



## Who Hosts?

# The Correlates of Hosting the Internally Displaced

Leonid Peisakhin<sup>1</sup>, Nik Stoop<sup>2</sup>, and Peter van der Windt<sup>1</sup>

HiCN Working Paper 412

May 2024

### Abstract

Tens of millions of individuals are displaced due to violence, and most are hosted by other households in their home countries. We ask what motivates people to host the forcibly displaced. We are interested in whether empathy increases the willingness to host but also consider alternative explanations. To explore the correlates of hosting we collected survey data from 1,504 households in the Democratic Republic of the Congo, fielded in-depth interviews, and implemented an experiment. We employ a novel strategy to measure hosting behavior, where household characteristics are measured prior to the arrival of displaced persons. We find that households with higher empathy are more likely to host in the ten-month period following the survey. There is no evidence that ethnicity, religiosity or wealth affect hosting behavior. Results from the experiment suggest that it is difficult to increase hosting propensity in the longer term (4+ months) through simple interventions.

### Keywords

Civil War, Displacement, Hosting, Experiment, Democratic Republic of Congo

### JEL Classification

D74, O15, C93, C83

### Acknowledgments

We thank Han Il Chang, Jean-Francois Maystadt, Melina Platas, six anonymous reviewers and seminar participants at Antwerp University, GLAC, NYU-AD, and EGAP for comments. Thanks to Emmanuel Kandate, Antoine Ciza, Ruilin Lai, RISD, and the late Jean Paul Zibika. This study was pre-registered (<https://osf.io/8q7kc> and <https://osf.io/zs3jb>); deviations can be found in Appendix I.

---

<sup>1</sup> New York University - Abu Dhabi

<sup>2</sup> Corresponding author, University of Antwerp, Research Foundation Flanders, [nik.stoop@uantwerp.be](mailto:nik.stoop@uantwerp.be).

## Introduction

At the end of 2022, 108 million people were living in forced displacement, having abandoned their homes due to violence or natural calamities (UNHCR 2023). The internally displaced persons (IDPs) – those who seek shelter within their countries' borders – made up 71 million of this total; the highest number ever recorded (IDMC 2023a). More than two-thirds of all IDPs live in just ten countries, with Syria, Afghanistan, the Democratic Republic of the Congo (DRC), Ukraine, and Colombia among the worst affected. The scale of the internal displacement problem is large, and it has been growing in recent years.

Our aim in this study is to advance the understanding of why people volunteer to host the internally displaced. Following the recent psychological turn in this literature, we are especially interested in whether higher empathy might be correlated with a greater willingness to host. We also consider alternative explanations, given that hosting can be conceptualized not only as altruistic behavior but also as a type of cooperation if there is an expectation of reciprocity through, for example, labor or future offer of shelter.<sup>1</sup> Thus, we also consider the role of co-ethnicity, links to local authority figures, the wealth of the hosting family, security concerns, and religiosity of the potential hosts in informing hosting decisions.<sup>2</sup> The emphasis on empathy and consideration of the alternative factors were pre-registered as hypotheses.<sup>3</sup>

The study took place in the context of internal displacement in the Democratic Republic of the Congo. The DRC has been experiencing prolonged conflict and is currently home to the third largest population of IDPs globally, with 5.7 million people – about 6% of the population – seeking refuge from violence within the country's borders (IDMC 2023b). In a methodological advance on the existing literature, we measured the characteristics of potential hosting households before

---

<sup>1</sup> The expectation being that those who think that they will benefit economically from hosting, by, for example, having IDPs work for free in their field, will be more willing to host.

<sup>2</sup> We do not consider political preferences as a factor because, in our context, partisanship largely follows regional lines, and we have no meaningful variation on this by design. The Congolese political landscape is also highly fragmented with over 400 registered parties, and partisanship is less meaningful than in an established two-party system.

<sup>3</sup> The pre-analysis plans are available at <https://osf.io/8q7kc> and <https://osf.io/zs3jb>. Deviations can be found in Appendix I.

the arrival of IDPs. To do this, in 2019, we identified a research site in eastern DRC that was likely to receive an influx of displaced people in subsequent months and set out to survey all dwellings in 15 villages in that region. This allowed us to avoid the common trap of ex post rationalization of hosting decisions. Also, unlike most other studies in this literature, we measured empathy directly, modifying an empathy scale from psychology (Newman et al. 2015; Chatruc and Rozo 2021). In another innovation, we measured hosting behavior not through self-reports of hosting or stated willingness to do so but through verifiable village chiefs' reports. These reports covered a ten-month period after the initial survey. We believe our measure to be considerably more reliable than self-reporting, which is subject to a strong social desirability bias. Over the ten-month period, 24% of the 1,504 households surveyed started hosting IDPs. The majority of incoming IDPs are of the same ethnicity as most potential hosts, but there is much variation on ethnicity, both within the hosting villages and among the displaced.

The scholarly understanding of the multi-faceted problem of forced displacement remains limited. Much of the existing literature focuses on the causes of flight and the logic of where the displaced go. Early cross-national work argued that people flee conflict as the threat of violence increases (Moore and Shellman 2004). Other studies have shown that the displaced are more likely to stay within their country's borders if neighboring countries are poor and undemocratic (Moore and Shellman 2006). Another important strand of the literature argues that the arrival of the forcibly displaced imports conflict into host communities by exacerbating ethnic and sectarian tensions, increasing competition over scarce jobs, or bringing weapons into the community (Salehyan and Gleditsch 2006; Salehyan 2008; Tumen 2016). More recently, scholars have observed that while the short-term impact of the arrival of displaced persons might be net negative, in the long-term, the displaced can have a positive impact on local economies through the expansion of trade links, an increase in local human capital, and the influx of humanitarian assistance (Maystadt et al. 2019; Verme and Schuettler 2021; Zhou and Shaver 2021; World Bank 2022).

Where the literature falls short is in addressing a fundamental question with regards to the dynamics of forced displacement, namely, in answering which factors explain the willingness of potential hosts to open their doors to the displaced and, from a policy perspective, in explaining how to encourage more hosting. This is particularly important among the internally displaced

because the vast majority of IDPs are accommodated not in refugee camps, but in host communities, among other co-nationals (UN 2021). Having people stay within their own countries and in local communities, once forcibly displaced, might be desirable because this form of displacement minimizes the trauma of uprootedness.

In recent years, several pioneering studies have examined the correlates of attitudes and helping behaviors vis-a-vis the forcibly displaced in host societies. In the context of refugees from Côte d'Ivoire fleeing to Liberia, Hartman and Morse (2018) found that those in hosting communities who themselves had experienced violence are more likely to open their doors to the displaced. They dubbed this the “empathy born of violence” hypothesis, and found additional supporting evidence for it in the context of Syrian IDPs being sheltered by other Syrians (Hartman, Morse, and Weber 2021). However, in a study among Lebanese hosts of Syrian refugees, Ghosn, Braithwaite, and Chu (2019) uncovered no evidence that prior experience of violence increases positive predisposition toward the displaced. Thus, the specific pathway to more hosting remains in contention in this nascent literature.

Scholars have also studied attitudes toward refugees in Western societies. While most of this work focuses on relatively low-stake outcomes – like expressions of willingness to help and contributions in behavioral games – the findings do suggest that empathy might be one of the primary determinants of helping behavior (Bansak, Hainmueller, and Hangartner 2016; Adida, Lo, and Platas 2018; Williamson et al. 2020).<sup>4</sup> However, a minority of the forcibly displaced are refugees, and only a fraction of these aim to and succeed in reaching Europe or the United States. Furthermore, the act of hosting strangers in one’s home is an extreme form of altruism or cooperation – it can be disruptive or even dangerous if guests prove violent or dishonest – and is therefore a different type of behavior from charitable contributions or support for petitions and requires scholarly attention in its own right.

In this study, linking pre-displacement characteristics of potential hosts to subsequent hosting behavior in the DRC, we find that empathy is the most important correlate of the willingness to

---

<sup>4</sup> Humanitarian concerns have also been shown to dominate economic considerations in determining attitudes toward Syrian refugees in Jordan (Alrababa’h et al. 2021).

open one's doors to the displaced. There is a 20 percentage-point difference in the likelihood of hosting between the most and least empathic respondent in our sample. In exploring the correlates of empathy, we find limited support for the idea that experience of past violence makes individuals more empathetic, consistent with the empathy born of suffering hypothesis. Other factors that matter in explaining hosting decisions are security considerations – households headed by men are more likely to open their doors – and connection to authority figures, whereby those related to the village chief are more likely to accommodate IDPs. The effect magnitudes for these variables, however, are considerably smaller than for empathy. Contrary to existing work on other types of altruistic and cooperative giving, ethnicity, wealth, religiosity, and expectations of strategic benefits from IDPs are not correlated with hosting decisions.

To better understand the mechanism by which IDPs are matched with hosting families and to contextualize the findings, we conducted semi-structured interviews with five village chiefs and 150 randomly selected households in a random subset of five study villages. The interviews clarified that, in seeking shelter, IDPs approach household heads more or less at random, and that there is no formal matching process; the village head is informed of the newly arrived IDPs, but does not himself arrange hosting. The interviews also confirm that empathy was the main reason for hosting, whereas ethnicity did not play an important role.

From a policy perspective, it is important not only to understand the correlates of hosting but also to learn how to encourage people to host more. To get at this we designed an experiment where we primed cognitive empathy through a perspective-taking exercise, encouraging respondents to imagine what it would be like to be displaced by asking them where they would go and what they would take with them if forced to leave home (modeled after Adida, Lo, and Platas 2018). To contextualize the importance of empathy relative to other factors we also separately primed religiosity and obedience to authority. Those randomized into the religious appeal intervention were visited by a community religious leader and reminded that it is a moral duty to help people in need. In the authority appeal, participants were visited by a local authority figure, the village chief, who stressed the importance of assisting potential IDPs who might arrive. To also test the importance of ethnicity to hosting decisions we implemented the experiment as a factorial design, whereby a random half of respondents were primed that the incoming IDPs would likely be of

their own ethnic group, and others were told that the displaced would likely be of a different ethnicity.

Findings from the experiment suggest that it might be difficult to increase the willingness to host in the longer-term. We found that neither the perspective-taking exercise nor the appeals to religion or authority affected hosting behavior relative to an untreated control in a setting where, on average, four months passed between the appeals being administered and the arrival of the displaced. This finding confirms the intuition from existing work on assistance to refugees in the U.S. that the effect of perspective-taking interventions might be short-lived (Adida, Lo, and Platas 2018).

In terms of this paper's contributions, we are the first to measure the potential correlates of hosting before the arrival of the displaced, thus reducing the bias associated with the ex post rationalization of hosting decisions, and to measure hosting behavior in a way that minimizes misreporting due to social desirability bias. While our findings highlight the importance of empathy to extreme acts of helping like hosting, we are skeptical about policy makers' ability to increase empathy levels in the population in the longer term using simple interventions. Given that the literature on refugee assistance in developed economies has already hinted at the relevance of empathy to helping decisions, we expect our findings to apply to the dynamics of refugee hosting in Western countries as well. It is a subject for future research how much empathy might affect other helping behaviors, including in everyday interactions outside of the context of assistance toward the forcibly displaced. Our findings also shed light on the ongoing debate whether past experience of violence results in pro-social behavior through post-traumatic growth (Blattman 2009) or parochial altruism in response to trauma (Bauer et al. 2014). The findings suggest that particularly empathetic individuals might reconceptualize who counts as an in-group member away from shared ethnicity toward shared victimhood.

## **Literature and Hypotheses**

The role of empathy in explaining hosting is of particular theoretical interest in this study, and something that we pre-registered as the primary correlate of hosting. Psychologists have long

argued that there is a “giving type,” a person who is more empathetic and therefore more likely to engage in altruistic behavior (Hoffman 2000; Batson 2002), and noted that empathy reduces prejudice in interactions across ethnic and other group lines (Stephan and Finlay 1999; Batson et al. 2002). This is because in empathizing with the suffering other, the affected individual develops an appreciation for how unjustly their interlocutor has been treated, and this reduces prejudice toward the other and enhances the desire to help. When the same emotions are shared by members of different groups, a bond of commonality might form between them. Consistent with common ingroup identity theory we might expect that a new supraordinate identity would emerge between the person helping and the one who is receiving assistance (Gaertner and Dovidio 2000).

Early studies on attitudes toward the displaced, primarily on refugees from developing countries in developed states, found that empathy is an important predictor of positive attitudes toward those in need. Newman et al. (2015) noted that respondents with high levels of empathy are less supportive of restrictive immigration policies. Bansak, Hainmueller, and Hangartner (2016) argued that Europeans are heavily motivated by humanitarian concerns, as they are most likely to accept vulnerable asylum seekers fleeing persecution. Subsequent studies have focused more on the cognitive dimension of empathy. The literature in psychology suggests that empathy has a cognitive and an affective component (Eisenberg, Fabes, and Spinrad 2007). Whereas affective empathy is about a person feeling the same emotions as their interlocutor, cognitive empathy concerns an ability to understand what the other person is feeling without necessarily experiencing the same emotion. Studies have sought to prime the cognitive dimension of empathy through perspective-taking exercises by encouraging respondents to imagine refugees’ thoughts and feelings and by presenting participants with personal narratives of the displaced. Such exercises have been found to engender inclusionary behavior toward the displaced, heighten support for more liberal immigration policies and reduce prejudice (Adida, Lo, and Platas 2018; Simonovits, Kézdi, and Kardos 2018; Audette, Horowitz, and Michelitch 2020; Williamson et al. 2020; Alan et al. 2021; Chatruc and Rozo 2021).

It remains an open question whether an extreme form of helping like hosting strangers in one’s home in the Global South is subject to the same set of determinants as less costly types of refugee assistance in Western countries. Encouragingly, the little work that exists on the correlates of

hosting the forcibly displaced also attributes an important role to empathy. In their study in Syria, Hartman, Morse, and Weber (2021) hypothesize that empathy is an important correlate of hosting, although they do not measure empathy directly. Hartman and co-authors argue that empathy is triggered by past experience of violence, and that it is those who had suffered violence who are most likely to host (see, similarly, Hartman and Morse 2018).<sup>5</sup> The empathy born of violence hypothesis is challenged by Ghosn, Braithwaite, and Chu (2019), who in their study on the correlates of assistance toward Syrian refugees in Lebanon find no evidence that past exposure to violence leads to more positive attitudes toward the displaced. Instead, Ghosn and co-authors argue that it is past inter-group contact that facilitates positive predispositions toward those forcibly displaced. This claim does not challenge the relevance of empathy to hosting but rather stipulates a different pathway behind the effect.

In this study, we test whether empathetic individuals are more likely to host, including across ethnic group lines. Consistent with psychological theories about altruism, we hypothesize that those with higher empathy will be more likely to accommodate IDPs (H1a). Further, in line with the “empathy born of violence” argument we hypothesize a positive relationship between past experience of violence and empathy (H1b). Consistent with the literature, we expect cognitive empathy to be associated with a higher propensity for hosting.

While the theoretical focus of this study is on the role of empathy in hosting, we also consider alternative explanations. Hosting can be thought of as a form of cooperation if there is an expectation of reciprocity in the future. Dominant explanations for cooperative behavior focus on the cost-benefit calculations of social actors. Studies in this tradition tell us that ethnicity is an important determinant of cooperation: members of the same ethnic community are more likely to help each other because of natural affinities of language and taste, and because negative reputational effects of shirking might be stronger among closely networked co-ethnics (Habyarimana et al. 2009). Extending this logic, we might expect that those who stand to benefit strategically from giving, either because they expect something in return or because they are

---

<sup>5</sup> On the altruism born of suffering hypothesis in psychology that underpins the argument by Hartman and co-authors see Staub and Vollhardt (2008). On the opposite argument that past experience of violence closes individuals off from out-groups see Bauer et al. (2014).



particularly visible in their community and therefore especially sensitive to reputation effects, will also cooperate and give more. This leads us to hypothesize that shared ethnicity should be one of the main correlates of the willingness to host (H2a). Likewise, we expect that those individuals who are most closely networked with authority figures with powers of punishment and reward in their communities will be more likely to host (H2b). We also hypothesize that those who think that hosting will bring economic rewards, either by using IDPs as cheap labor or through maximizing the chances of receiving aid from non-governmental organizations (NGOs), will be more likely to host (H2c).

If we consider hosting as an act of altruism it is reasonable to expect that one's willingness to host might be constrained by the characteristics of one's household. For instance, literature on charitable giving finds that the wealthy are more likely to donate and that people are less likely to help refugees as the cost of giving increases (Meer and Priddy 2021). Thus, we hypothesize that wealthier households will be more likely to host (H3a). Some authors have argued that those who have internalized the moral precepts of religious teachings become more altruistic (Brooks 2006; Putnam and Campbell 2010), which leads us to conjecture that more religious households will be more likely to host (H3b).<sup>6</sup> Based on our field experience at the study site, we also expect that families with male household heads will feel more physically secure and will therefore be more likely to accommodate strangers (H3c).

