolve a communal dispute (Karim and Beardsley 2017).

According to localized peace enforcement theory, perceptions that the UN is impartial mediate its ability to contain local-level disputes. To further investigate the plausibility of this mechanism, I added questions at the end of the survey to assess whether respondents believed the UN or France favored any particular ethnic group. I constructed a new variable, IMPARTIAL, that takes a value of 1 if a respondent said they did not perceive the international actor in their vignette as favoring a certain group, and 0 otherwise. I also code the variable UN\_TREATMENT as 1 if a respondent received the UN treatment and 0 if they received the French treatment. I omit respondents in the control group because their vignette did not feature the presence of an international actor.

The regression results also demonstrate that perceptions of impartiality are associated with a lower likelihood of dispute escalation. Model 3 in Table 6.2 reproduces the results displayed in Figure 6.5: UN peacekeepers decrease the likelihood that an individual will predict a dispute to escalate by nearly 20 percent relative to French peacekeepers. This effect is robust to including the measure of impartiality (see Model 4). However, the magnitude of the UN peacekeeping effect drops to 14 percent. In addition, the regression results suggest that individuals who perceive the peacekeeping patrol as impartial are 12.5 percent less likely to say a dispute will escalate compared to those who say peacekeepers are not impartial. The fact that the magnitude of the association decreases when

Table 6.2 *Perceptions of impartiality mediate international actors' ability to contain disputes*

	Perception as Impartial		Dispute Likely to Escalate	
	(1)	(2)	(3)	(4)
UN_TREATMENT	0.239*** (0.044)	0.300*** (0.050)	-0.199*** (0.038)	-0.139*** (0.051)
IMPARTIAL				-0.125** (0.050)
Controls	No	Yes	No	Yes
Observations	493	377	551	377

Note: Coefficient estimates from ordinary least squares regression models with standard errors in parentheses. \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$

perceptions of impartiality are included suggests that these perceptions drive at least part of the effect of UN peacekeeping patrols.

Next, I investigate whether my proposed mechanism – perception of the UN as impartial – accounts for the observed difference in effect size between UN and French peacekeeping. Although the above discussion suggests that impartiality mediates at least part of the effect of the UN treatment, it is not clear how large this mediated effect is. To calculate the magnitude of the mediated effect, I employ a nonparametric causal mediation model developed by Imai et al. (2011) for use with the `MEDIATION` package in R.

While the treatment was randomly assigned, the mediator (impartiality) was not. Thus for the estimates in the following analysis to be valid, two conditions must be met as part of what is called the sequential ignorability assumption. First, the analysis must be adjusted for all pre-treatment confounders that might be associated with both impartiality (the mediator) and the outbreak of violence (the outcome). Although I cannot be sure that I have included all potential confounders, since there are always likely to be some unobservable variables present that introduce bias, I include a series of demographic covariates to alleviate this concern.

The second condition is that there should be no posttreatment confounders – that is, there should be no causal relationship between impartiality and other mediators. And indeed, there is no reason to expect that perceptions of impartiality would cause other mediators or vice versa. That is, it is unlikely that assignment to the UN treatment group has a causal relationship with a variable that shifts perceptions of

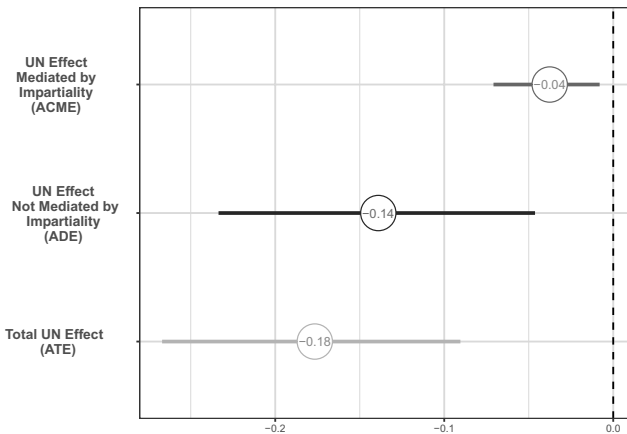


Figure 6.7 Estimated size of the UN treatment effect, by mediator  
 Note: Decrease in predicted probability of dispute escalation (95 percent confidence intervals).

impartiality through another mechanism that also changes beliefs about whether a communal dispute will become violent. As Figure 6.6 illustrates, assignment to the UN treatment does not shift beliefs about any other characteristic of the international intervener.

