Online Appendix - Drinking Tea with the Neighbors

1 The Malian Context

Mali is a Muslim-majority state in West Africa. It boasts a rich heritage of indigenous governance institutions dating back to the Malian Empire (1200s) that encourage peace and tolerance. Despite the existence of social norms of reciprocity, Mali has still struggled with a history of ethnicized conflict since independence in the 1960s, including three previous uprisings led by members of the Tuareg community as well as inter-communal fighting between communities in the North and Center of the country. These movements were fueled by grievances of nomadic groups who wanted better representation in government. For an overview of the historical context of these rebellions as well as greater context on the outbreak of the Malian crisis see (Lecocq et al., 2013).

This study was conducted in the context of the ongoing Malian crisis, which took place in the wake of Gaddafi's fall in Libya in 2011 when many former fighters fled back into Mali and launched a new rebellion. This is the fourth insurgency that the Malian state has faced since independence. Many actors active in the rebellion were from the Tuareg ethnic group and had participated in previous uprisings since Mali's independence (early 1960s, 1990s, and 2006-2009). The current crisis also includes ethnically-based movements, including Tuareg-led insurgent movements. At its onset, the separatist movement was joined by hard-line, jihadist groups who wanted to implement Islamic law. In response to this rising insecurity, junior officers in the Malian military launched a coup in April 2012, which ousted the democratically elected president. That coup d'état and subsequent political chaos created an opportunity for insurgent groups to take territory. These groups occupied three regions in northern Mali until a French intervention in January 2013. See these sources for a more comprehensive overview of the context of the outbreak of the crisis: (Wing, 2013; Whitehouse, 2012).

Data collection took place approximately a year after Mali had managed to hold new multi-party elections and was run by civilian president Ibrahim Boubacar Keita. The country signed the Algiers Peace Accords in summer 2015, but was actually experiencing an uptick in violence over the course of the research process and insecurity as more insurgent groups were moving into the center of the country -near one of our research sites: Mopti/Sevare. There were about 200,000 people internally displaced; many resided in the two cities where we conducted research.

Before the 2012 coup, Mali had held five elections since its multiparty transition in 1992. Mali has a weak empirical state (Bleck and Michelitch, 2015) where the government fails to deliver

many key public goods. Thus, Malians turn to traditional leaders, religious authorities and mutual help associations to navigate life in one of the world's poorest countries.[1] Social practices remain steeped in hierarchy, including high levels of gender inequality (Wing, 2013; Gottlieb, 2016), deference to heads of household and elders, and expectations of social redistribution toward family. The country has very high rates of social dependence.[2]

Inter-communal conflict has increased in the country's center (near Mopti) after the data collection was completed in 2015. These conflicts are linked to centuries-old tensions related to resource scarcity, resource tenure practices, and competition for access to water (Bagayoko et al., 2017). The conflict in the center is further complicated by the growing resistance in the Peul communities (not included as signatories in the Algiers Accord), in addition to groups aiming to spread a hard-line version of politicized Islam. Bamako is the capital of Mali and remains far from most of the fighting associated with the current conflict. However, Bamako suffered two attacks on civilians during the period of research (March and November 2015).

Subsequent to the period of research, Mali suffered two additional coups. The first, in August 2020, prompted the elected government to leave office, but enjoyed much popular support. In the second, in spring 2021, the ruling junta removed the transitional officials that had been put in place. There has been an uptick in violence subsequent to the period of research.

Figure 1: Violent Incidents in Mali

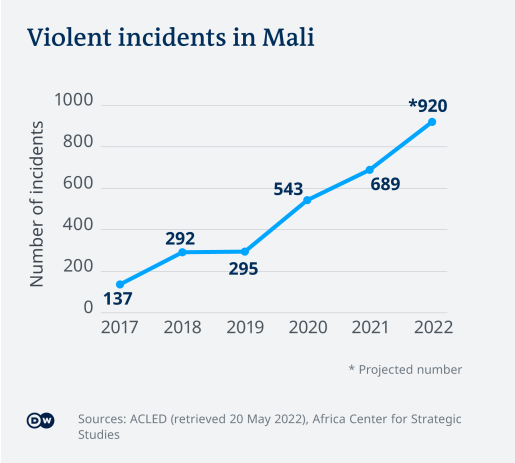

Figure from "German Mali Mission: A Crisis Far from Over," Deutsche Welle, June 30, 2022: https://www.dw.com/en/german-mali-mission-minusma-a-crisis-far-from-over/a-62305871. Original data source (Raleigh et al., 2010).