### **Context: Violence and Displacement in the DRC**

We set out to test these hypotheses in the context of the Democratic Republic of Congo. The DRC is a setting that is representative of a prolonged conflict leading to bouts of forced displacement. The DRC has been among the top three countries globally by the number of new displacements over the past five years (IDMC 2023b). There are over 250 ethnic groups in the country, and conflict is exacerbated by the multiplicity of ethnic cleavages. Fighting has continued for more

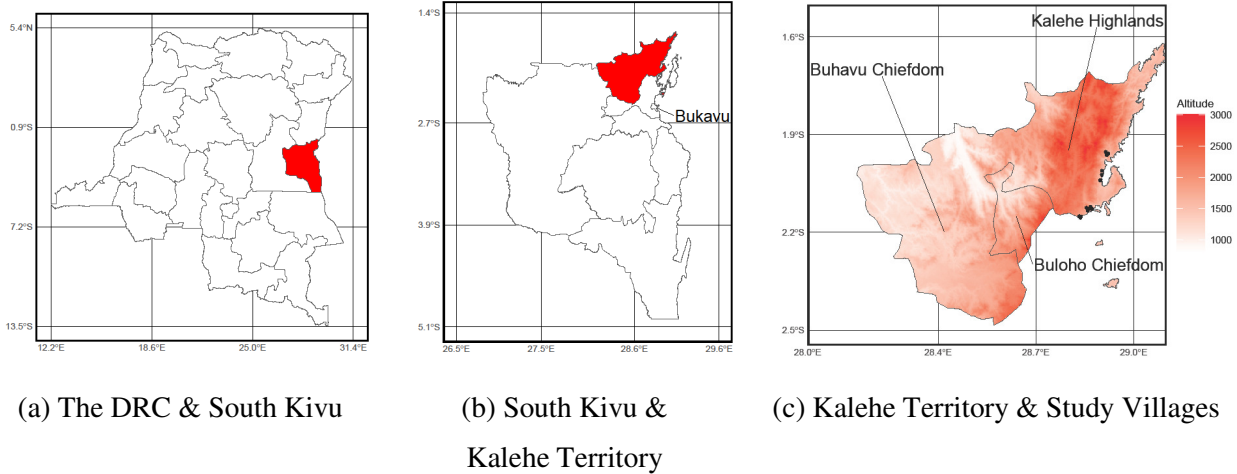
---

<sup>6</sup> Conceptually, religiosity is different from empathy. Religiosity is a commitment to a certain set of community values, whereas empathy is an ability to feel what the other feels or understand what she feels.

than three decades, and though the Second Congo War ended in 2003, violence is still endemic, especially in the east. In 2022 alone, the number of IDPs due to conflict in the DRC increased by four million individuals, second only to Ukraine. The vast majority of IDPs do not reside in camps or larger cities but take refuge with host families in rural settlements (UNHCR 2021). The dynamics of displacement in the DRC makes it similar on key dimensions to other countries with large displaced populations like Yemen, South Sudan, Northern Nigeria, and Afghanistan.

The study is set in eastern DRC, in the Kalehe region of the South Kivu province, which has seen sustained violence in the recent past. In 2019, the year when this study was in the field, South Kivu recorded some 400,000 new displacements (IDMC 2020). The Kalehe region is multi-ethnic. The Havu are the majority in the Buhavu chiefdom, and the smaller Buloho chiefdom is home to the Tembo. The study villages are located within the Mbingu South grouping in the Kalehe region (Figure 1). We selected this area because of a high likelihood of IDP inflows from the neighboring Kalehe highlands where armed combatants from the Conseil National pour la Restauration de la Démocratie (CNRD), a dissident wing of the Democratic Forces for the Liberation of Rwanda (FDLR), moved in large numbers shortly before fieldwork began. In November 2019, about two months after we conducted the household survey, the Congolese army launched a military offensive against the CNRD causing the displacement of thousands of civilians, including into our research sites. In Appendix A, we provide a more detailed account of the conflict's history and associated displacement patterns, as well as information on ethnic relations in the area and a description of what hosting arrangements entail in these communities. The process by which IDPs find hosts in a given community is described in Appendix B.

**Figure 1. Map of the Research Area**



*Notes:* Authors’ rendering. Panel (a): the DRC, with South Kivu highlighted. Panel (b): South Kivu, with Kalehe territory highlighted. The capital city of South Kivu – Bukavu – is also indicated. Panel (c): Kalehe territory, the Buhavu and Buloho chiefdoms, the Kalehe highlands, and the study villages.

## Data and Empirical Strategy

### *Village Selection and Data Collection*

The project began in July 2019 with a visit to the prospective field site for an explorative survey. All 94 villages of the Mbinga South grouping were visited, and the field team met with village chiefs and collected data on village characteristics.<sup>7</sup> Twenty-one villages were found to fit the criteria for the study – there, cellphone reception was adequate and some displaced families had arrived in the preceding three months.<sup>8</sup> Of this total, fifteen villages were selected at random for inclusion in the project. Then, we met again with the village chief and the village council in the selected villages to explain the project in more detail and secure their approval to proceed. The field team also drew up a list of all households and dwellings in each village.

---

<sup>7</sup> We had stringent security protocols in place. The field coordinator sought approval from security advisors of the International NGO Safety Organization and local authorities to ensure that it was safe to visit. Survey teams maintained contact with the field coordinator via cellphone, and team leaders carried a satellite phone for emergencies.

<sup>8</sup> The other criteria were: 1) the village is larger than 70 but smaller than 250 households; 2) availability of a leasable agricultural field; and 3) the settlement is safe to work in.

Next, the survey was fielded in September 2019 with the aim of interviewing every household head in all fifteen villages to collect pre-displacement information on household characteristics and to measure empathy levels among respondents. The experiment was embedded in the survey.<sup>9</sup> With the survey completed, we asked the village chiefs to keep the record of incoming IDPs and which households hosted them for the next ten months. We told the chiefs that we would stay in regular contact and that the information they provided would be verified. To facilitate communications, we gave each chief a cellphone, which was theirs to keep, and also provided weekly top up credit for the study's duration.<sup>10</sup>

The project's field coordinator phoned the chiefs once every two weeks to discuss hosting dynamics and remind them to maintain records. The initial follow up visit took place four months into the study. By then the conflict in the Kalehe highlands had flared up and IDPs were arriving in substantial numbers. The field team met with every village chief, discussed each of the entries, and digitized the records on incoming IDPs. We also visited five households selected at random from every chief's list to check the accuracy of the hosting records; we found no discrepancy with the chief's information. The final follow up to collect the records on hosting dynamics – which was not pre-registered but became possible due to extra funding – was completed ten months into the study in July 2020; because of the Covid-19 pandemic this was done over the phone.

While not pre-registered, we visited the field site once again in October 2021 for qualitative fieldwork to learn more about how the match between the IDPs and hosts took place and to contextualize the results of the quantitative analyses. We were especially interested to learn how the hosts and the hosted understood what motivated people to open their doors. Qualitative interviews with village chiefs and 150 household heads were completed in five randomly selected villages from the original sample of 15; we interviewed ten hosts, ten hosted, and ten non-hosting

---

<sup>9</sup> Survey instruments and replication data are available on the APSR Dataverse. Voluntary and informed consent was obtained from all participants. Village chiefs, councils, and community leaders were asked to consent to the study as a whole. Respondents were informed that there was no compensation for participating. Because of low levels of literacy consent was provided verbally. The study involved minimal risk of harm and did not entail deception. International and local ethics approval was obtained before program start. IRB approval from New York University – Abu Dhabi (#040-2019).

<sup>10</sup> Each village chief received \$5 per week in phone credit.

heads of households in each village. We describe highlights from these interviews in the results section and provide detailed information on the set-up and findings of qualitative fieldwork in Appendix B. The timeline of field activities is presented in Appendix C.

### *Sample*

The fifteen study villages contain 1,660 dwellings. In the survey we collected information from 1,504 dwellings.<sup>11</sup> We focus on the households that own the dwelling as they make the decision whether to host the IDPs. In the ten month-period following our survey, 1,274 new incoming displaced individuals were hosted among 386 of these households in the study villages, and 354 of these were captured in our survey.

The characteristics of potential hosts are summarized in **Table 1**.<sup>12</sup> A typical respondent is 43 years old. About half (49%) can read and write, and 60% of respondents are born in the village. Most respondents (71%) are Protestant, 19% are Catholic, and 10% follow other religions. A typical household consists of eight household members and has a dependency ratio of 54%.<sup>13</sup>

### *Potential Correlates of Hosting*

We hypothesized that individuals who are more empathic are more willing to host.<sup>14</sup> To measure empathy, we use a modified version of the Basic Empathy Scale. The full scale consists of 20 items (Jolliffe and Farrington 2006). We designed a truncated six-item scale containing measures that in previous studies have been shown to correlate strongly with cognitive and affective empathy (see Appendix D for details). Subsequently, we dropped one of the items because it was the only

---

<sup>11</sup> We aimed to collect information from all heads of households. If the head was not present we returned the subsequent day. If (s)he was not present the second day we interviewed the spouse. In total, data were collected for 91% of households; household head and spouse were absent for two days in the remaining 9%. In 76% of households we were able to interview the head.

<sup>12</sup> A detailed description of the variables and survey instruments are available on the APSR Dataverse.

<sup>13</sup> The dependency ratio – often used as a measure for the burden that the working-age population bears – is calculated as the number of people younger than 15 plus the number of people older than 64 divided by the total size of the household.

<sup>14</sup> We also hypothesized that individuals with a history of violent displacement are more likely to host internally displaced people, but with 95% of respondents having been displaced there is too little variation to explore.

statement phrased in the negative and did not load in the same way as all the others in a confirmatory factor analysis.<sup>15</sup> The final scale that we use contains the five items reported in **Table 1**; the design of this scale allows us to separately measure affective and cognitive empathy. Higher scores denote higher levels of empathy. In the analyses, we use an additive index of the five item scores. The average respondent is quite empathic with a score of 9 out of 15.

To allow us to test whether past exposure to violence might result in higher empathy we asked respondents how much and what type of violence they experienced during the preceding 12 months. The overall levels of violence exposure are high with almost everyone reporting that they had been afraid that their village would be attacked by an armed group (90%) and many stating that they had witnessed armed violence in their village (72%). These high levels of violence exposure are consistent with findings in other studies in this part of the DRC (Van der Windt and Humphreys 2016; Stoop and Verpoorten 2021). We will use the experience of having one's home ransacked as our primary measure of violence exposure. There is meaningful variation on this measure (61% say that they experienced ransacking), and home ransacking, unlike targeted violence, might be plausibly exogenous to household characteristics.<sup>16</sup>

When it comes to testing alternative explanations for hosting, there is variation on ethnicity in the sample. In the hosting villages, Havu are the largest ethnic group, comprising 69% of household heads. Fourteen percent of household heads are Tembo, and ten percent are Shi (**Table 1**). Among the displaced that arrived during the 10-month study window, 31% are Havu, 23% are Kinyarwanda speaking (i.e. Tutsi or Hutu), 21% are Shi, and 17% Tembo. To get at the relative importance of ethnicity among potential hosts we asked respondents how strongly they identify with their ethnic group. With a mean of 6.39 on a 0-9 scale, in-group bonds appear to be very

---

<sup>15</sup> Other studies have reported similar problems with negatively phrased items, finding that they are poorly correlated with latent empathy factors and that respondents might misunderstand them; see Appendix D for details.

<sup>16</sup> While conflict dynamics are complex in the Congo (Autesserre 2010; Appendix A), a common tactic used by rebels is to raid villages at night. Anecdotal evidence suggests that during these night raids rebels do not systematically target specific houses. This is consistent with the observation in the literature that much of within-village violence against civilians in the Congo is indiscriminate (Maedl 2011). Because we do not have pre-conflict household characteristics, we cannot check for selection on observables (c.f. Blattman 2009).

strong. A related alternative hypothesis has to do with exposure to oversight from authority figures. We measure this by asking about the respondents' connection to the village chief; these connections are defined broadly as family relations and friendship. Fifty-two percent of household heads report some form of relation to the chief. In terms of strategic benefits from hosting, a little over a quarter of respondents think either that IDPs are a source of cheap labor or that hosting increases the likelihood that hosts might receive aid from NGOs.

The final set of alternative hypotheses has to do with the characteristics of hosting households: their wealth, religiosity, and physical security. We measure respondents' wealth by recording the quality of construction materials of their house and via a factored index of the household's possessions from farm animals to means of communication and transportation. An average household is quite poor with a decent roof but walls made of low-quality materials, like soil and straw, and no means of transportation. To measure religiosity we asked respondents about the importance of church in their daily lives and inquired how often they go to church. Consistent with expectations, respondents are generally very religious. To get at the underlying sense of security we recorded whether the head of the household is male – this is the case in 76% of households.

**Table 1. Descriptive Information about Potential Hosting Households**

	Obs.	Mean	Std. Dev.	Min	Max
<i>Demographic information</i>					
Respondent's age (>18 years old)	1,504	42.75	16.07	18	99
Respondent is literate (0/1)	1,504	0.49	0.50	0	1
Respondent is born in the village (0/1)	1,504	0.60	0.49	0	1
Respondent is Protestant (0/1)	1,504	0.71	0.46	0	1
Respondent is Catholic (0/1)	1,504	0.19	0.39	0	1
Respondent adheres to another religion (0/1)	1,504	0.10	0.30	0	1
Household size	1,504	7.72	3.15	1	34
Household dependency ratio (0-1)	1,482	0.54	0.22	0	1
Host at the time of the survey (visit 3)	1,504	0.21	0.41	0	1
<i>Empathy</i>					
Empathy index (sum of items, 0-15)	1,488	9.37	2.16	1	15
- After being with a friend who is sad about something, I also feel sad (0-3)	1,500	2.01	0.75	0	3
- I get caught up in other people's feelings easily (0-3)	1,500	1.97	0.65	0	3
- I tend to feel scared when I am with friends who are afraid (0-3)	1,502	1.91	0.68	0	3
- I can often understand how people are feeling even before they tell me (0-3)	1,499	1.39	0.77	0	3
- I can usually realize quickly when a friend is angry (0-3)	1,499	2.07	0.66	0	3
<i>Ethnicity</i>					
Household head is Havu (0/1)	1,504	0.69	0.46	0	1
Household head is Shi (0/1)	1,504	0.10	0.30	0	1

Household head is Tembo (0/1)	1,504	0.14	0.35	0	1
Strength of ethnic attachment index (sum of items, 0-9)	1,462	6.39	1.53	0	9
- Overall, I am similar to average people among __ (0-3)	1,474	2.03	0.59	0	3
- I have a strong attachment to __ (0-3)	1,490	2.21	0.63	0	3
- If someone criticizes __, it feels like a personal insult (0-3)	1,499	2.14	0.90	0	3
<i>Authority</i>					
Respondent is related to the village chief (0/1)	1,499	0.52	0.50	0	1
<i>Perceived benefits</i>					
Strongly agrees that IDPs increase probability of aid (0/1)	1,478	0.25	0.43	0	1
Strongly agrees that IDPs provide cheap labor (0/1)	1,496	0.31	0.46	0	1
<i>Wealth</i>					
Dwelling has a high-quality roof (0/1)	1,504	0.66	0.47	0	1
Dwelling has high-quality walls (0/1)	1,504	0.15	0.36	0	1
Asset index (PCA)	1,483	0.00	2.06	-3.29	11.04
<i>Religiosity</i>					
Importance of church in daily life (1=not important, ..., 10=important)	1,492	7.93	1.78	1	10
Number of days per week respondent attends church (0-7)	1,499	2.34	1.36	0	7
<i>Physical security</i>					
Household head is male (0/1)	1,504	0.76	0.43	0	1
<i>Exposure to violence</i>					
Exposure to violence index (sum of items, 0-6)	1,499	3.75	1.82	0	6
- Respondent feared attack on village (0/1)	1,497	0.90	0.30	0	1
- Respondent saw armed groups in village (0/1)	1,497	0.72	0.45	0	1
- Respondent saw armed violence in village (0/1)	1,498	0.72	0.45	0	1
- Respondent's home was ransacked (0/1)	1,498	0.61	0.49	0	1
- Respondent was kidnapped by armed group (0/1)	1,498	0.40	0.49	0	1
- Respondent was physically attacked by armed group (0/1)	1,499	0.40	0.49	0	1

*Notes:* Components of the asset index: number of goats, poultry, houses, rooms, chairs, beds, foam mattresses, motorcycles, machetes, pots, cupboards, radios and phones. For the strength of ethnic attachment and empathy measures, respondents were asked to score each item on a four-point Likert scale from ‘Strongly disagree’ (0) to ‘Strongly agree’ (3). Exposure to violence relates to the 12 months preceding the survey. Household size of 34 is an outlier; results hold when this observation is excluded from analyses.

### *Empirical Strategy*

To examine the correlates of hosting we estimate the following model:

$$Y_{ij} = \beta_0 + \Gamma X_{ij} + \Lambda W_{ij} + \alpha_j + \varepsilon_{ij} \quad (1)$$

where the indicator variable  $Y_{ij}$  is equal to one if household  $i$  in village  $j$  started hosting in the ten-month period after the survey.  $X_{ij}$  is a vector containing the study’s variables of interest: empathy, ethnicity, authority, perceived benefits, wealth, religiosity, security, and conflict exposure.  $W_{ij}$  is a vector containing demographic controls. We include village fixed effects,  $\alpha_j$ , to control for differences in observable and unobservable predictors across villages. That is, we effectively control for any factor at the village level and higher that may explain hosting behaviors, such as



the size of the IDP inflow and village-level governance dynamics. Standard errors are clustered at the village-level to account for within-village correlation of the residuals. The empirical model and control variables were pre-registered.

## Results

### *Correlates of Hosting*

During the ten-month period after household surveys had been fielded 24% of households started hosting newly arrived IDPs. A small number of IDPs (11%) already knew their hosts from before. We exclude hosting relationships based on prior acquaintance from the analyses because, substantively, we are interested in why people open their doors to strangers; this leaves us with 21% of households that started hosting strangers.<sup>17</sup>

The main results exploring the correlates of hosting are reported in **Table 2**. Model 1 does not contain any controls, model 2 includes village fixed effects, and model 3 – our preferred specification – includes both village fixed effects and demographic controls for age, literacy, being native to the village, religious denomination, household size, the household dependency ratio, as well as a control for whether the household was already hosting at the time of the survey. In model 4 we further explore the role of ethnicity in hosting decisions. We do that not at the level of households but in dyadic analyses. To do that we constructed a dyad-level dataset that pairs each incoming IDP to all potential hosts in the village. This allows us to assess whether dyads where there is an ethnic match are more likely to initiate a hosting relationship.<sup>18</sup> Model 4 contains the same controls as model 3. We use IDP-level fixed effects, thus controlling for any differences in observable and unobservable predictors across incoming IDPs. The full set of results for **Table 2**

---

<sup>17</sup> Qualitative studies from the region confirm that only a minority of displaced individuals are hosted by acquaintances (e.g., Kesmaecker-Wissing and Pagot 2015). Appendix E shows that results remain unchanged when we include all hosting relationships. Supplementary Materials on the APSR Dataverse provides further descriptive information on hosting behavior in our study villages and its dynamics over time.