The causal mediation model decomposes the average treatment effect (ATE) into two components: (1) the average causal mediation effect (ACME), the part of the ATE that is caused by the proposed mediator (impartiality in this case), and (2) the average direct effect (ADE), the remaining part of the ATE effect size, which is attributed to other potential causes.

I find that the respondents believe the UN presence decreases the likelihood of dispute escalation because locals perceive it to be impartial. That is, perceptions of UN impartiality drive a significant part of the ATE. Figure 6.7 displays the total estimated UN effect (the ATE) at the bottom. It shows that assignment to the UN peacekeeping patrol treatment decreases the proportion of respondents that say disputes will become violent by 0.18 relative to assignment to the French patrol treatment.<sup>2</sup> The figure displays the magnitude of the effect that can be attributed to the proposed mediator (ACME) at the top: 0.04 of the 0.18 UN effect is due to perceptions that the UN is impartial – a substantively and statistically significant effect. Perceptions of the UN as impartial account for nearly one-quarter of its predicted effectiveness on

<sup>2</sup> I use the results from Models 2 and 4 in Table 6.2 to derive the ACME, ADE, and ATE, which is why the UN effect size is slightly different than in other models. I construct a 95 percent quasi-Bayesian confidence interval derived from 1,000 simulations.

their own. All other differences between France and the UN *combined* account for the remaining three-quarters of the estimated difference in effect magnitude.

### Conclusion

My localized peace enforcement theory presents a straightforward decision framework in which an individual's willingness to cooperate in the short term is a function of their beliefs about whether or not others will reciprocate their attempts to cooperate. I argue that peacekeepers shape these beliefs in systematic ways. In particular, the presence of peacekeeping patrols makes individuals believe the risks of engagement are lower and that members of out-groups are more likely to reciprocate their attempts to cooperate. This mechanism explains why residents of postconflict settings are more willing to cooperate across group boundaries when international peacekeepers are present.

In this chapter, I present evidence from a preregistered lab-in-the-field experiment in Mali that is in line with this argument. I find that participants send more of their initial salary to partners when assigned to a treatment in which they are told that UN peacekeepers will punish any low contributions compared to both a no-peacekeeper control and an identical French enforcement treatment. The results indicate that the UN is particularly effective among participants with low levels of trust. Evidence from the experiment and interviews following the experiment further suggest that beliefs that the UN is more impartial than France drive perceptions that UN peacekeepers are more effective.

I provided further evidence to support the observable implications of the theory using a survey experiment administered to 874 Malians in 8 neighborhoods of the capital city of Bamako and 12 villages in central Mali. Consistent with my theory, I find that including the presence of UN peacekeeping patrols in a vignette about a communal dispute between two families from different ethnic groups reduces the proportion of Malian respondents that say violence will break out by more than half. A detailed questionnaire following the experiment and a formal mediation analysis underscore that perceptions of the UN as impartial account for a substantial part of this effect. In line with the theory's expectations, impartial peacekeepers change beliefs about the likelihood that a dispute between members of different social groups living in the same community will become violent. Biased peacekeepers do not affect these expectations.

Although the analysis offered in this chapter should increase our confidence in the micro-foundations of the theory at the individual level, we still cannot determine whether the ability of UN peacekeepers to

increase individuals' willingness to cooperate across group boundaries has a broader effect on peace. As I indicate in this chapter, individuals' willingness to cooperate lays the micro-level foundation for peace from the bottom up. Chapter 7 further extends these findings to the national level. It draws upon original data on peacekeeping deployments and communal violence in Mali to show that UN peacekeepers do prevent the onset of communal violence. The chapter also demonstrates that there is substantial variation within UN PKOs: It shows that domestic populations perceive peacekeepers from some troop-contributing countries as more impartial than others.