[1] In 2020, Mali was ranked 179th out of 188 countries in the United Nations Human Development Index.

[2] This rate is calculated using the number of dependents compared to the "working age" population 15-64. `https://wcaro.unfpa.org/sites/default/files/pub-pdf/UNFPA-WCARO-YOUTH-EN-WEB.pdf,p.17`.

2 Research Timeline

The study occurred between the fall of 2014 and the summer of 2016. The research began with ethnographic work to determine the conceptual boundaries of *grinw*. In August and September 2014, four lead research assistants spent a month attending *grin* meetings in Bamako and interviewing an initial pool of *grin* members to better understand how to define them. Using convenience samples from their networks, enumerators visited 12 *grinw* two times for ethnographic observation and to conduct a group interview. In the first session, they observed the *grinw*, and in the second meeting, they conducted a group interview to outline basis characteristics to help develop questionnaires and to establish a core set of criteria to define *grinw*.

Following these site visits, we conducted a focus group on the findings with a broader set of 25 enumerators. They discussed and debated the elements of the definition and the criteria we had generated through the ethnographic work. Most of the enumerators were members of their own *grinw*. Each enumerator also wrote a short essay on what they thought a *grin* was and its role in Malian society. Then the group discussed key elements together, debated inclusion criteria, and contributed to developing the group survey instrument in order to capture appropriate variation. We used this process to derive the definition used below.

Next, we conducted the household survey, described in greater detail in the Supplementary Materials, to identify the characteristics of members and non-members and to generate a list of *grinw* in Bamako (October 2014). After this, we proceeded with *grin* level surveys, and later, experimental games and individual surveys in Bamako (October - January 2015). In March 2015, we began research in Sevare and Mopti - repeating the household survey, group surveys, experimental games, and individual surveys. These activities were carried out in March and April 2015. Finally, the qualitative data was conducted in a group of out-of-sample *grinw* simultaneously by two research teams in the fall of 2015. Transcripts were translated and transcribed by two research assistants in the spring of 2016. We compared the transcripts to ensure reliability across them and ultimately used one of them (which included slightly more detail) for analysis.

3 Defining *Grinw*

Since *grinw* are informal associations, it was very important to offer a clear definition of our concept. This preliminary ethnographic, focus group session, and essays identified six rules or "standards" that applied to nearly all *grinw*: 1) there must be free discussion among members; 2) there needs to be a beverage (usually tea) shared; 3) there need to be regular meetings independent

of other types of events; 4) all activities linked to the *grinw* should be voluntary; 5) the group must be recognized as a *grin* by its members and its membership is clearly defined; 6) members should actively participate in meetings.

This initial work also helped us to identify the type of organizational and membership variations that could exist within *grinw* in order to generate our questionnaire. During that initial phase, we decided to narrow our population of interest to younger *grinw*, or groups with members between 18-45, as older participants in *grinw* tended to meet less frequently and to do so in private, rather than in public spaces.

4 Trust Game Script

Player A (Trust)

We are going to play a game with a partner who you don't know. All of your actions will be anonymous.

I am going to give you 300 FCFA and an envelope. The game goes as follows: You can keep all the money, or give 100, 200, or 300 to a partner. The partner is a (Malian/Malian who speaks the same language as you at home/a Malian who speaks a different language than you at home). If you keep all the money, the game stops now.

If you give something to your partner, whatever you give will be tripled by the referee (If you give 100 FCFA, it becomes 300 FCFA, if you give 200 FCFA, it becomes 600 FCFA, if you give 300 FCFA, it becomes 900 FCFA). Then, we will give the money to your partner, explaining what your options were and the choice that you have made over the course of the game. Then your partner has the option to send something back to you from the endowment that you sent him/her.

I am giving you this envelope and 300 FCFA. You can put 0, 100, 200, or 300 inside. Do not show your decision to anyone else; please go behind this wall (car), so we cannot observe your actions. Give the envelope sealed back to me when you have finished the task.

Player B (Trustworthiness)

We are going to play a game with a partner who you don't know. All of your actions will be anonymous.