<sup>18</sup> There are a total of 44,680 dyads, of which 384 started hosting. We excluded those IDPs that were already known to the host.

can be consulted in Appendix F.<sup>19</sup> Coefficients are standardized for ease of comparison; we report magnitudes in standard deviations.

**Table 2. Correlates of Hosting**

		Household hosts IDP (1)	Household hosts IDP (2)	Household hosts IDP (3)	Within- dyad hosting (4)
Empathy	Empathy	0.091** (0.035)	0.073** (0.031)	0.074** (0.032)	0.012* (0.006)
Ethnicity	Strength of ethnic attachment	-0.025 (0.029)	-0.024 (0.027)	-0.024 (0.028)	
	IDP and respondent of same ethnicity				-0.022 (0.018)
Authority	Respondent related to chief	0.055** (0.022)	0.042** (0.018)	0.033* (0.018)	0.006 (0.006)
Benefits	Strongly agrees that IDPs increase prob. of aid	0.006 (0.028)	0.012 (0.025)	0.017 (0.025)	0.004 (0.006)
	Strongly agrees that IDPs provide cheap labor	-0.013 (0.034)	-0.005 (0.035)	-0.005 (0.033)	-0.004 (0.006)
Wealth	Dwelling has a high-quality roof	0.053* (0.029)	0.049* (0.027)	0.042 (0.027)	0.002 (0.006)
	Dwelling has high-quality walls	-0.005 (0.043)	0.000 (0.029)	0.009 (0.026)	0.006 (0.007)
	Asset index	0.018 (0.034)	0.032 (0.034)	0.027 (0.030)	0.003 (0.008)
Religiosity	Importance of church in daily life	-0.010 (0.031)	-0.019 (0.029)	-0.019 (0.029)	0.000 (0.006)
	Times to church per week	-0.018 (0.016)	-0.015 (0.017)	-0.013 (0.019)	-0.004 (0.005)
Security	Household head is male	0.073*** (0.021)	0.089*** (0.022)	0.082*** (0.023)	0.009 (0.006)
Violence	Home was ransacked	-0.036 (0.025)	-0.044 (0.026)	-0.042 (0.026)	-0.010* (0.006)
	Fixed effects	No	Village	Village	IDP
	Demographic controls	No	No	Yes	Yes
	Observations	1,382	1,382	1,361	35,444
	R <sup>2</sup>	0.024	0.066	0.070	0.004

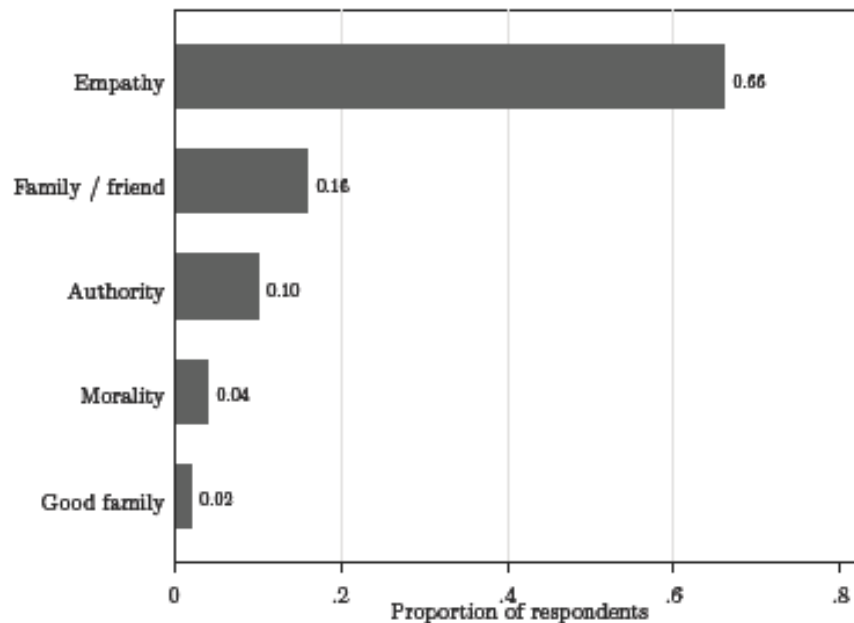
Notes: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Standard errors clustered at the village (models 1-3) and dwelling (model 4) level and reported in parentheses. Variables are standardized. Full set of results in Appendix F.

First, we explore the role of empathy in hosting decisions. The host's empathy level is the most important variable in the calculus of IDP hosting. The coefficient for empathy is positively signed and statistically significant across all three specifications. For one standard deviation increase on

<sup>19</sup> In Appendix F, we also include a specification that controls for assignment to experimental interventions.

the fifteen-point empathy scale we find an associated increase in the likelihood of hosting by 0.07 of a standard deviation; moving from the lowest (1) to the highest (15) empathy score is associated with a 20 percentage-point increase in the likelihood of hosting.<sup>20</sup> When we separate the components of the empathy index into affective and cognitive empathy, we find that only the cognitive empathy coefficient is statistically significant, and that it is much larger than the one for affective empathy; see Appendix F. Thus, consistent with recent arguments in this literature, we find suggestive evidence that understanding what one’s interlocutor feels is more important than feeling the same emotion as them even for an extreme act of helping like hosting.

**Figure 2. Reasons for Hosting**



*Notes:* In qualitative follow-up interviews, we asked the open question “*Why did you decide to host this IDP family?*” of 50 randomly selected households that were hosting an IDP. This figure presents a categorization of their answers. Detailed information is available in Appendix B.

The importance of empathy in hosting decisions is corroborated in the qualitative follow up fieldwork. When asked in an open-ended question to explain why they decided to open their doors to IDPs, 66% of hosts said that they were motivated by compassion or pity, noting that they

<sup>20</sup> As shown in Supplementary Materials on the APSR Dataverse, the relationship between empathy and hosting appears to be continuous; there is no evidence of a threshold beyond which households start hosting.

themselves had experienced displacement or could easily imagine their household being displaced. One of the hosts noted that “[the IDPs] were in difficulty, and I have gone through a similar situation.” Another, imagining what it might be like to be displaced, told us “I hosted them because I could find myself in the same situation and, in that case, I would need to rely on other people to receive me in their home.” The ability to imagine what displacement would feel like is illustrative of cognitive empathy in action. Our interlocutors also mentioned other reasons for hosting – notably, previous kinship relations, being asked by the village chief to help, a religious obligation to help those in need, and willingness to help ‘good’ or respected families. In **Figure 2** we summarize how often the various reasons for hosting were mentioned in the interviews, and more detailed information is available in Appendix B. The interviews confirm that being empathetic toward the displaced is by far the most important reason for hosting.

Of the three cost-benefit centered explanations for hosting – ethnicity, relationship to the chief, and perceived economic benefits of hosting – only the respondents’ relationship to the village chief is statistically significant (**Table 2**). Those who self-report as having a connection to the chief are more likely to open their doors to IDPs. In the qualitative follow up fieldwork we set out to ascertain what role village chiefs have in the hosting process. Interviews confirm that chiefs rarely match IDPs to specific families. Only 18% of hosts without a prior relationship with the IDPs said that it was the chief who made the initial introduction. In most cases, the IDPs knocked on doors at random (54%) or approached potential hosts in the street (20%) (see Appendix B for details).

During our study period, most of the hosting households (72%) accommodated an IDP of a different ethnicity than the head of the hosting household. The role of ethnicity in hosting is explored at the household level in models 1-3 as the strength of ethnic attachment, and in the context of dyadic matches between potential hosts and IDPs in model 4 as a probability of co-ethnic dyads striking up a hosting relationship. Neither of the two variables are statistically significant, and both are consistently negatively signed. That ethnicity – an important predictor of cooperative behavior in everyday life and emphasized in the broader literature on the causes of cooperation (Habyarimana et al. 2009) – is not correlated with hosting decisions suggests that

hosting by its nature is a type of behavior that is very different from more mundane cooperative interactions.<sup>21</sup>

That ethnicity does not play a major role in hosting decisions is also confirmed in qualitative fieldwork.<sup>22</sup> When asked an open-ended question about the logic of their hosting decisions, none of those who were hosting IDPs at the time of the interview mentioned ethnicity as a factor. Similarly, none of the IDP families referenced ethnicity when asked why they thought that the hosting family took them in. In a hypothetical hosting scenario – when asked to choose between IDP households of different ethnicities – only 12% of respondents said that they would prefer to host a family of co-ethnics. In contrast, 60% of respondents mentioned they would host any IDP household without discrimination. Appendix B provides detailed information on these analyses.

We also hypothesized that household characteristics – factors like household wealth, religiosity, and the feeling of security – might be important in shaping hosting decisions. We find that neither wealth nor religiosity matter systematically. While having a high-quality roof – a common indicator for wealth in this setting – is positively and significantly correlated with hosting in models 1 and 2, this variable loses statistical significance once demographic controls are introduced in model 3. Higher religiosity appears to be consistently associated with a lower likelihood of hosting, although the coefficients never reach statistical significance. As a matter of empirics, the correlation between empathy and religiosity in our sample is low.<sup>23</sup> We do find that households with male heads are considerably more likely to accommodate IDPs. Qualitative interviews with female household heads suggest that they feel physically insecure relative to their male counterparts and are worried that male IDPs might assault them or refuse to leave. As a

---

<sup>21</sup> Empathy seems to affect hosting decisions for coethnics and non-coethnics differently. In Appendix F, leveraging the dyadic analyses, we show that empathy is an important correlate of hosting only when it comes to accommodating non-coethnic IDPs.

<sup>22</sup> Other qualitative accounts from the region also suggest that while ethnicity may influence where the forcibly displaced go, there is little evidence that it influences the hosting decision (e.g. McDowell 2008).

<sup>23</sup> Religiosity levels in the sample are high, with the importance of church in daily life rated on average at 8 of 10 points, and respondents attending church on average 2.3 times per week. Yet, the standard deviation on these variables is also high at 1.8 and 1.4 respectively. Empathy is not significantly correlated with the importance of church in daily life (0.03, p-value: 0.19) and only weakly correlated with attending church (0.07, p-value: 0.01).

secondary factor, some female household heads mention that they are too poor to host IDPs and have smaller fields.<sup>24</sup>

We check the robustness of the reported results in several ways. In the main specification we study the hosting dynamics of households that own the dwelling. In a few cases, IDPs were received by households that were hosted themselves; in a robustness check we include these additional households. Second, dwellings that were hosting at the time of the survey may be thought to be less likely to host additional households; to address this concern we drop these dwellings. Third, we drop households that left the village during the 10-month period after the survey. Fourth, to learn about the intensive margin of hosting, we look at the number of IDPs hosted, instead of a binary hosting variable. Fifth, we include hosting relationships based on kinship or prior acquaintance. Additionally, we address the issue that our model clusters standard errors for only a small number of clusters. Across all these robustness checks, the results do not change substantively (see Appendix E).

### *Origins of Empathy*

Having established that empathy is the strongest correlate of hosting, we now explore its origins. The literature in psychology and political science suggests that empathy might, at least in part, result from past exposure to hardship (Stephan and Finlay 1999). We put the “empathy born of violence” hypothesis to the test in the context of displacement in the DRC. To do this we run an analysis with the empathy score as the outcome and measures of prior exposure to violence as independent variables. We measure past exposure to violence among potential hosts through a six-item index (model 1), by whether the respondent’s house had been ransacked (model 2), and by the number of times that a respondent had been displaced over her lifetime (model 3).<sup>25</sup> The analyses include controls for wealth, religiosity, strategic benefits, strength of ethnic attachment,

---

<sup>24</sup> Data are based on follow up interviews with 25 randomly selected female-headed households that are not hosting; fieldwork completed in February 2023 in the five villages visited previously for qualitative interviews.

<sup>25</sup> Nearly all respondents (95%) have a history of displacement due to violence. The median respondent was displaced three times, and the variable ranges between 0 and 25 with a standard deviation of 2.87.

and proximity to the village chief, as well as village fixed effects and demographic controls. As before, coefficients are standardized, and the reported effect is in standard deviations.

The results are reported in **Table 3**; full regression output is in Appendix G. Past experience of violence is correlated with higher empathy across all specifications; however, the magnitude of the effect is small. A one standard deviation increase in the exposure to violence index is associated with an increase of 0.08 of a standard deviation in the empathy index. Moving from no exposure to violence to the highest level of exposure on the six-item index (i.e., from the minimum of 0 to the maximum of 6) is associated with a 0.27 standard deviation increase in empathy, corresponding to 0.6 of a unit increase on the fifteen-point empathy scale. Similarly, having one’s house ransacked or experiencing an additional instance of displacement are associated with positive, but small, increases on the empathy scale of 0.33 and 0.06 of a unit, respectively. These findings provide suggestive support for the hypothesis that past hardship might indeed make individuals more empathetic toward others who are suffering and therefore more willing to help.

**Table 3. Correlates of Empathy**

		Empathy score (1)	Empathy score (2)	Empathy score (3)
Past violence	Exposure to violence	0.082* (0.039)		
	Home was ransacked		0.075** (0.033)	
	Number of times displaced			0.074*** (0.021)
	Village FE	Yes	Yes	Yes
	Demographic controls	Yes	Yes	Yes
	Observations	1,361	1,361	1,362
	R <sup>2</sup>	0.135	0.135	0.137

*Notes:* \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01 Standard errors clustered at the village level and reported in parentheses. Variables are standardized. Full set of results in Appendix G.

The argument that past exposure to violence may be correlated via the empathy channel with a higher propensity among potential hosts to open their doors to the forcibly displaced, regardless of ethnicity, is an important addendum to the literature on the legacies of violence. There is an ongoing debate in that literature as to whether past exposure to violence leads to pro-social behavior through post-traumatic growth (Blattman 2009; Voors et al. 2012) or to parochial

altruism; i.e., withdrawal from the public sphere and increased cooperation exclusively with one's co-ethnics (Bauer et al. 2014; Lupu and Peisakhin 2017). Our results help to make sense of this disparate set of findings. It seems that those with high levels of empathy – in part resultant from experiencing past hardships – might be more willing to view non-coethnics as similar and therefore act pro-socially toward them. In this sense, among particularly empathetic individuals prosocial behavior might be extended not only to coethnics but also to suffering others. This is consistent with the insights of common ingroup identity theory, which argues that meaningful shared experiences can activate supraordinate identity (Gaertner and Dovidio 2000). That hosting communities in conflict-plagued societies appear to reconceptualize who counts as an in-group member away from shared ethnicity toward shared victimhood is something that thus deserves further attention (see, for instance, Kaufman 2001; Wayne and Zhukov 2022).

### *Increasing the Willingness to Host*

We have now established that empathy is the most important correlate of hosting. However, from the policy perspective it is also important to know whether the feeling of empathy can be stimulated with a view to encouraging more potential hosts to open their doors to strangers in order to minimize the trauma of forced displacement. This is what we explore in the experiment that was embedded within the survey.

The experiment contained eight groups. Those randomly assigned to the empathy appeal participated in a perspective-taking exercise, where respondents were asked where they would go if displaced and what they would take with them. This type of intervention has been shown to activate cognitive empathy (Adida, Lo, and Platas 2018). To contextualize the importance of empathy we also separately primed two other potential drivers of hosting. To test the sway of village elites over hosting decisions we asked the village chief to visit those respondents randomly assigned to the authority appeal to urge them to accommodate IDPs. Respondents assigned to the religiosity appeal received a visit from a local Catholic community leader, who reminded them that it is a religious duty to help those in need. Those in the control condition were read a brief message informing them that there might be displacement in the region; the same message preceded all other treatments. In addition, to learn about the role of ethnicity, half of the respondents were assigned at random to a prime that the incoming IDPs would likely be from their



own ethnic group, whereas the other half were told that the displaced would likely be of a different ethnicity. Detailed information on the design of the experiment is in Appendix H.

Results from the experiment are reported in **Table 4**. These specifications do not include any covariates other than village fixed effects given the random nature of treatment assignment; full results with covariates are in Appendix H. We consider two outcomes related to hosting in the table: an expression of the willingness to host IDPs in the future as asked in the survey and actual hosting behavior over the ten-month period following the survey. The reason that we also report the self-reported willingness to host here is to show how different this attitudinal variable is from actual behavior. In the pre-analysis plan, we pre-registered additional outcomes unrelated to hosting: contributions to hypothetical future IDPs in an incentive-compatible dictator game, willingness to cultivate a field, proceeds from which would go to hypothetical future IDPs, and showing up to work in the field two weeks after survey completion.

In the sample, 97% of respondents said that they were willing to host hypothetical IDPs. Only 24% actually started hosting. Likewise, 96% of respondents said they were willing to cultivate a field for future IDPs, but only 53% sent household members to do the work two weeks later. This discrepancy between attitudinal measures – commonly used in existing work on the correlates of refugee assistance – and actual helping suggests that self-reported attitudes are subject to social desirability bias, and that what the attitudinal measure captures, at least in this instance, is mostly cheap talk. Such high self-reported willingness to host and to cultivate the field made it very difficult to capture any treatment effects in the survey, and none of the treatments, including perspective-taking, had a statistically discernible effect on these outcome measures.

None of the treatments changed hosting behavior in the longer term (**Table 4**). These null findings are unlikely to be due to low statistical power, as there were about 1,500 participants in the experiment.<sup>26</sup> Instead, it seems that the treatments – including the perspective-taking intervention – did not leave a sufficiently long-lasting effect. On average, IDPs arrived four months after treatments had been administered. This was likely too long of a gap for a simple but scalable

---

<sup>26</sup> Power calculations are in the Supplementary Material on the APSR Dataverse.

treatment such as perspective-taking to have an effect (on the short durability of perspective-taking effects see Adida, Lo, and Platas 2018; Simonovits, Kézdi, and Kardos 2018). At the time of administering the surveys we did not know how soon the displaced would arrive. It is possible that, had they arrived within one or two months, treatment effects would have been discernible. Notably, humanitarian organizations like the UNHCR often find themselves in a similar situation of knowing that an influx of IDPs is likely but not knowing when these would arrive. The lesson from our study is that perspective-taking does not work 4+ months out from the time of the treatment.

When it comes to other helping behaviors – contributions to hypothetical IDPs in the dictator game and field cultivation – these are explored in Appendix H. Authority and morality appeals both have a positive and statistically significant effect on donations in the behavioral game only in the subsample of respondents who think that IDPs are likely to arrive in the coming months and that future IDPs will reap benefits from respondents’ help.<sup>27</sup> Likewise, for this outcome, which is measured immediately following the treatments, the perspective-taking exercise has a positive effect ( $p=0.11$ ) in this subsample. Two weeks down the line, none of the experimental treatments have a positive effect on households sending members to cultivate the field. However, consistent with the study’s earlier correlational analyses on hosting behavior, respondents’ baseline level of empathy is positively and significantly associated with respondents or their family members showing up to work on the field in the subsample ( $p<0.05$ ).

**Table 4. Results of the Experiment**

	Willingness to host IDPs (survey response) (1)	Actual IDP hosting (subsequent 10 months) (2)
Empathy appeal	0.003 (0.019)	0.027 (0.056)
Authority appeal	0.008	-0.018

<sup>27</sup> None of the treatments are statistically significant in the full sample. This makes sense, given that we should expect treatments to be effective only among those who think that IDPs will be arriving and who trust that resources will be shared with the IDPs. This subgroup analysis was not pre-registered.

	(0.023)	(0.041)
Morality appeal	0.010	0.023
	(0.017)	(0.025)
Other ethnicity	-0.012	0.047
	(0.020)	(0.050)
Empathy appeal * Other ethnicity	-0.007	-0.088
	(0.023)	(0.061)
Authority appeal * Other ethnicity	0.022	-0.107
	(0.022)	(0.070)
Morality appeal * Other ethnicity	0.005	-0.063*
	(0.024)	(0.033)
Village FE	Yes	Yes
Demographic controls	No	No
Other explanatory variables	No	No
Observations	1,499	1,504
R <sup>2</sup>	0.022	0.050

*Notes:* \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$  Standard errors clustered at the village level and reported in parentheses. Variables are standardized. Details on the experiment in Appendix H.

Returning to the null effects of perspective taking on longer term costly helping behaviors like hosting or field cultivation, there is a plausible alternative explanation for these. Perspective taking might not work in a population where most members have direct experience of or live in regular fear of displacement. Ninety-five percent of respondents in our sample reported experiencing displacement at least once in their lifetime. It is possible that in a population where the possibility of having to flee from one's home is a reality of everyday life that perspective taking fails because imagining where to go and what to take when fleeing is a regular necessity. We are unable to adjudicate between the failure of the perspective-taking intervention as a matter of time lapsed versus saturation of experience or fear of displacement; this is something that requires further study.

## Conclusion

We set out to explore what motivates individuals to open their doors to strangers and host the forcibly displaced. While the literature sheds light on the causes of displacement, the pathways that displaced individuals take, and on the economic and political impact of the displaced on host communities, it is largely silent about the factors that motivate potential hosts to accommodate

them. And yet, if the trauma of displacement is to be minimized by facilitating the displaced to be hosted in communities closer to home and in private homes rather than refugee camps, then we need to better understand what motivates hosting and how to encourage potential hosts to accommodate IDPs.

We found that empathy among potential hosts is the most important correlate of the decision to open one's home to the displaced. As one goes from the minimum to the maximum value on the empathy scale, the associated likelihood of hosting increases by 20 percentage points. Empathy appears to matter considerably more in hosting decisions than any other factor. Exploring the origins of empathy, we also found, consistent with the altruism born from suffering hypothesis, that empathy levels appear to be higher among those who have experienced violence in the past. Feeling physically secure as a male household head or being connected to local authorities increases the likelihood of hosting too, but at a lower magnitude. Being of the same ethnicity as the IDP, wealthy, or religious does not appear to affect the decision to host, at least in the context of the Democratic Republic of the Congo.

The study featured an experiment wherein we encouraged respondents to host by priming cognitive empathy through a perspective-taking exercise. We also appealed to participants' respect for authority and religiosity. The experiment produced largely null results indicating, among other things, that the effect of perspective-taking interventions is likely short-lived and cannot persist for multiple months. These results raise concerns with regards to policy makers' ability to engender greater willingness to host those forcibly displaced in the longer-term using simple interventions.

Our study is among the very first to explore the correlates of hosting (see also Hartman and Morse 2018; Hartman, Morse, and Weber 2021). It stands out from existing work because we were able to measure household characteristics – including empathy levels – prior to the arrival of IDPs; this allowed us to get around the problem of ex post rationalization of hosting decisions. In addition, our data come from a census of 15 villages, which means that the results are not a product of selective or biased sampling. Unlike most studies on assistance to migrants, we measured empathy via a scale that is used in psychology. Finally, the main measure of hosting in our study was not a self-reported willingness to accommodate IDPs or even a self-report of having hosted in the past

but rather a verifiable record by the village head that a given household hosted IDPs in the 10-month period after the pre-displacement survey.

We expect the findings from this study to travel to other societies of primarily subsistence farmers living in chronic poverty and in an environment of high violence such as Yemen, South Sudan, Northern Nigeria, and Afghanistan. Notably, in the context of chronic violence, displacement is usually predictable, which primes the potential hosts to think of this as a possibility. Instances where displacement is a product of a natural calamity are different; there the dynamics of hosting, absent the expectation of IDP inflows, might plausibly be distinct. Therefore, the generalizability of our conclusions requires out-of-sample testing. In future work, it might also be useful to better measure exposure to past violence among respondents. The measure that we use captures recent experience of violence, whereas the psychology literature hypothesizes that hardships deeper in the past likely lead to more empathy. Our findings suggest that those more empathetic, and perhaps also with more past experience of hardships, might be more willing to consider victims as in-group members. This is something that could fruitfully be measured directly in future work. Finally, we expect that those with higher empathy will also be more likely to host refugees in economically-advanced countries. Moving beyond the context of the forcibly displaced and hosting, in future work it would be interesting to explore how strongly empathy correlates with other forms of assistance, including in everyday interactions.

**Authors' statement:**

The authors declare the human subjects research in this article was reviewed and approved by New York University – Abu Dhabi (#040-2019). The authors affirm that this article adheres to the principles concerning research with human participants laid out in APSA's Principles and Guidance for Human Subjects Research (2020). The authors declare no ethical issues or conflicts of interest in this research. This research was funded by Research Foundation Flanders (12W8320N) and the Center of Behavioral Institutional Design and Tamkeen under the NYU Abu Dhabi Research Institute Award CG005. Research documentation and data that support the findings of this study are openly available in the APSR Dataverse at <https://doi.org/10.7910/DVN/IESQYC>.

## References:

- Adida, Claire L., Adeline Lo, and Melina R. Platas. 2018. "Perspective Taking Can Promote Short-Term Inclusionary Behavior Toward Syrian Refugees." *Proceedings of the National Academy of Sciences* 115 (38): 9521–26.
- Alan, Sule, Ceren Baysan, Mert Gumren, and Elif Kubilay. 2021. "Building Social Cohesion in Ethnically Mixed Schools: An Intervention on Perspective Taking." *The Quarterly Journal of Economics* 136 (4): 2147–94.
- Alrababa'h, Ala', Andrea Dillon, Scott Williamson, Jens Hainmueller, Dominik Hangartner, and Jeremy Weinstein. 2021. "Attitudes Toward Migrants in a Highly Impacted Economy: Evidence From the Syrian Refugee Crisis in Jordan." *Comparative Political Studies* 54 (1): 33–76.
- Audette, Nicole, Jeremy Horowitz, and Kristin Michelitch. 2020. "Personal Narratives Reduce Negative Attitudes toward Refugees and Immigrant Outgroups: Evidence from Kenya." Working Paper 1. CSDI - Vanderbilt University.
- Autesserre, Séverine. 2010. *The Trouble with the Congo. Local Violence and the Failure of International Peacebuilding*. Cambridge University Press.
- Bansak, Kirk, Jens Hainmueller, and Dominik Hangartner. 2016. "How Economic, Humanitarian, and Religious Concerns Shape European Attitudes Toward Asylum Seekers." *Science* 354 (6309): 217–22.
- Batson, C. Daniel. 2002. "Addressing the Altruism Question Experimentally." In *Altruism and Altruistic Love*. New York: Oxford University Press.
- Batson, C. Daniel, Johee Chang, Ryan Orr, and Jennifer Rowland. 2002. "Empathy, Attitudes, and Action: Can Feeling for a Member of a Stigmatized Group Motivate One to Help the Group?" *Personality and Social Psychology Bulletin* 28 (12): 1656–66.
- Bauer, Michal, Alessandra Cassar, Julie Chytilová, and Joseph Henrich. 2014. "War's Enduring Effects on the Development of Egalitarian Motivations and In-Group Biases." *Psychological Science* 25 (1): 47–57.
- Blattman, Christopher. 2009. "From Violence to Voting: War and Political Participation in Uganda." *American Political Science Review* 103 (02): 231–47.
- Brooks, Arthur C. 2006. *Who Really Cares. The Surprising Truth About Compassionate Conservatism. America's Charity Divide: Who Gives, Who Doesn't, and Why It Matters*. New York: Basic Books.
- Chatruc, Marisol Rodriguez, and Sandra V Rozo. 2021. "How Does It Feel to Be Part of the Minority? Impacts of Perspective Taking on Prosocial Behavior." 1273. IDB Working Paper Series. Inter-American Development Bank.
- Clore, Gerald L., and Katharine M. Jeffery. 1972. "Emotional Role Playing, Attitude Change, and Attraction toward a Disabled Person." *Journal of Personality and Social Psychology* 23 (1): 105–11.
- Eisenberg, Nancy, Richard A. Fabes, and Tracy L. Spinrad. 2007. "Prosocial Development." In *Handbook of Child Psychology*. John Wiley & Sons, Ltd.
- Gaertner, Samuel L., and John F. Dovidio. 2000. *Reducing Intergroup Bias: The Common Ingroup Identity Model*. Reducing Intergroup Bias: The Common Ingroup Identity Model. New York: Psychology Press.
- Ghosn, Faten, Alex Braithwaite, and Tiffany S Chu. 2019. "Violence, Displacement, Contact, and Attitudes Toward Hosting Refugees." *Journal of Peace Research* 56 (1): 118–33.

- Habyarimana, James, Macartan Humphreys, Daniel N. Posner, and Jeremy M. Weinstein. 2009. *Coethnicity: Diversity and the Dilemmas of Collective Action*. Russell Sage Foundation.
- Hartman, Alexandra C., and Benjamin S. Morse. 2018. "Violence, Empathy and Altruism: Evidence from the Ivorian Refugee Crisis in Liberia." *British Journal of Political Science* 50 (2): 1–25.
- Hartman, Alexandra C., Benjamin S. Morse, and Sigrid Weber. 2021. "Violence, Displacement, and Support for Internally Displaced Persons: Evidence from Syria." *Journal of Conflict Resolution* 65 (10): 1791–1819.
- Hoffman, Martin L. 2000. *Empathy and Moral Development: Implications for Caring and Justice*. Cambridge: Cambridge University Press.
- IDMC. 2020. "Democratic Republic of the Congo: Displacement Associated with Conflict and Violence. Figure Analysis - Grid 2020." Internal Displacement Monitoring Centre.
- . 2023a. "Global Report on Internal Displacement 2023. Internal Displacement and Food Security." Internal Displacement Monitoring Centre.
- . 2023b. "Global Internal Displacement Database." Internal Displacement Monitoring Centre. 2023. <http://www.internal-displacement.org/database/displacement-data>.
- Jolliffe, Darrick, and David P. Farrington. 2006. "Development and Validation of the Basic Empathy Scale." *Journal of Adolescence* 29 (4): 589–611.
- Kaufman, Stuart J. 2001. *Modern Hatreds: The Symbolic Politics of Ethnic War*. Cornell University Press.
- Kesmaecker-Wissing, Melanie, and Anaïs Pagot. 2015. "Driven Apart. How Repeated Displacement Changes Family Dynamics in Eastern Drc." IDMC.
- Lupu, Noam, and Leonid Peisakhin. 2017. "The Legacy of Political Violence across Generations." *American Journal of Political Science* 61 (4): 836–51.
- Maedl, Anna. 2011. "Rape as Weapon of War in the Eastern DRC? The Victims' Perspective." *Human Rights Quarterly* 33 (1): 128–47.
- Maystadt, Jean-François, Kalle Hirvonen, Athur Mabiso, and Joachim Vandecastelen. 2019. "Impacts of Hosting Forced Migrants in Poor Countries." *Annual Review of Resource Economics*, May.
- McDowell, Steve. 2008. "Internal Displacement in North-Kivu: Hosting, Camps, and Coping Mechanisms." UNICEF.
- Meer, Jonathan, and Benjamin A. Priday. 2021. "Generosity Across the Income and Wealth Distributions." *National Tax Journal* 74 (3): 655–87.
- Moore, Will H., and Stephen M. Shellman. 2004. "Fear of Persecution: Forced Migration, 1952-1995." *The Journal of Conflict Resolution* 48 (5): 723–45.
- . 2006. "Refugee or Internally Displaced Person?: To Where Should One Flee?" *Comparative Political Studies* 39 (5): 599–622.
- Newman, Benjamin J., Todd K. Hartman, Patrick L. Lown, and Stanley Feldman. 2015. "Easing the Heavy Hand: Humanitarian Concern, Empathy, and Opinion on Immigration." *British Journal of Political Science* 45 (3): 583–607.
- Putnam, Robert D., and David E. Campbell. 2010. *American Grace: How Religion Divides and Unites Us*. New York: Simon and Schuster.
- Salehyan, Idean. 2008. "The Externalities of Civil Strife: Refugees as a Source of International Conflict." *American Journal of Political Science* 52 (4): 787–801.
- Salehyan, Idean, and Kristian Skrede Gleditsch. 2006. "Refugees and the Spread of Civil War." *International Organization* 60 (2): 335–66.



- Simonovits, Gábor, Gábor Kézdi, and Péter Kardos. 2018. "Seeing the World Through the Other's Eye: An Online Intervention Reducing Ethnic Prejudice." *American Political Science Review* 112 (1): 186–93.
- Staub, Ervin, and Johanna Vollhardt. 2008. "Altruism Born of Suffering: The Roots of Caring and Helping after Victimization and Other Trauma." *American Journal of Orthopsychiatry* 78 (3): 267–80.
- Stephan, Walter G., and Krystina Finlay. 1999. "The Role of Empathy in Improving Intergroup Relations." *Journal of Social Issues* 55 (4): 729–43.
- Stoop, Nik, and Marijke Verpoorten. 2021. "Would You Fight? We Asked Aggrieved Artisanal Miners in Eastern Congo." *Journal of Conflict Resolution* 65 (6): 1159–86.
- Tumen, Semih. 2016. "The Economic Impact of Syrian Refugees on Host Countries: Quasi-Experimental Evidence from Turkey." *American Economic Review* 106 (5): 456–60.
- UN. 2021. "Shining a Light on Internal Displacement. a Vision for the Future." United Nations High-Level Panel on Internal Displacement.
- UNHCR. 2021. "Hosts Offer Vital Refuge to Families Fleeing DRC Violence." The UN Refugee Agency.
- . 2023. "Global Trends Forced Displacement in 2022." The UN Refugees Agency.
- Van der Windt, Peter, and Macartan Humphreys. 2016. "Crowdsourcing in Eastern Congo: Using Cell Phones to Collect Conflict Events Data in Real Time." *Journal of Conflict Resolution* 60 (4): 748–81.
- Verme, Paolo, and Kirsten Schuettler. 2021. "The Impact of Forced Displacement on Host Communities: A Review of the Empirical Literature in Economics." *Journal of Development Economics* 150 (May): 102606.
- Voors, Maarten J., Eleonora E.M. Nillesen, Philip Verwimp, Erwin H. Bulte, Robert Lensink, and Daan P. Van Soest. 2012. "Violent Conflict and Behavior: A Field Experiment in Burundi." *The American Economic Review* 102 (2): 941–64.
- Wayne, Carly, and Yuri M. Zhukov. 2022. "Never Again: The Holocaust and Political Legacies of Genocide." *World Politics* 74 (3): 367–404.
- Williamson, Scott, Claire L. Adida, Adeline Lo, Melina R. Platas, Lauren Prather, and Seth H. Werfel. 2020. "Family Matters: How Immigrant Histories Can Promote Inclusion." *American Political Science Review* 115 (2): 686–93.
- World Bank. 2022. "Social Cohesion and Forced Displacement: A Synthesis of New Research." Washington, DC: World Bank.
- Zhou, Yang-Yang, and Andrew Shaver. 2021. "Reexamining the Effect of Refugees on Civil Conflict: A Global Subnational Analysis." *American Political Science Review* 115 (4): 1175–96.