We played a game with your partner who is (Malian/Malian who speaks the same language as you at home/Malian who speaks a different language than you at home).

We gave your partner 300 FCFA and explained that they were playing with someone who they do not know. They had an option to keep all of the money or to give you 100, 200, or 300

FCA. We told the partner that whatever was given would be tripled by a referee and given to you. If the partner gave 100 FCFA, it would become 300 FCFA, if they gave 200 FCFA, it would become 600 FCFA, if they gave 300 FCFA, it would become 900. We explained that you, as the partner, would have the opportunity to return back some of that. Your partner gave X, so here is your endowment, which is three times the amount they gave.

Now, you have the choice to return something from that gift: 0-100-200-300... up to X. If you would like to give something to your partner, please put it in this envelope. Do not show your decision to anyone else; please go behind this wall (car), so we cannot observe your actions. Give the envelope sealed back to me when you have finished the task.

5 Correlation of trust game contribution and real-world outcomes

Table 1: Correlation of trust game contribution and real-world outcomes, sample of senders, full model

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Voluntary work				Trust towards				
sender	to help friends	hours help friends	in the neighb.	hours in the neighb.	same lang.	from the North	other ethnic groups	other lang.	Most Malians are selfish
TG contrib, %	0.066	1.185	0.080*	3.663*	0.063	0.042	-0.056	0.064	-0.003
	(0.041)	(3.378)	(0.041)	(1.953)	(0.043)	(0.055)	(0.041)	(0.042)	(0.044)
Female	-0.033	-1.025	-0.026	-0.744	0.042	0.028	0.042	-0.053	0.079**
	(0.036)	(2.902)	(0.037)	(1.833)	(0.037)	(0.048)	(0.038)	(0.039)	(0.037)
Age	0.003	-0.075	0.004	0.064	-0.002	0.005*	0.000	0.004	0.002
	(0.002)	(0.148)	(0.002)	(0.108)	(0.002)	(0.003)	(0.002)	(0.003)	(0.003)
Minority lang.	0.014	0.378	0.044*	-0.041	0.008	-0.043	-0.032	-0.036	0.022
	(0.025)	(1.720)	(0.026)	(1.262)	(0.025)	(0.033)	(0.025)	(0.026)	(0.026)
Lives in couple	-0.014	-0.144	-0.007	-2.865*	-0.001	-0.009	-0.067*	-0.041	-0.069*
	(0.035)	(2.411)	(0.036)	(1.554)	(0.035)	(0.047)	(0.036)	(0.038)	(0.038)
Basic/relig. sch.	0.077	5.666	0.037	5.287***	-0.086*	-0.094	-0.076	-0.115**	-0.132***
	(0.047)	(4.083)	(0.048)	(1.937)	(0.045)	(0.066)	(0.049)	(0.052)	(0.048)
Secondary sch.	0.044	3.599	-0.024	4.335**	-0.107**	-0.070	-0.079	-0.111*	-0.030
	(0.052)	(4.532)	(0.052)	(2.172)	(0.051)	(0.072)	(0.053)	(0.058)	(0.052)
Tertiary sch.	0.019	2.583	-0.007	4.681*	-0.057	0.021	-0.054	-0.033	-0.036
	(0.052)	(4.798)	(0.053)	(2.479)	(0.053)	(0.075)	(0.054)	(0.060)	(0.054)
HH size	0.010***	0.298***	0.008***	0.163**	-0.001	-0.002	0.004**	0.001	-0.000
	(0.002)	(0.101)	(0.002)	(0.071)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
HH memb North	0.009	-2.054	0.037	0.441	-0.027	0.209***	-0.006	-0.028	0.154***
	(0.031)	(2.136)	(0.031)	(1.750)	(0.034)	(0.044)	(0.032)	(0.034)	(0.032)
Income gen. act.	-0.067**	-2.324	-0.062**	-2.997**	-0.067**	-0.074*	-0.017	-0.058*	-0.001
	(0.030)	(2.112)	(0.030)	(1.435)	(0.030)	(0.041)	(0.031)	(0.033)	(0.031)
Asset index	0.040***	1.645**	0.047***	1.010*	0.004	0.001	-0.017	-0.011	-0.007
	(0.011)	(0.783)	(0.011)	(0.553)	(0.011)	(0.014)	(0.011)	(0.011)	(0.011)
Risk averse	-0.011	-0.776	0.014	1.870	-0.052*	-0.051	-0.010	0.020	0.029
	(0.027)	(2.268)	(0.027)	(1.353)	(0.028)	(0.038)	(0.028)	(0.030)	(0.030)
Use saving tool	0.149***	-1.957	0.124***	0.743	0.033	0.015	0.092***	0.059**	-0.008
	(0.028)	(2.311)	(0.029)	(1.364)	(0.026)	(0.036)	(0.028)	(0.028)	(0.028)
Lent money	0.081***	3.100	0.095***	1.753	0.116***	-0.066	0.077**	0.034	0.046
	(0.029)	(2.318)	(0.030)	(1.685)	(0.034)	(0.043)	(0.033)	(0.035)	(0.032)
Mopti	0.182***	23.831***	0.238***	22.40***	0.241***	0.096**	0.111***	0.089***	-0.184***
	(0.029)	(1.684)	(0.029)	(1.290)	(0.029)	(0.038)	(0.029)	(0.029)	(0.030)
Contrib. in DG	0.000	0.011	0.000	-0.007	0.000	0.001***	0.000*	0.000	-0.000
	(0.000)	(0.014)	(0.000)	(0.009)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.071	-6.211	0.002	-10.73***	1.137***	0.602***	1.215***	0.933***	0.772***
	(0.092)	(4.999)	(0.092)	(3.771)	(0.093)	(0.124)	(0.097)	(0.094)	(0.095)
Observations	1,313	1,313	1,313	1,313	1,312	1,308	1,238	1,300	1,311
R-squared	0.112	0.123	0.119	0.206	0.097	0.073	0.046	0.039	0.081
Mean dep var	0.687	18.69	0.667	14.32	1.201	0.828	1.250	1.038	0.655