Supplementary Materials for:

**Who Hosts?  
The Correlates of Hosting the Internally Displaced**

Leonid Peisakhin, Nik Stoop, Peter van der Windt

Conditionally Accepted at the American Political Science Review

April 2, 2024

A.	Context: Conflict, Displacement, and Hosting in Kalehe.....	35
B.	Visit 6: Qualitative Interviews.....	37
B.1	Sampling Frame, Sampling Strategy, Sample.....	37
B.2	Hosting Dynamics and the Role Played By the Village Chief.....	38
B.3	Empathy as a Motivation for Hosting.....	39
B.4	Role of Ethnicity in the Hosting Decisions.....	42
C.	Data Collection.....	45
D.	Measurement of Empathy.....	45
E.	Robustness.....	49
E.1	Hosting by Any Household in the Dwelling.....	49
E.2	Subsample of Households Not Yet Hosting During the Survey.....	49
E.3	Only Those that Did Not Leave during the 10-Month Period.....	49
E.4	Number of IDPs Hosted.....	49
E.5	Including Hosting Relationships Based on Kinship or Prior Acquaintance.....	50
E.6	Wild Cluster Bootstrap.....	51
F.	Correlates of Hosting.....	53
G.	Origins of Empathy.....	58
H.	The Experiment.....	59
H.1	Full Results of the Experiment.....	59
H.2	Secondary Outcomes.....	61
I.	Deviations from the Pre-Analysis Plan.....	64
	References.....	65

### **A. Context: Conflict, Displacement, and Hosting in Kalehe**

This study takes place in Kalehe territory, located in the South-Kivu province of the Democratic Republic of Congo. Conflict and armed group mobilization in this region has been ongoing since the early 1990's and largely relate to historic tensions over land and power between various local communities. As put by Bouvy, Bisimwa, and Batumike (2021, 9): "*Every incident is reinterpreted through the lenses of a fierce competition between Hutu, Havu and Tembo for the control of territory and power in Kalehe.*"

In May 2019, about a month before the onset of field activities, combatants from the Conseil National pour la Restauration de la Démocratie (CNRD), a dissident wing of the Democratic Forces for the Liberation of Rwanda (FDLR), moved in large numbers\* from North Kivu to South Kivu. These Hutu rebels moved into the Kalehe highlands, claiming that they wanted to peacefully live alongside local communities while preparing to return to Rwanda (UNSC 2019). Around that same time, North-Kalehe saw the return of two other armed groups: Mai Mai Kirikicho and Nyatura Kalume (Bouvy, Bisimwa, and Batumike 2021). Mai Mai Kirikicho recruits primarily from the Tembo community and claims to defend the Tembo against Hutu militia and Rwandophone officers of the Congolese army. Nyatura Kalume, on the other hand, claims to protect the Congolese Hutu population from other Mai-Mai groups and the Congolese army (Kivu Security Tracker 2023).

Given these dynamics, we expected that there was a large probability that violence would occur in the subsequent months, which in turn could lead to large flows of displacement from the Kalehe highlands to Mbinga South, a coastal area considered relatively safe (see **Figure 1** in main text).

The Kalehe highlands indeed experienced conflict in the subsequent months. On 26 November 2019, the Congolese government launched a military operation against the CNRD in Kalehe (UNSC 2020). The offensive led to the displacement of thousands of civilians, as Congolese Hutu were afraid of being confused with CNRD dependents, while others fled because they anticipated retaliations against the local population – as had happened in the past after attacks against the FDLR (Bouvy, Bisimwa, and Batumike 2021). Those that had been displaced were largely

---

\* Estimates of the number of rebels varied widely from source to source, but all agreed they ranged in the thousands.

accommodated by host households in receiving villages (Radio Okapi 2019), including in our research area.

### **Displacement and Hosting in Kalehe**

The ongoing insecurity in the region creates a continuous ebb and flow of displacement (Jacobs and Kyamusugulwa 2018). IDPs in Eastern Congo overwhelmingly favor being hosted by other families (Pham et al. 2022; Haver 2008), which is also the case in Kalehe territory (McDowell 2008).<sup>†</sup> IDPs often try to stay close to their home villages, many within a one-day walk of their homes (Pham et al. 2022). Focus groups and interviews with IDPs in, among others, Kalehe territory suggest that IDPs prefer a familiar rural environment, and being close to their homes to monitor security or to access their banana plantations, root crops or fields (McDowell 2008).

Hosting periods tend to differ for different waves of displacement. Displacement can be of a ‘pendulum’ nature, with IDPs returning to their home communities during the day or intermittently for planting or school seasons. Some IDPs return home after a few weeks, some after many months, and some settle in the host village (Haver 2008). In South Kivu province, IDPs who have lived in a host community for more than a year are often allocated a plot of land (Kesmaecker-Wissing and Pagot 2015).

Hosting involves sharing accommodation and food, and also offers emotional and spiritual sanctuary (e.g., McDowell 2008). Hospitality to IDPs extends beyond family ties.<sup>‡</sup> Living arrangements vary. Some IDPs occupy a room in the host family’s house, some are housed in empty or temporary structures on the host household’s plot of land, while others sleep with their hosts in the same room (Kesmaecker-Wissing and Pagot 2015). Accounts from Kalehe suggest that hosted IDPs are most often accommodated inside the host’s house and not in temporary accommodation outside the host family’s house because of stigma attached to having a guest living outside in a temporary structure which leaks and is often small, cold and dirty (McDowell 2008).

---

<sup>†</sup> In 2017, UNOCHA estimated that in Eastern Congo around 3.3 million IDPs lived in host communities and 500,000 in camps (Jacobs and Kyamusugulwa 2018).

<sup>‡</sup> Qualitative work from the region suggests that family links are not a reason to refuse to take in IDPs, and many hosted IDPs are not previously acquainted with their hosts (Kesmaecker-Wissing and Pagot 2015).

Hosted IDPs are expected to contribute to the household in whatever ways they can. These contributions can involve working in the host's fields, collecting wood for small amounts of money to contribute to the household, fetching water, or doing other domestic chores. Sharing humanitarian assistance – if provided – is also seen as a contribution (McDowell 2008; Haver 2008).

Despite problems and the unknown length of stay, hosting has been found to be a positive experience by both host and hosted.<sup>§</sup> However, host households are often affected by conflict and live at subsistence level themselves. Sharing food, goods and land with IDPs puts an additional burden on host households. When hosting is of short duration and fighting is intermittent, allowing time for people to return and recover, hosting is a strategy to cope with a difficult situation. However, when displacement lasts long and is experienced repeatedly, the coping mechanism needs to be supported to prevent it from breaking down.

## **B. Visit 6: Qualitative Interviews**

In October 2021, we returned to five randomly selected study villages for in-depth qualitative follow up fieldwork. The purpose of this fieldwork was to contextualize and complement the results of the quantitative analyses. Specifically, we aimed to obtain a better understanding of the dynamics involved in matching IDPs with hosts, to investigate whether the role of empathy is also mentioned qualitatively, and to explore the role of ethnicity in hosting decisions. The instruments and data, which include all responses to open-ended questions, are available on the APSR Dataverse.

### **B.1 Sampling Frame, Sampling Strategy, Sample**

Five of the fifteen study villages were randomly selected for follow-up fieldwork. In each village, we aimed to collect information from thirty households: 10 randomly selected host households, 10 randomly selected hosted households, and 10 randomly selected households that do not host and are not hosted. The sampling frame built on the household census collected during visit 2 (see next section). Together with the village chief, the list of households was updated: i.e., households that

---

<sup>§</sup> 97% of hosts and 83% of displaced surveyed said that if they had to, they would choose to enter host arrangements again (McDowell 2008).

had left the village were removed and those that had arrived were added. In addition, enumerators indicated for each household whether it was hosting, being hosted, or neither. From this list, within each village, ten households were randomly selected from each group, resulting in a total sample size of 150 respondents. In addition to the household surveys, we also conducted an in-depth interview with the village chief in each selected village. These interviews were aimed at understanding broader hosting dynamics within the village, but also to learn more about the types of IDP inflows that took place during the 10-month period during which we measure IDP hosting.

## **B.2 Hosting Dynamics and the Role Played By the Village Chief**

We asked households that were hosting at the time of the interview whether they had a personal connection with the IDP prior to hosting them. The vast majority (78%) responded no. We asked households who did not have a personal connection with the IDP how they met. In about half of cases (54%), the IDPs simply knocked on their door. Others (26%) indicate that they were put in contact with the IDP by someone else in the village. Most of the times this role was played by the village chief (N=7), while also a religious leader (N=1) and other villagers (N=2) were mentioned.

The remainder (20%) of hosting households without a personal connection to the IDP indicate to have met the IDP on the road. Consider for instance the following answer: *“I was coming back from prayer when I met them for the first time, it was late and they were on the road, looking for a shelter. I showed them that I had space in my house, but I didn't have enough to eat but if they wanted, they could come. So, I came with them, a pregnant woman with 9 children and her husband. When they arrived at my house, they called other displaced people because they found the house spacious.”*

We asked all hosting households whether they spoke with the village chief before they started hosting the IDP. The large majority (90%) indicated that they did, which is not surprising as it is customary to inform the village chief of new people arriving in the village. The responses from hosted households paint a similar picture. We asked them whether somebody recommended the hosting household to them or whether they found it themselves. Half of them indicated to have found the hosting household on their own account (N=25). In an open-ended question, we ask them how they found their hosting household. Responses relate to knocking on doors and asking help on the road, while others were able to stay with relatives. Examples of answers include: 1)

*“We met on the road, and we asked for help. He had compassion for us and welcomed us in his home.”; 2) “I came from [redacted], I was fleeing the attacks of [redacted]. I arrived in this village and knocked on this door. They received me after having explained at length my situation of being displaced.”; 3) “I came from [redacted] where my military husband was killed during battle. I presented myself here with his older brother who offered me this small room where I now live with my children.”*

To those households that found the hosting household on their own account (N=25), we also asked whether they had to try several households before being accommodated. The majority (68%) was currently staying with the first household they had approached. By the second and third try everybody had found a roof over their head. The other half of hosted households (N=25) found the hosting household through the help of someone in the village. Most of the times this role was again played by the village chief (N=13), while also a religious leader (N=1), friends and family (N=8), and other villagers (N=3) were mentioned. In an open-ended question, we asked about the role these individuals played. Illustrative responses include: 1) *“He saw that he did not have enough space to accommodate us, and he asked our current host to accommodate us.”; 2) “He asked his neighbor to help us because he was already hosting a displaced person.”; 3) “He oriented me well by showing me the house, he first did some research to find the host house.”*

In sum, the qualitative information from these interviews suggests that the village chief plays an important role in the context of hosting decisions in his role as the guardian of the village. However, the village chief does not assign incoming IDPs to households; there is agency in the hosting decision on the side of both the IDP and the potential host household.

### **B.3 Empathy as a Motivation for Hosting**

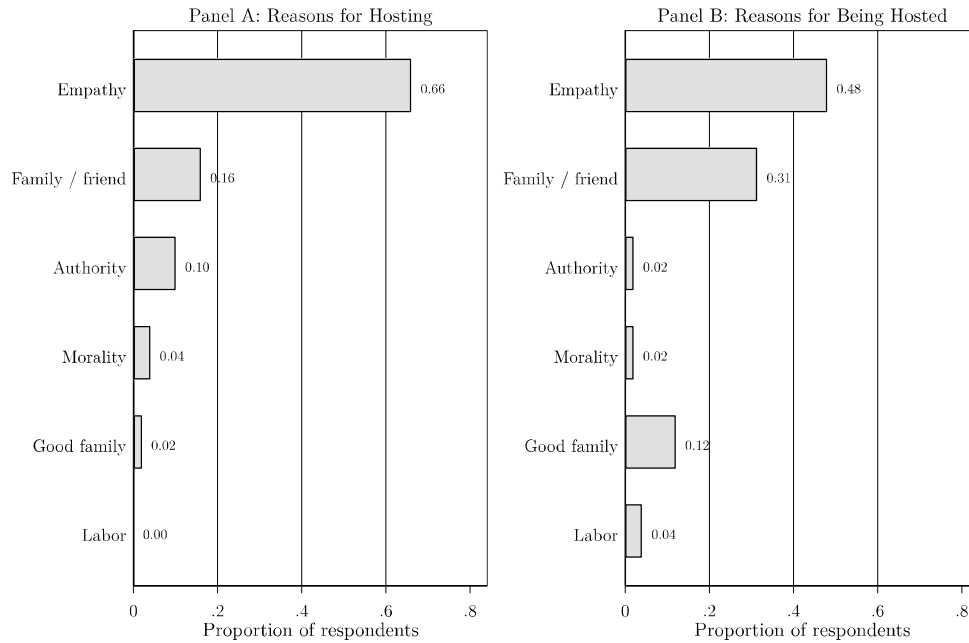
Our quantitative analysis in the main text concludes that empathy is one of the key factors explaining the hosting decision. The qualitative follow-up data corroborate this finding. We asked hosting households why they decided to host a displaced person. In addition, we asked displaced households why – according to them – their current host was willing to host them. These questions were open-ended, and we categorized the answers according to the main motivation mentioned. Six categories emerged, which are presented in **Figure A1**.

Panel A presents the reasons for hosting. In line with our quantitative analysis in the main text, empathy clearly comes out as the most important motivation, mentioned by 66% of hosting households. Illustrative answers include: 1) *“It was raining and late. These people were in trouble.”*; 2) *“I felt sorry for them and saw the degree of suffering of these families.”*; 3) *“I saw their suffering and could not let them continue suffering.”*; 4) *“This family was in difficulty, and I understood I had to help them.”*

Interestingly, among those referring to empathy, 66% mentioned that they had been in a situation of displacement before, or that they could imagine finding themselves in such a situation in the future. This clearly relates to cognitive empathy; i.e., perspective taking or the ability to understand someone else’s emotions. Illustrative answers include: 1) *“They were in difficulty, and I have gone through a similar situation.”*; 2) *“I could also run into the same difficulties as this person, my first reaction would then also be to find a home to stay.”*; 3) *“I hosted them because I could find myself in the same situation and in that case, I would need to rely on other people to receive me in their home.”* Other reasons related to having a previous relationship with the displaced family (16%), being asked by the village chief if they would be willing to host (10%), helping those in need as a Christian duty (4%), or the positive reputation of the displaced family (2%).

**Figure A1. Reasons for Hosting and for Being Hosted**





*Notes:* The categories in the graphs represent open answers from 50 households that were hosting at the time of the interview (Panel A) and 50 households that were hosted at the time of the interview (Panel B). The former were asked “Why did you decide to host the IDP you are currently hosting?”, while the latter were asked “Why do you think your current host was willing to host you?”

In Panel B, we present reasons for being hosted as perceived by hosted IDPs. Again, empathy stands out, being mentioned by 48% of respondents. Illustrative responses include: 1) “*Because he knew the war had taken all our goods and left us with nothing.*”; 2) “*When the household saw me, they took pity on me after I explained the ordeal I had gone through during three days of fleeing, and they agreed to provide me with this accommodation.*”; 3) “*Because he took pity on us as displaced persons and he saw that we were vulnerable, he was sensitive to our vulnerability.*”; 4) “*Because of his generosity, we did not know each other, and he accepted to host us.*”; 5) “*Because he found me pregnant and without means.*”

About a third of displaced households (31%) indicated to be hosted by family or friends: 1) “*It is my family and I had nowhere else to go.*”; 2) “*He studied with my husband, and they remained close friends.*”; 3) “*Because I did not have any means and it is also my biological family.*”; 4) “*I am the wife of his older brother. Even if he’s dead, the younger brother is obliged to host me.*” Other reasons related to the displaced family having a good reputation (12%), helping the host

family out with labor (4%), the village chief pleading on their behalf (2%) or religious motivations (2%). In sum, also in the qualitative follow-up work, empathy stands out as the most important determinant of hosting.

#### B.4 Role of Ethnicity in the Hosting Decisions

Contrary to existing work on altruistic and cooperative giving, our quantitative analysis in the main text indicates that ethnicity does not explain hosting decisions. Qualitative data presented in this section corroborate this finding. We asked households that were hosting and households that were neither hosting nor being hosted\*\* to imagine the following situation: “*Imagine that several IDP families arrived in your village. Imagine that you have the resources to host a family. How likely is it that you would host an IDP family of the following ethnicity?*”

Respondents were then presented with a list of ethnicities common in the research area: Tembo, Havu, Shi, Banyarwanda, and Hunde.†† The response options were: 1) very unlikely; 2) unlikely; 3) likely; 4) very likely. For all ethnic groups, the typical respondent indicates that they would be (very) likely to host the IDP of that ethnicity (i.e., scores between 3 and 4).‡‡ **Table A1** presents this information by ethnicity dyad; i.e., the ethnicity of the respondent and the ethnicity of the hypothetical IDP. There are only small differences in the self-reported willingness to host IDPs from different ethnicities.§§

**Table A1. Willingness to Host Members of the Same and Other Ethnic Groups**

IDP↓ Resp.→	Tembo	Havu	Shi	Banyarwanda	Hunde
Tembo	3.92	3.59	3.31	No obs	3.70
Havu	3.85	3.75	3.54	No obs	3.80
Shi	3.77	3.68	3.46	No obs	3.50
Banyarwanda	3.46	3.17	3.08	No obs	3.30
Hunde	3.62	3.46	3.31	No obs	3.80

\*\* These two groups comprised 100 respondents. The majority (56%) are Havu, while others are Tembo (21%), Shi (13%), Hunde (7%), or other smaller ethnicities (3%).

†† To avoid ordering effects, across respondents, the ethnicities were presented in a random order.

‡‡ Tembo: 3.61, Havu: 3.74, Shi: 3.65, Banyarwanda: 3.19, Hunde: 3.5.

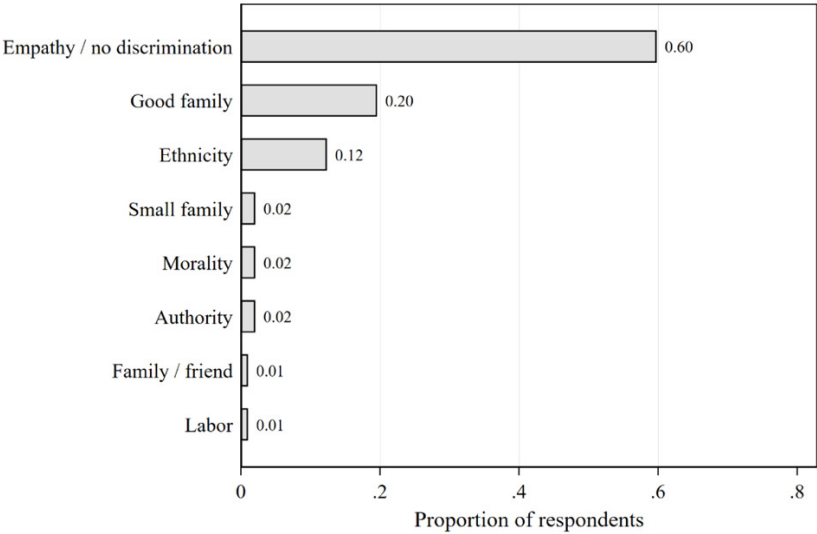
§§ While the willingness to host Banyarwanda appears to be relatively lower, respondents still indicate that they would be likely to host them, on average.

*Notes:* Response to the question “Imagine that several IDP families arrived in your village. Imagine that you have the resources to host a family. How likely is it that you would host an IDP family of the following ethnicity?” Asked to households that were hosting and households that were neither hosting nor being hosted. Response options were:

1) very unlikely; 2) unlikely; 3) likely; 4) very likely. There are no Banyarwanda respondents.

We then asked these households to imagine the following situation, clearly priming the ethnicity of incoming IDPs: “Imagine that multiple displaced families arrive in your village. Among them are several Tembo families, several Havu families, several Shi families, several Hunde families and several Banyarwanda families.” Given this scenario, we asked them whether they would be willing to host a displaced family provided they had the resources. Almost all respondents (97%) answered affirmatively. We then asked them an open question about how they would decide which family to host. We categorized the answers according to the main criteria mentioned. The results are presented in **Figure A2**.

**Figure A2. Mentioned Criteria for Hosting**



*Notes:* The categories in the figure represent open answers from households that were hosting and households that were neither hosting nor being hosted at the time of the interview. Provided they had indicated a willingness to host an IDP family (N=97), they were asked “How would you decide which family to host?”

Again, reasons related to empathy stand out, being mentioned by 60% of respondents. Illustrative answers include: 1) “I receive all the families and if they are numerous, I appeal to the chief of the

*village. However, if it is necessary to choose a family, I will choose to receive the poorest family, the families with means can rent a house.”; 2)“I know that not everyone can come at the same time, those who came first I give them a space where they can settle, those who come later I also give them a space and so on. There is room to accommodate them, a displaced person can even sleep on the floor, the main thing is that there is a place to sleep.”; 3)“I can welcome the family that has more difficulty, the family that has no acquaintance here.”*

Given that our question primed the ethnicity of IDPs, many of the answers related to empathy also referred to ethnicity, indicating that it would not be a criterion for discrimination. Consider for instance the following answers: 1)“*I will inquire about their background to make sure that what he says is true. I receive according to who is in the worst situation without taking into account his tribe. I can also take into account distance, I receive in priority the family who came from furthest.”; 2)“I can welcome all of them, without exception, I am the mother of a large family, food may be lacking but there is always the possibility of sharing the little that is available.”; 3)“It is without distinction of tribe, I only have to ask him to explain where he comes from, why he fled.”*

About 20% of respondents mentioned that they would choose to host a “good family” that they believe would not cause them any problems. Illustrative answers include: 1)“*A family that will not be a source of insecurity for me or for the village, that is to say that the chief must be informed beforehand.”; 2)“A family which will not put me in insecurity or in other difficulties such as theft.”; 3)“I can choose the family with which we can live in harmony.”; 4)“The family that doesn't steal, the family that I will get along with.”*

It is worth highlighting that even when specifically framing the question in terms of ethnicity, only 12% of respondents mentioned that they would preferably host a family of their own ethnic group. This further reinforces the finding from the previous section, where none of our respondents mentioned ethnicity as a motivating factor for hosting or being hosted, when asked an open question. In sum, also the qualitative data suggest that ethnicity plays a relatively small role in hosting decisions in our study context.

### C. Data Collection

**Table A2** gives an overview of the timeline and key activities of the data collection process.

**Table A2. Data Collection Timeline**

Visit	Day	Activities	Date
1	1	Village census. 94 villages visited, 15 selected.	Jul7-Jul25, 2019
2	7	Full listing of dwellings and households.	Aug25-Sep8, 2019
3	10	Household surveys with embedded experiment.	Sep5-Sep20, 2019
4	10+4m	Collected information on hosting behavior in person.	Jan11-Jan14, 2020
5	10+10m	Collected information on hosting behavior by phone.	Jul8-Jul23, 2020
6	10+25m	Qualitative interviews with chief and 30 households in 5 villages.	Oct14-Oct19, 2021
7	10+42m	Qualitative interviews with chief and 5 female-headed households that are not hosting in 5 villages.	Feb5-12, 2023

*Notes:* Timeline and key activities of the data collection process.

### D. Measurement of Empathy

#### Item Selection

To measure empathy, we rely on the “Basic Empathy Scale”, a scale widely used in psychology (Jolliffe and Farrington 2006). The original scale consists of 20 items. Many studies, however, have validated and used shorter versions (e.g. Salas-Wright, Olate, and Vaughn 2013; Heynen et al. 2016; Rodríguez-Hidalgo et al. 2020). We follow Salas-Wright, Olate, and Vaughn (2013) and use a six-item scale. The items were chosen in order to capture a range of different emotions, while also taking into account how strongly each item was correlated with affective or cognitive empathy in previous studies (i.e. Albiero et al. 2009; D’Ambrosio et al. 2009; Heynen et al. 2016; Jolliffe and Farrington 2006; Salas-Wright, Olate, and Vaughn 2013).

In the psychology literature, two components of empathy are generally distinguished: a cognitive component that involves the capacity to imagine someone else’s thoughts and feelings, and an affective component that involves the ability to respond to someone else’s thoughts and feelings with appropriate emotion (e.g. Baron-Cohen, 2011; Baron-Cohen and Wheelwright, 2004; Jolliffe and Farrington, 2006). We choose three items for each component. Affective empathy: 1) “After being with a friend who is sad about something, I also feel sad”; 2) “I get caught up in other

people's feelings easily"; 3) "I tend to feel scared when I am with friends who are afraid". Cognitive empathy: 4) "I can often understand how people are feeling even before they tell me"; 5) "I can usually realize quickly when a friend is angry"; 6) "I find it hard to know when my friends are frightened". Respondents were asked to indicate to what extent these statements applied to them using a 4-point Likert scale: 0) strongly disagree; 1) disagree; 2) agree; 3) strongly disagree. The option "undecided" is removed, forcing respondents to make a choice. Higher item scores are associated with higher levels of empathy. The exception is item 6, which is phrased in a negative way.

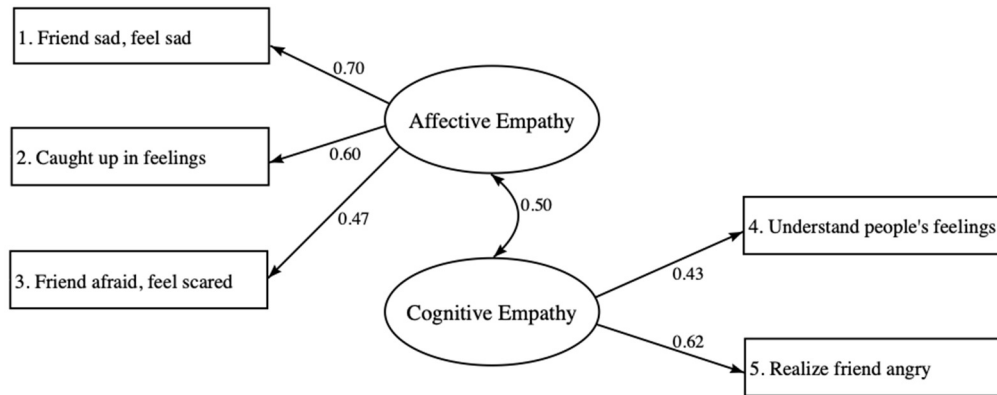
### **Confirmatory Factor Analysis**

To test the goodness of fit of our adapted empathy scale, we follow earlier validation exercises (e.g. Salas-Wright, Olate, and Vaughn 2013; Heynen et al. 2016; Rodríguez-Hidalgo et al. 2020), and performed a Confirmatory Factor Analysis.<sup>\*\*\*</sup> Following the original model of Jolliffe and Farrington (2006), we specified the six items to load on one of two latent factors: affective empathy and cognitive empathy. Item 6 ("*I find it hard to know when my friends are frightened*") loaded poorly on the latent factor representing cognitive empathy (standardized factor coefficient of only 0.03, and  $p = 0.361$ ). Item 6 was the only negatively phrased item. While the combination of positively and negatively phrased items is common practice in psychological research, several scholars have argued against doing so, as it may confuse respondents, requires higher verbal skills, and reduces the precision of the measures derived from the items (Suárez-Álvarez, Pedrosa, and Lozano 2018; Sonderen, Sanderman, and Coyne 2013). Most of our respondents (65%) did not finish primary education, which may explain why we found no correlation between item 6 and the latent factor representing cognitive empathy. Multiple studies that use the Basic Empathy Scale have reported similar problems with negatively phrased items, finding that they are poorly correlated with the latent empathy factors, suggesting that respondents may have misunderstood them (e.g. Heynen et al. 2016; Zych et al. 2022; Sánchez-Pérez et al. 2014; Bensalah et al. 2016; Salas-Wright, Olate, and Vaughn 2013). We followed the example of these studies and exclude item 6 from the analysis.

---

<sup>\*\*\*</sup> We used the Structural Equation Model builder of Stata 15.1.

**Figure A3. Confirmatory Factor Analysis Model**



*Notes:* The figure displays the estimated item factor loadings on the two latent factors as well as the correlation between the latent factors. All coefficients are significant at  $p < 0.001$ . Goodness of fit measures:  $\chi^2(df) = 5.75 (4)$ ,  $p$ -value=0.22; RMSEA=0.017; CFI=0.998; TLI=0.994.

Next, we ran the Confirmatory Factor Analysis model with the five remaining items. **Figure A3** presents the results. All item factor loadings are highly significant ( $p < 0.001$ ) with estimated coefficients ranging from 0.47 to 0.70 – indicating strong correlations between the separate items and the latent factors. As an additional validation test, **Table A3** compares the estimated item factor loading coefficients with the average factor loading coefficients for those items across a range of earlier studies (i.e. Albiero et al. 2009; D’Ambrosio et al. 2009; Heynen et al. 2016; Jolliffe and Farrington 2006; Salas-Wright, Olate, and Vaughn 2013). The estimates are highly comparable. In addition, in line with these studies, **Figure A3** shows that the latent factors of affective and cognitive empathy are strongly and significantly correlated, with a coefficient of 0.50 and a  $p$ -value  $< 0.001$ .

**Table A3. Comparison of Item Factor Loadings with Previous Studies**

	Earlier studies (average)	This study
1. After being with a friend who is sad about something, I usually feel sad.	0.63	0.70
2. I get caught up in other people’s feelings easily.	0.60	0.60
3. I tend to feel scared when I am with friends who are afraid.	0.40	0.47
4. I can often understand how people are feeling even before they tell me.	0.51	0.43

5. I can usually realize quickly when a friend is angry.

0.50

0.62

---

*Notes:* Table compares the factor loading coefficients estimated in our 5-item model with the average factor loading coefficients for those items across a range of earlier studies, specifically: Albiero et al. 2009; D’Ambrosio et al. 2009; Heynen et al. 2016; Jolliffe and Farrington 2006; Salas-Wright, Olate, and Vaughn 2013.

Next, we follow earlier work (i.e. Albiero et al. 2009; D’Ambrosio et al. 2009; Heynen et al. 2016; Jolliffe and Farrington 2006; Salas-Wright, Olate, and Vaughn 2013) and explore a set of goodness of fit indicators and cut-off points, i.e. the value of the chi-square statistic should be close to the number of degrees of freedom and have a p-value exceeding 0.05; the Root Mean Square Error of Approximation (RMSEA) should not exceed 0.08, with values closer to 0 indicating a better fit; the Comparative Fit Index (CFI) and Tucker-Lewis Index (TLI) should have values exceeding 0.90. According to all these indicators, our two-factor, 5-item model is a good fit to the data: the chi-square statistic was not significant ( $\chi^2(df) = 5.75 (4)$ , p-value = 0.22); and the other indicators are well within the recommended range: RMSEA=0.017; CFI=0.998 and TLI=0.994. In sum, we feel comfortable to drop item 6 from the empathy scale. Finally, applying the Spearman-Brown reliability correction, we find Cronbach Alpha values that indicate internal consistency for the five-item empathy scale (0.83) as well as for the affective (0.85) and cognitive (0.77) empathy scales separately. Following Albiero et al. (2009), and per our pre-analysis plan, we derive a measure for empathy by summing up the separate item scores.



## **E. Robustness**

In this section, we submit the results to multiple robustness tests. For ease of comparison, model 1 in **Table A4** presents the results from the preferred specification as reported in the paper (model 3 in **Table 2**).

### **E.1 Hosting by Any Household in the Dwelling**

The fifteen study villages encompass 1,660 dwellings. In the survey we collected information from 1,504 dwellings. We focus on those households that own the dwelling as they make the decision whether to host the IDPs. In the ten month-period following our survey, 1,274 new incoming displaced households were hosted among 386 of these households in the study villages (354 of them were surveyed during visit 3). However, 193 additional IDPs were received by households that were already hosted themselves. Model 2 of **Table A4** presents the results where we change the dependent variable to any household in the dwellings starts hosting, which increases the number of dwellings that are hosting strangers (and for which data were collected during visit 3) from 316 to 432. We obtain similar results.

### **E.2 Subsample of Households Not Yet Hosting During the Survey**

Households that were already hosting at the time of the survey may be less likely to host additional households. The majority (78%) of households that started hosting during the study period were not yet hosting at the time of the survey. As specified in the pre-analysis plan, we run a robustness check limiting the analysis to households that were not yet hosting at the time of the survey. Model 3 of **Table A4** presents the results. The main findings remain qualitatively unchanged.

### **E.3 Only Those that Did Not Leave during the 10-Month Period**

Households that left the study village are unable to host incoming IDPs. Only 12 households left during the 10 months following the survey. Model 4 of **Table A4** shows the results of a robustness check where we subset to those households that did not leave during the study period. The main findings remain qualitatively unchanged.

### **E.4 Number of IDPs Hosted**

The village chief recorded the number of IDPs that a household started hosting during the 10-month period following the survey. To explore the intensive margin of hosting, model 5 of **Table**

**A4** shows results when changing the dependent variable to the number of IDPs being hosted. The main findings remain qualitatively unchanged.

### **E.5 Including Hosting Relationships Based on Kinship or Prior Acquaintance**

A small number of IDPs (11%) already knew their hosts from before. In the main analysis, we exclude hosting relationships based on kinship or prior acquaintance from the analyses because we are interested in why people open their doors to strangers. In model 6 of **Table A4**, the dependent variable also captures hosting based on kinship or prior acquaintance while we additionally include a control variable capturing such prior relationships. Again, the main findings remain qualitatively unchanged.

**Table A4. Robustness Tests**

	Main specification (model 3 in Table 2) (1)	Hosted by any household in dwelling (2)	Subset of HH that did not yet host (3)	Subset of HH that did not leave (4)	Number IDPs hosted (5)	Hosts IDP (including kinship) (6)
Empathy	0.074** (0.032)	0.076** (0.028)	0.076* (0.037)	0.069* (0.033)	0.053* (0.029)	0.065** (0.030)
Strength of ethnic attachment	-0.024 (0.028)	-0.013 (0.028)	-0.021 (0.033)	-0.021 (0.028)	0.003 (0.027)	-0.022 (0.026)
Respondent related to chief	0.033* (0.018)	0.031 (0.019)	0.024 (0.027)	0.033 (0.019)	0.019 (0.025)	0.034* (0.016)
Strongly agrees that IDPs increase prob. of aid	0.017 (0.025)	0.012 (0.026)	0.033 (0.037)	0.017 (0.026)	0.046 (0.036)	0.019 (0.024)
Strongly agrees that IDPs provide cheap labor	-0.005 (0.033)	0.002 (0.031)	-0.018 (0.043)	-0.006 (0.033)	-0.022 (0.031)	-0.005 (0.031)
Dwelling has a high-quality roof	0.042 (0.027)	0.042* (0.023)	0.056* (0.029)	0.047* (0.026)	0.040 (0.029)	0.043 (0.026)
Dwelling has high-quality walls	0.009 (0.026)	0.009 (0.024)	0.032 (0.029)	0.008 (0.025)	-0.014 (0.026)	0.005 (0.026)
Asset index	0.027 (0.030)	0.025 (0.031)	-0.025 (0.040)	0.027 (0.030)	0.008 (0.043)	0.027 (0.027)
Importance of church in daily life	-0.019 (0.029)	-0.021 (0.025)	-0.014 (0.031)	-0.021 (0.028)	0.013 (0.027)	-0.012 (0.027)
Times to church per week	-0.013 (0.019)	-0.003 (0.020)	-0.015 (0.021)	-0.016 (0.019)	-0.026 (0.020)	-0.012 (0.019)
Household head is male	0.082*** (0.023)	0.071** (0.026)	0.085*** (0.021)	0.089*** (0.025)	0.065** (0.029)	0.079*** (0.023)
Home was ransacked	-0.042 (0.026)	-0.038 (0.026)	-0.062* (0.033)	-0.044 (0.028)	-0.024 (0.027)	-0.040 (0.025)
Host at the time of the survey	0.032 (0.026)	0.098*** (0.021)		0.026 (0.026)	0.011 (0.020)	0.035 (0.025)
Respondent's age	0.036 (0.025)	0.030 (0.031)	0.022 (0.022)	0.041 (0.026)	0.016 (0.034)	0.036 (0.025)
Respondent is literate	0.027 (0.030)	0.025 (0.029)	0.036 (0.033)	0.029 (0.031)	0.042* (0.022)	0.032 (0.030)
Respondent is born in the village	0.048 (0.034)	0.050 (0.033)	0.057 (0.039)	0.050 (0.034)	0.047 (0.029)	0.049 (0.034)
Respondent is Protestant	0.040 (0.024)	0.037 (0.022)	0.056* (0.028)	0.036 (0.024)	0.006 (0.027)	0.032 (0.022)
Household size	-0.036 (0.033)	-0.042 (0.036)	-0.033 (0.034)	-0.040 (0.033)	0.019 (0.035)	-0.032 (0.032)
Household dependency ratio	0.004 (0.032)	0.013 (0.031)	0.003 (0.037)	0.004 (0.032)	-0.003 (0.034)	0.004 (0.032)
Kinship or prior acquaintance with IDP						0.260*** (0.026)
Village FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,361	1,361	1,083	1,348	1,361	1,361
R <sup>2</sup>	0.070	0.074	0.082	0.070	0.110	0.153

Notes: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Standard errors clustered at the village level and reported in parentheses.