The table reports the correlation between the trust game outcome (the contribution as a share of the endowment received) and the real-world outcomes reported in the headings. Regression coefficients are estimated for the sample of senders only. Voluntary hours are monthly; the measures of self-reported trust are on a 0-2 scale. Sample sizes may vary due to missing values in the dependent variable. Robust standard errors are in parentheses. ***p<0.01, **p<0.05, *p<0.1.

Table 2: Correlation of trust game contribution and real-world outcomes, sample of senders, full model

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Accept wedding with			Provide	Contrib.for	Contrib.	Contrib	Contrib
	diff. lang.	diff. relig.	diff. ethnic group	public goods	econ support of memb.	econ support memb. CFA	for commun benefits	commun. benefits CFA
TG contrib, %	0.018	0.005	0.025	0.138**	0.010	5,865*	0.001	3,597
	(0.025)	(0.045)	(0.042)	(0.062)	(0.070)	(3,148)	(0.066)	(4,741)
Female	0.012	-0.083**	-0.062*	-0.094**	-0.025	-2,164	-0.036	-3,530
	(0.022)	(0.039)	(0.037)	(0.048)	(0.050)	(1,975)	(0.048)	(2,907)
Age	0.003*	0.007***	0.001	0.003	-0.001	296	-0.000	138
	(0.001)	(0.003)	(0.002)	(0.004)	(0.004)	(213)	(0.004)	(220)
Minority lang.	-0.047***	-0.085***	-0.107***	0.005	0.007	-2,907**	0.004	3,542
	(0.016)	(0.027)	(0.025)	(0.036)	(0.040)	(1,342)	(0.040)	(2,920)
Lives in couple	-0.012	-0.085**	0.014	-0.082	0.031	815	0.036	-464
	(0.022)	(0.039)	(0.036)	(0.055)	(0.057)	(2,561)	(0.057)	(3,783)
Basic/relig. sch.	-0.046	-0.212***	-0.095**	0.072	0.004	-8,088	0.043	-4,075
	(0.029)	(0.049)	(0.046)	(0.078)	(0.087)	(7,366.339)	(0.081)	(6,926.311)
Secondary sch.	-0.013	-0.000	-0.021	0.019	0.029	-5,895	0.040	-8,940
	(0.031)	(0.053)	(0.049)	(0.081)	(0.088)	(7,084)	(0.083)	(6,306)
Tertiary sch.	0.009	0.006	0.048	-0.025	0.039	-5,005	0.051	-7,526
	(0.031)	(0.056)	(0.050)	(0.083)	(0.089)	(7,266)	(0.083)	(6,275)
HH size	-0.002**	-0.006***	-0.001	-0.001	0.001	68	0.004*	452**
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(77.456)	(0.002)	(226.882)
HH memb. North	0.036**	0.050	0.106***	0.056	0.041	86	0.038	3,419
	(0.018)	(0.034)	(0.030)	(0.043)	(0.048)	(1,547)	(0.047)	(4,187)
Income gen. act.	0.008	-0.076**	0.044	-0.025	0.081*	3,147**	0.016	5,301**
	(0.020)	(0.032)	(0.030)	(0.039)	(0.044)	(1,257)	(0.043)	(2,470)
Asset index	0.008	-0.022*	0.004	0.014	0.025	410.665	0.023	1,727.052
	(0.007)	(0.012)	(0.010)	(0.014)	(0.016)	(773)	(0.015)	(1,115)