Variables are standardized.

## E.6 Wild Cluster Bootstrap

Our main specification clusters standard errors at the village-level. In **Table A5**, we address the issue that our study only includes a small number of clusters (i.e., 15 villages), potentially biasing

our findings. As suggested by Cameron and Miller (2015), we run a robustness check implementing the wild cluster bootstrap method. The results remain qualitatively unchanged.

**Table A5. Wild Cluster Bootstrap**

		Hosts IDP (1)
Empathy	Empathy	0.074** (0.038) [0.046]
Ethnicity	Strength of ethnic attachment	-0.024 (0.407) [0.468]
Authority	Respondent related to chief	0.033* (0.093) [0.095]
Benefits	Strongly agrees that IDPs increase prob. of aid	0.017 (0.513) [0.515]
	Strongly agrees that IDPs provide cheap labor	-0.005 (0.893) [0.882]
Wealth	Dwelling has a high-quality roof	0.042 (0.137) [0.146]
	Dwelling has high-quality walls	0.009 (0.728) [0.746]
	Asset index	0.027 (0.389) [0.383]
Religiosity	Importance of church in daily life	-0.019 (0.519) [0.509]
	Times to church per week	-0.013 (0.503) [0.492]
Security	Household head is male	0.082*** (0.003) [0.001]
Violence	Home was ransacked	-0.042 (0.129) [0.123]
Demographic controls	Host at the time of the survey	0.032 (0.234) [0.225]
	Respondent's age	0.036 (0.172) [0.182]
	Respondent is literate	0.027 (0.379) [0.362]
	Respondent is born in the village	0.048 (0.185) [0.229]
	Respondent is Protestant	0.040 (0.114) [0.106]
	Household size	-0.036 (0.296) [0.311]
	Household dependency ratio	0.004 (0.896) [0.909]
		Village FE
	Observations	1,361

*Notes:* Variables are standardized. P-values from the conventional model with standard errors clustered at the village-level are reported in parentheses. Bootstrap p-values from the distribution of 999 wild bootstrap t-statistics after clustering at the village-level are reported in square brackets. Significance is indicated by \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$  and is based on the bootstrap p-values.

## **F. Correlates of Hosting**

Models 1-3 in **Table A6** replicate models 1-3 in **Table 2**, where we present results for all covariates. Model 4 adds the experimental conditions to models 3. Models 5 and 6 present results focusing solely on affective and cognitive empathy, respectively.

**Table A6. Correlates of Hosting: Full Model**

		Hosts IDP					
		(1)	(2)	(3)	(4)	(5)	(6)
Empathy	Empathy	0.091** (0.035)	0.073** (0.031)	0.074** (0.032)	0.075** (0.032)		
	Affective empathy					0.048 (0.035)	
	Cognitive empathy						0.070*** (0.020)
Ethnicity	Strength of ethnic attachment	-0.025 (0.029)	-0.024 (0.026)	-0.024 (0.028)	-0.024 (0.030)	-0.022 (0.028)	-0.018 (0.027)
Authority	Respondent related to chief	0.055** (0.022)	0.042** (0.018)	0.033* (0.018)	0.036* (0.018)	0.036* (0.018)	0.033* (0.018)
Benefits	Strongly agrees IDPs increase prob. of aid	0.006 (0.028)	0.012 (0.025)	0.017 (0.025)	0.011 (0.025)	0.021 (0.026)	0.020 (0.025)
	Strongly agrees IDPs provide cheap labor	-0.013 (0.034)	-0.005 (0.035)	-0.005 (0.033)	-0.003 (0.035)	-0.001 (0.034)	-0.002 (0.033)
Wealth	Dwelling has a high-quality roof	0.053* (0.029)	0.049* (0.027)	0.042 (0.027)	0.038 (0.026)	0.043 (0.027)	0.044 (0.026)
	Dwelling has high-quality walls	-0.005 (0.042)	0.000 (0.029)	0.009 (0.026)	0.009 (0.024)	0.009 (0.026)	0.007 (0.027)
	Asset index	0.018 (0.034)	0.032 (0.033)	0.027 (0.030)	0.028 (0.030)	0.028 (0.030)	0.024 (0.030)
Religiosity	Importance of church in daily life	-0.010 (0.031)	-0.019 (0.029)	-0.019 (0.029)	-0.022 (0.027)	-0.018 (0.028)	-0.020 (0.028)
	Times to church per week	-0.018 (0.016)	-0.015 (0.017)	-0.013 (0.019)	-0.014 (0.021)	-0.011 (0.020)	-0.015 (0.019)
Security	Household head is male	0.072*** (0.021)	0.089*** (0.022)	0.082*** (0.023)	0.086*** (0.024)	0.081*** (0.023)	0.083*** (0.024)
Violence	Home was ransacked	-0.036 (0.025)	-0.044 (0.026)	-0.042 (0.026)	-0.036 (0.024)	-0.038 (0.026)	-0.044 (0.027)
Demographic	Host at the time of the survey			0.032 (0.026)	0.028 (0.026)	0.032 (0.026)	0.030 (0.025)
	Respondent's age			0.036 (0.025)	0.043* (0.022)	0.034 (0.025)	0.034 (0.024)
	Respondent is literate			0.027 (0.030)	0.029 (0.028)	0.032 (0.030)	0.027 (0.030)
	Respondent is born in the village			0.048 (0.034)	0.047 (0.035)	0.050 (0.034)	0.045 (0.035)
	Respondent is Protestant			0.040 (0.024)	0.045 (0.026)	0.041 (0.024)	0.043* (0.024)
	Household size			-0.036 (0.033)	-0.039 (0.032)	-0.034 (0.033)	-0.036 (0.033)
	Household dependency ratio			0.004 (0.032)	0.004 (0.031)	0.006 (0.033)	0.004 (0.032)
Experiment	Empathy appeal				0.025 (0.126)		
	Authority appeal				-0.024 (0.089)		
	Morality appeal				0.084 (0.062)		
	Other ethnicity				0.177 (0.120)		
	Empathy appeal * Other ethnicity				-0.241 (0.154)		
	Authority appeal * Other ethnicity				-0.335* (0.169)		
	Morality appeal * Other ethnicity				-0.207* (0.098)		
	Village FE	No	Yes	Yes	Yes	Yes	Yes
	Observations	1,382	1,382	1,361	1,361	1,361	1,361
	R <sup>2</sup>	0.024	0.066	0.07	0.081	0.067	0.07

Notes: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01. Standard errors clustered at the village level and reported in parentheses.

Variables are standardized.

**Table A7** presents parsimonious regressions, exploring the relationship between a household's hosting behavior and each of the main explanatory variables individually.

**Table A7. Correlates of Hosting: Parsimonious Model**

	Hosts IDP								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Empathy	0.071** (0.028)								
Strength of ethnic attachment		-0.003 (0.027)							
Respondent related to chief			0.050*** (0.012)						
Strongly agrees IDPs increase prob. of aid				0.030 (0.028)					
Strongly agrees IDPs provide cheap labor				-0.011 (0.034)					
Dwelling has a high-quality roof					0.046 (0.028)				
Dwelling has high-quality walls					0.004 (0.026)				
Asset index					0.062* (0.033)				
Importance of church in daily life						-0.009 (0.027)			
Times to church per week						-0.006 (0.020)			
Exposure to violence index							-0.033 (0.022)		
Home was ransacked								-0.046 (0.026)	
Household head is male									0.100*** (0.028)
Village FE	No	No	No	No	No	No	No	No	No
Observations	1,488	1,462	1,499	1,475	1,483	1,489	1,499	1,498	1,504
R <sup>2</sup>	0.046	0.044	0.043	0.039	0.052	0.040	0.042	0.043	0.050

*Notes:* \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01 Standard errors clustered at the village level and reported in parentheses. Variables are standardized. Parsimonious regressions, isolating the relationship between a household's hosting behavior and each of the main explanatory variables.

### Correlates of Hosting at the Dyad Level

We construct a dataset with all possible dyads at the village level between incoming IDPs and potential hosts, and subsequently explore whether coethnic dyads are more likely to result in hosting than non-coethnic dyads. Model 1 in **Table A8** replicates the study's preferred specification – model 3 in **Table 2** – at the dyad level. Only empathy and gender of the household head are statistically significant, and empathy has the largest effect. Model 2 replicates model 4 in **Table 2**, where we present results for all covariates. Finally, models 3 and 4 separate out results by whether the dyad is a coethnic dyad or not, respectively. Empathy is an important correlate of

hosting only when it comes to accommodating non-coethnic IDPs, while it is not statistically significant in informing the decision to host coethnics.



**Table A8. Correlates of Hosting: Full Model**

		Dyad hosts IDP (1)	Dyad hosts IDP (2)	Dyad hosts coethnic IDP (3)	Dyad hosts non- coethnic IDP (4)
Empathy	Empathy	0.013** (0.007)	0.012* (0.006)	-0.003 (0.014)	0.017** (0.007)
Ethnicity	Strength of ethnic attachment	-0.003 (0.006)			
	IDP and respondent same ethnicity		-0.022 (0.018)		
Authority	Respondent related to chief	0.007 (0.006)	0.006 (0.006)	0.011 (0.010)	0.003 (0.007)
Benefits	Strongly agrees that IDPs increase prob. of aid	0.003 (0.006)	0.004 (0.006)	0.012 (0.011)	0.001 (0.008)
	Strongly agrees that IDPs provide cheap labor	-0.003 (0.006)	-0.004 (0.006)	-0.007 (0.010)	-0.002 (0.007)
Wealth	Dwelling has a high-quality roof	0.003 (0.006)	0.002 (0.006)	-0.001 (0.012)	0.003 (0.007)
	Dwelling has high-quality walls	0.006 (0.007)	0.006 (0.007)	-0.009 (0.010)	0.015* (0.009)
	Asset index	0.004 (0.008)	0.003 (0.008)	0.016 (0.014)	-0.000 (0.009)
Religiosity	Importance of church in daily life	-0.002 (0.006)	0.000 (0.006)	-0.011 (0.010)	0.005 (0.007)
	Times to church per week	-0.002 (0.005)	-0.004 (0.005)	0.004 (0.011)	-0.006 (0.006)
Security	Household head is male	0.010* (0.006)	0.009 (0.006)	0.016* (0.008)	0.005 (0.007)
Violence	Home was ransacked	-0.008 (0.006)	-0.010* (0.006)	-0.012 (0.010)	-0.010 (0.007)
Demographic	Host at the time of the survey	0.006 (0.006)	0.004 (0.006)	0.011 (0.014)	0.001 (0.007)
	Respondent's age	0.010 (0.006)	0.011* (0.006)	0.021** (0.010)	0.007 (0.008)
	Respondent is literate	0.007 (0.006)	0.008 (0.006)	0.003 (0.011)	0.009 (0.007)
	Respondent is born in the village	0.010* (0.005)	0.010* (0.005)	0.024** (0.009)	0.008 (0.007)
	Respondent is Protestant	0.005 (0.006)	0.004 (0.006)	-0.000 (0.011)	0.006 (0.007)
	Household size	-0.005 (0.006)	0.001 (0.007)	-0.019* (0.011)	0.008 (0.008)
	Household dependency ratio	0.003 (0.005)	0.003 (0.005)	0.016* (0.009)	-0.002 (0.007)
IDP FE		Yes	Yes	Yes	Yes
Observations		34,620	35,444	10,016	25,428
$R^2$		0.005	0.004	0.022	0.010

Notes: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Standard errors clustered at the dwelling level and reported in parentheses.

Variables are standardized.

## G. Origins of Empathy

Table A9 replicates Table 3, including all covariates.

**Table A9. Correlates of Empathy**

		Empathy score		
		(1)	(2)	(3)
Past violence	Exposure to violence	0.082*		
		(0.039)		
	Respondent's home ransacked		0.075**	
			(0.033)	
	Number of times displaced			0.074***
				(0.021)
Ethnicity	Strength of ethnic attachment	0.093**	0.092**	0.088**
		(0.036)	(0.035)	(0.036)
Authority	Respondent related to chief	0.062**	0.065**	0.076**
		(0.028)	(0.027)	(0.027)
Benefits	Strongly agrees that IDPs increase prob. of aid	0.126***	0.125***	0.126***
		(0.033)	(0.034)	(0.033)
	Strongly agrees that IDPs provide cheap labor	0.098**	0.100**	0.101**
		(0.036)	(0.036)	(0.036)
Wealth	Dwelling has a high-quality roof	0.043*	0.044*	0.048*
		(0.024)	(0.024)	(0.024)
	Dwelling has high-quality walls	-0.023	-0.024	-0.028
		(0.028)	(0.029)	(0.032)
	Asset index	0.011	0.004	-0.004
		(0.036)	(0.035)	(0.035)
Religiosity	Importance of church in daily life	-0.003	-0.003	-0.012
		(0.033)	(0.033)	(0.032)
	Times to church per week	0.027	0.025	0.022
		(0.023)	(0.023)	(0.023)
Security	Household head is male	-0.007	-0.004	0.003
		(0.050)	(0.049)	(0.048)
Demographic	Host at the time of the survey	-0.030	-0.031	-0.038
		(0.044)	(0.045)	(0.044)
	Respondent's age	-0.053*	-0.056*	-0.061**
		(0.028)	(0.028)	(0.028)
	Respondent is literate	0.104**	0.105***	0.108***
		(0.035)	(0.035)	(0.036)
	Respondent is born in the village	0.022	0.024	0.032
		(0.029)	(0.029)	(0.028)
Respondent is Protestant	0.048	0.049	0.056*	
	(0.028)	(0.028)	(0.028)	
Household size	0.048	0.051*	0.052	
	(0.028)	(0.028)	(0.030)	
Household dependency ratio	0.027	0.027	0.028	
	(0.025)	(0.026)	(0.024)	
	Village FE	Yes	Yes	Yes
	Observations	1,361	1,361	1,362
	R <sup>2</sup>	0.135	0.135	0.137

Notes: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01 Standard errors clustered at the village level and reported in parentheses.

Variables are standardized.

## H. The Experiment

**Table A10** summarizes how the respondents were randomized across the various treatments.

**Table A10. Experimental Design**

	Control	Authority	Morality	Empathy	Total
Same ethnicity	152	142	160	159	613
Other ethnicity	225	228	216	222	891
Total	377	370	376	381	1,504

*Notes:* Table presents number of dwelling's main households per treatment condition. Household assignment to treatment condition is random.

The text presented to the respondents in each treatment is available on the APSR Dataverse. In these texts, we randomly varied the name of the village, and, by design, therefore the ethnicity of the incoming IDPs. We did so as follows. In each study village, during visit 2, we worked together with the village chief and selected two nearby villages: one in which the majority is the same ethnic group as that of the research village, and one village that has an ethnic group of a different village. As part of the appeal, during visit 3, the respondent would be randomly assigned to one of the two villages, and thus their dominant ethnic group. This explains the difference in the number of observations across the ethnicity treatment conditions in **Table A10**.

Within study villages, dwellings were randomly assigned to the control group or one of the three treatment appeals. In the Supplementary Material on the APSR Dataverse we present a balance test for the covariates included in our analyses. As expected, given random assignment, the variables are well balanced across control and treatment groups.

### H.1 Full Results of the Experiment

**Table A11** replicates **Table 4**, but includes all covariates.

**Table A11. Experimental Results**

	Willingness to host IDPs (1)	Actual IDP hosting (2)
Empathy appeal	-0.001 (0.018)	0.010 (0.051)
Authority appeal	0.009 (0.023)	-0.010 (0.036)
Morality appeal	0.008 (0.018)	0.034 (0.025)
Other ethnicity	-0.001 (0.017)	0.072 (0.049)
Empathy appeal * Other ethnicity	-0.013 (0.025)	-0.098 (0.063)
Authority appeal * Other ethnicity	0.010 (0.022)	-0.136* (0.069)
Morality appeal * Other ethnicity	-0.004 (0.024)	-0.084* (0.040)
Empathy	0.000 (0.003)	0.014** (0.006)
Strength of ethnic attachment	-0.005 (0.003)	-0.006 (0.008)
Respondent related to chief	0.017* (0.009)	0.030* (0.014)
Strongly agrees that IDPs increase prob. of aid	-0.003 (0.011)	0.011 (0.024)
Strongly agrees that IDPs provide cheap labor	-0.007 (0.011)	-0.002 (0.031)
Dwelling has a high-quality roof	-0.002 (0.013)	0.032 (0.023)
Dwelling has high-quality walls	0.004 (0.012)	0.010 (0.027)
Asset index	0.001 (0.003)	0.006 (0.006)
Importance of church in daily life	0.000 (0.002)	-0.005 (0.006)
Times to church per week	-0.004 (0.006)	-0.004 (0.006)
Household head is male	0.010 (0.016)	0.082*** (0.023)
Home was ransacked	0.013* (0.006)	-0.030 (0.020)
Host at the time of the survey	0.020** (0.008)	0.028 (0.026)
Respondent's age	-0.000 (0.000)	0.001* (0.001)
Respondent is literate	0.013 (0.009)	0.024 (0.023)
Respondent is born in the village	0.012 (0.013)	0.039 (0.030)
Respondent is Protestant	0.005 (0.008)	0.040 (0.023)
Household size	0.003 (0.003)	-0.005 (0.004)
Household dependency ratio	0.014 (0.040)	0.008 (0.059)
Village FE	Yes	Yes
Observations	1,359	1,361
R <sup>2</sup>	0.043	0.081

Notes: \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01 Standard errors clustered at the village level and reported in parentheses.

Variables are not standardized.

## H.2 Secondary Outcomes

While this study focuses on hosting behavior, our pre-analysis plan also formulated hypotheses regarding three other outcome variables. First, at the time of the survey, respondents played an incentive-compatible dictator game in which they received 1,500 CDF (the equivalent of about 1 USD) and decided to donate any portion of this endowment to a fund that would be used to help future incoming IDPs. Second, we rented a field outside the village and provided seeds for the initial sowing. Proceeds of this field were intended for IDPs. In the survey, we asked whether respondents were willing to provide their labor to prepare this field for sowing at a particular day. Finally, when that day came – approximately two weeks after the survey (mean 13.8 days and standard deviation 4.14) – we recorded whether someone in the respondent’s household showed up to provide the promised agricultural labor.

**Table A12** presents descriptive statistics for these secondary outcome measures. Respondents donated on average 333 CDF; about 22% of their endowment. Nearly all respondents (96%) indicated to be willing to work on the field, but when that day came about half of all households (53%) had a member participating.

**Table A12. Descriptives of Secondary Outcomes**

	Obs.	Mean	St. Dev.	Min.	Max.
Give to IDPs in dictator game (CDF)	1,490	332.62	249.00	0	1,500
Willing to work for IDPs (0/1)	1,500	0.96	0.19	0	1
Work on field for IDPs (0/1)	1,504	0.53	0.50	0	1

*Notes:* Data for the dictator game and willingness to work measured during visit 3 as part of the survey. Work on the field observed about two weeks after the visit 3 survey.

While these measures are intended to capture helping behavior towards IDPs, we consider them of secondary importance compared to hosting behavior. When respondents were asked to donate money or show up to work on the field, IDPs had not arrived in the village yet. Hence, respondents may not have found it credible that their behavior would end up benefitting IDPs, either because it was uncertain whether the IDPs would arrive in the future or because respondents believed that money from the game or proceeds from the field would be used for other purposes. In contrast, when actual IDPs arrive on one’s doorstep, it is very clear that providing them with shelter will

benefit the IDP.

In **Table A13**, we analyze how these secondary outcomes are affected by the experimental treatments. Columns 1-3 replicate the set-up of **Table A11**. We find that, overall, the treatments had no discernable impact. When it comes to the stated willingness to work on the field, we argue that – much like stated willingness to host – these self-reported attitudes are subject to social desirability bias, and that the near universal agreement left little room to capture treatment effects. When it comes to giving in the game and showing up to work on the field, we suspect that respondents did not find it credible that their behavior would end up benefitting IDPs, because of the uncertainty over the IDPs coming to the village and possible confusion about whom and how their contributions would benefit.

**Table A13. Results for Secondary Outcomes**

		Give to IDPs in game (1)	Willing to work for IDPs (2)	Work on field for IDPs (3)	Give to IDPs in game (4)	Willing to work for IDPs (5)	Work on field for IDPs (6)
Experiment	Empathy appeal	6.130 (35.548)	0.017 (0.016)	-0.068 (0.042)	37.653 (22.149)	-0.017 (0.017)	-0.090 (0.088)
	Authority appeal	-4.243 (35.192)	0.012 (0.021)	-0.103** (0.035)	60.868* (34.325)	-0.020 (0.020)	-0.132* (0.064)
	Morality appeal	4.513 (42.204)	0.014 (0.017)	-0.026 (0.045)	53.232* (28.989)	0.005 (0.009)	-0.091 (0.087)
	Other ethnicity	-5.856 (43.447)	-0.008 (0.015)	-0.035 (0.038)	29.104 (21.835)	0.007 (0.006)	-0.039 (0.103)
	Empathy appeal * Other ethnicity	-21.986 (46.504)	-0.026 (0.024)	0.021 (0.055)	-34.730 (40.927)	-0.004 (0.018)	-0.015 (0.139)
	Authority appeal * Other ethnicity	-24.861 (41.628)	-0.010 (0.025)	0.066 (0.056)	-102.054** (44.722)	-0.007 (0.023)	0.057 (0.145)
	Morality appeal * Other ethnicity	-27.546 (63.456)	-0.013 (0.019)	0.011 (0.068)	-36.826 (41.089)	-0.031* (0.015)	0.075 (0.147)
	Empathy	Empathy	-2.455 (2.798)	-0.000 (0.004)	0.006 (0.006)	0.037 (5.790)	0.003 (0.004)
Ethnicity	Strength of ethnic attachment	-2.626 (6.117)	-0.004 (0.003)	0.013* (0.008)	1.759 (8.288)	0.001 (0.002)	-0.004 (0.007)
Authority	Respondent related to chief	-4.895 (17.022)	0.009 (0.010)	0.012 (0.026)	8.985 (19.985)	-0.003 (0.008)	0.035 (0.042)
Benefits	Strongly agrees IDPs increase prob. of aid	-1.202 (22.735)	-0.012 (0.014)	-0.025 (0.048)	-46.336* (22.172)	-0.003 (0.016)	-0.027 (0.078)
	Strongly agrees IDPs provide cheap labor	26.648 (20.017)	-0.004 (0.013)	-0.009 (0.036)	28.250 (19.550)	-0.003 (0.009)	-0.043 (0.058)
Wealth	Dwelling has a high-quality roof	14.318 (20.077)	0.000 (0.012)	-0.049 (0.034)	-26.124 (26.260)	-0.014 (0.014)	-0.042 (0.045)
	Dwelling has high-quality walls	5.068 (23.721)	-0.007 (0.018)	0.064 (0.064)	4.341 (23.986)	0.013 (0.017)	0.041 (0.076)
	Asset index	26.094*** (5.235)	-0.003 (0.003)	-0.015* (0.008)	32.697*** (7.482)	-0.001 (0.002)	-0.026 (0.015)

Religiosity	Importance of church in daily life	8.786 (5.315)	-0.002 (0.003)	-0.003 (0.008)	2.760 (4.563)	-0.003* (0.002)	-0.021 (0.014)
	Times to church per week	-4.755 (5.306)	0.004 (0.003)	-0.011 (0.012)	-5.059 (7.578)	0.002 (0.007)	-0.008 (0.019)
Security	Household head is male	-16.143 (18.241)	-0.009 (0.012)	-0.076 (0.043)	26.187 (24.927)	-0.011 (0.013)	-0.047 (0.053)
Violence	Home was ransacked	-35.060** (12.743)	0.008 (0.014)	-0.075** (0.028)	-47.880*** (11.321)	0.031 (0.019)	-0.120** (0.048)
Demographic	Host at the time of the survey	25.461 (15.538)	0.014 (0.015)	0.014 (0.029)	6.174 (28.924)	-0.007 (0.016)	-0.038 (0.048)
	Respondent's age	-0.344 (0.489)	-0.002*** (0.000)	0.001 (0.001)	-0.731 (0.924)	-0.001* (0.001)	0.001 (0.001)
	Respondent is literate	22.063* (11.537)	-0.000 (0.012)	-0.034 (0.034)	15.772 (21.782)	-0.004 (0.015)	-0.055 (0.048)
	Respondent is born in the village	-22.284 (15.676)	-0.003 (0.014)	0.005 (0.016)	12.664 (23.280)	-0.020 (0.016)	0.019 (0.026)
	Respondent is Protestant	-10.137 (21.105)	-0.007 (0.006)	-0.003 (0.032)	12.298 (35.275)	0.014 (0.010)	0.051 (0.064)
	Household size	-1.923 (2.477)	0.007*** (0.002)	0.008 (0.005)	-1.448 (3.427)	0.001 (0.004)	0.006 (0.009)
	Household dependency ratio	-16.405 (34.080)	-0.027 (0.029)	0.010 (0.054)	78.844 (48.281)	-0.010 (0.035)	0.008 (0.086)
	Village FE	YES	YES	YES	YES	YES	YES
Observations	1,348	1,360	1,361	548	553	553	
$R^2$	0.141	0.062	0.143	0.186	0.105	0.203	

Notes: \*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$  Standard errors clustered at the village level and reported in parentheses.

Variables are not standardized.

While not pre-registered, our survey included some questions that allow us to tentatively explore whether there are treatment effects among those who had confidence that their efforts would benefit the IDPs. First, respondents were asked whether they thought that IDPs would arrive in their village in the months after the survey. Answers ranged on a 4-point scale from “not at all likely” to “very likely”. Second, respondents were asked on a 10-point scale from “not at all likely” to “very likely” whether they thought the work on the field would actually be organized, and whether the proceeds would go to IDPs. Overall, 63% of respondents thought that IDPs would (very) likely arrive, 81% thought that the work on the field would (very) likely be organized, and 69% thought that the proceeds of the field would (very) likely go to IDPs.

We consider those who answered positively to all three questions as the subgroup of respondents that is likely to believe their behavior will end up benefitting future IDPs; these individuals comprise 40% of the overall sample. In Columns 4-6, we present the experimental results for this subgroup. First, we find that all three main treatments increase giving in the game – although the perspective treatment is just shy of being significant at the 10% cut-off, with a p-value of 0.11. The treatments still do not have an impact on willingness to work because this outcome is subject to cheap talk. Finally, we also find a positive and significant correlation between baseline empathy

and showing up to work on the field for IDPs ( $p < 0.05$ ). However, given that analyses in columns 4-6 were not pre-registered, we refrain from drawing strong conclusions.

## **I. Deviations from the Pre-Analysis Plan**

This study was pre-registered in Open Science Foundation's EGAP registry prior to data collection: <https://osf.io/8q7kc> and <https://osf.io/zs3jb>. There are a number of differences between what we set out to do and what we did. What follows is a brief summary.

First, we initially planned to collect hosting data only once, about 6 months after the household survey. Because of additional funding, we collected data 4 months after the household survey, and then again 10 months after the household survey. Due to the Covid-19 pandemic, the latter round of data-collection was done through a phone survey.

Second, we initially set out to measure empathy with six measures, instead of five. As we discuss in Section Data and Empirical Strategy and in Appendix D, we dropped the negatively worded item 6: "I find it hard to know when my friends are frightened".

Third, originally, the study set out to test two hypotheses: 1) individuals with a history of violent displacement are more likely to host internally displaced people, and 2) individuals with a higher capacity to empathize are more likely to host internally displaced people. We do not look at displacement as an independent variable because there is too little variation to explore, with 95% of respondents having a history of displacement.

Fourth, to avoid issues of multi-collinearity, two suggested covariates were not included in the analyses. Related to social pressure, we do not control for how often the respondent meets the village chief (because we include the relationship with the village chief). Related to education, we do not explore the level of schooling (because we control for whether the respondent is literate or not). We did run regressions that included these covariates, but none of them were significantly related to hosting behavior.

Finally, to add further context to our findings, we undertook a large quality data exercise in October 2021. Specifically, we re-visited five randomly selected study villages and interviewed, in each



village, the village chief, ten host households, ten hosted households and ten households that did neither. We returned again to these five villages in February 2023 to interview the village chief and five randomly selected female-headed households that are not hosting, to understand why female-headed households are less likely to open their doors to IDPs.

## References

- Albiero, Paolo, Giada Matricardi, Daniela Speltri, and Diana Toso. 2009. "The Assessment of Empathy in Adolescence: A Contribution to the Italian Validation of the 'Basic Empathy Scale.'" *Journal of Adolescence* 32 (2): 393–408.
- Baron-Cohen, Simon. 2011. "The Evolution and Diagnosis of Empathy." *The Evolutionary Review* 2 (1): 55–57.
- Baron-Cohen, Simon, and Sally Wheelwright. 2004. "The Empathy Quotient: An Investigation of Adults with Asperger Syndrome or High Functioning Autism, and Normal Sex Differences." *Journal of Autism and Developmental Disorders* 34 (2): 163–75.
- Bensalah, Leila, Nicolas Stefaniak, Arnaud Carre, and Chrystel Besche-Richard. 2016. "The Basic Empathy Scale Adapted to French Middle Childhood: Structure and Development of Empathy." *Behavior Research Methods* 48 (4): 1410–20.
- Bouvy, Alexis, Stanislas Bisimwa, and Eric Batumike. 2021. "La Paix Des Armes in North Kalehe: Stabilization, Demobilization and the Continuous Reconfiguration of Armed Groups." Governance in Conflict Network, University of Ghent.
- Cameron, A. Colin, and Douglas L. Miller. 2015. "A Practitioner's Guide to Cluster-Robust Inference." *The Journal of Human Resources* 50 (2): 317–72.
- D'Ambrosio, Fanny, Marie Olivier, Davina Didon, and Chrystel Besche. 2009. "The Basic Empathy Scale: A French Validation of a Measure of Empathy in Youth." *Personality and Individual Differences* 46 (2): 160–65.
- Haver, Katherine. 2008. "Out of Site: Building Better Responses to Displacement in the Democratic Republic of the Congo by Helping Host Families." Oxfam International.
- Heynen, E. J. E., G. H. P. Van der Helm, G. J. J. M. Stams, and A. M. Korebrits. 2016. "Measuring Empathy in a German Youth Prison: A Validation of the German Version of the Basic Empathy Scale (BES) in a Sample of Incarcerated Juvenile Offenders." *Journal of Forensic Psychology Practice* 16 (5): 336–46.
- Jacobs, Carolien, and Patrick Milabyo Kyamusugulwa. 2018. "Everyday Justice for the Internally Displaced in a Context of Fragility: The Case of the Democratic Republic of Congo (DRC)." *Journal of Refugee Studies* 31 (2): 179–96.
- Jolliffe, Darrick, and David P. Farrington. 2006. "Development and Validation of the Basic Empathy Scale." *Journal of Adolescence* 29 (4): 589–611.
- Kesmaecker-Wissing, Melanie, and Anaïs Pagot. 2015. "Driven Apart. How Repeated Displacement Changes Family Dynamics in Eastern Drc." IDMC.
- Kivu Security Tracker. 2023. "Kivu Security Tracker." 2023. <https://kivusecurity.org>.
- McDowell, Steve. 2008. "Internal Displacement in North-Kivu: Hosting, Camps, and Coping Mechanisms." UNICEF.

- Pham, Phuong, Thomas O’Mealia, Carol Wei, Kennedy Kihangi Bindu, Anupah Makoond, and Patrick Vink. 2022. *Hosting New Neighbors: Perspectives of Host Communities on Social Cohesion in Eastern DRC*. Policy Research Working Papers. The World Bank.
- Radio Okapi. 2019. “Sud-Kivu - Plus de 20.000 Déplacés à Kalehe: Une Femme Est Morte de Faim et a Laissé 5 Orphelins.” *Radio Okapi*, December 16, 2019. www.radiookapi.net.
- Rodríguez-Hidalgo, Antonio J., Oswaldo Mero, Eva Solera, Mauricio Herrera-López, and Juan Calmaestra. 2020. “Prevalence and Psychosocial Predictors of Cyberaggression and Cybervictimization in Adolescents: A Spain-Ecuador Transcultural Study on Cyberbullying.” Edited by Thomas M. Olin. *PLOS ONE* 15 (11): e0241288.
- Salas-Wright, Christopher P., René Olate, and Michael G. Vaughn. 2013. “Assessing Empathy in Salvadoran High-Risk and Gang-Involved Adolescents and Young Adults: A Spanish Validation of the Basic Empathy Scale.” *International Journal of Offender Therapy and Comparative Criminology* 57 (11): 1393–1416.
- Sánchez-Pérez, Noelia, Luis J. Fuentes, Darrick Jolliffe, and Carmen González-Salinas. 2014. “Assessing Children’s Empathy through a Spanish Adaptation of the Basic Empathy Scale: Parent’s and Child’s Report Forms.” *Frontiers in Psychology* 5.
- Sonderen, Eric van, Robbert Sanderman, and James C. Coyne. 2013. “Ineffectiveness of Reverse Wording of Questionnaire Items: Let’s Learn from Cows in the Rain.” *PLOS ONE* 8 (7): e68967.
- Suárez-Álvarez, Javier, Ignacio Pedrosa, and Luis M. Lozano. 2018. “Using Reversed Items in Likert Scales: A Questionable Practice.” *Psicothema*, no. 30.2 (May): 149–58.
- UNSC. 2019. “United Nations Organization Stabilization Mission in the Democratic Republic of the Congo - Report of the Secretary-General (S/2019/575).” UN Security Council.
- . 2020. “United Nations Organization Stabilization Mission in the Democratic Republic of the Congo - Report of the Secretary-General (S/2020/214).” United Nations Security Council.
- Zych, Izabela, David P. Farrington, Elena Nasaescu, Darrick Jolliffe, and Estera Twardowska-Staszek. 2022. “Psychometric Properties of the Basic Empathy Scale in Polish Children and Adolescents.” *Current Psychology* 41: 1957–66.