Risk averse	-0.006	0.035	-0.002	-0.060*	0.019	-3,306*	0.001	-7,621**
	(0.017)	(0.030)	(0.028)	(0.036)	(0.039)	(1,925)	(0.038)	(3,098)
Use saving tool	0.021	0.003	0.004	-0.043	0.087**	3,090**	0.073*	-2,208
	(0.019)	(0.029)	(0.027)	(0.038)	(0.042)	(1,340)	(0.041)	(2,962)
Lent money	0.022	-0.002	0.025	-0.007	0.053	-37	0.025	-518
	(0.016)	(0.034)	(0.029)	(0.040)	(0.043)	(2,002)	(0.043)	(3,292)
Mopti	-0.033*	-0.061*	-0.119***	0.040	-0.056	1,268	0.076*	-7,236***
	(0.020)	(0.031)	(0.029)	(0.040)	(0.045)	(2,365)	(0.043)	(2,633)
Contrib in DG	0.000*	0.000	0.000	0.000	-0.000	-4.59	-0.000	13.5
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(10.8)	(0.000)	(13.3)
Constant	0.837***	0.699***	0.729***	0.526***	0.324**	357	0.111	4,715
	(0.059)	(0.099)	(0.092)	(0.135)	(0.151)	(10,419)	(0.143)	(9,955)
Observations	1,313	1,313	1,313	730	731	731	731	731
R-squared	0.040	0.093	0.069	0.044	0.039	0.063	0.022	0.058
Mean dep var	0.909	0.549	0.714	0.691	0.518	7,591	0.377	11,174

The table reports the correlation between the trust game outcome (the contribution as a share of the endowment received) and the real-world outcomes reported in the headings. Regression coefficients in columns 1-3 are estimated for the sample of senders only. Models in columns 4-8 are based on the sample of grin members. Voluntary hours are monthly; the measures of self-reported trust are on a 0-2 scale. Sample sizes may vary due to missing values in the dependent variable. Robust standard errors are in parentheses. ***p<0.01, **p<0.05, *p<0.1.

Table 3: Correlation of trust game contribution and real-world outcomes, sample of receivers, full model

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Voluntary work				Trust towards				
	to help friends	hours help friends	in the neighb.	hours in the neighb.	same lang.	from the North	other ethnic groups	other lang.	Most Malians are selfish
TG contrib, %	0.039	9.474***	0.012	12.902***	0.295***	0.147*	0.171***	0.200***	0.013
	(0.047)	(3.498)	(0.048)	(3.242)	(0.059)	(0.080)	(0.058)	(0.062)	(0.050)
Female	-0.030	3.096	-0.007	5.613**	0.091**	0.053	0.093**	-0.061	-0.015
	(0.035)	(2.017)	(0.034)	(2.716)	(0.041)	(0.054)	(0.040)	(0.047)	(0.038)
Age	-0.001	-0.083	0.001	-0.018	-0.002	-0.001	-0.000	-0.000	0.001
	(0.002)	(0.123)	(0.002)	(0.087)	(0.002)	(0.003)	(0.002)	(0.002)	(0.002)
Minority lang.	-0.014	-2.559*	0.052**	-0.408	-0.037	0.019	-0.015	0.031	-0.016
	(0.024)	(1.346)	(0.024)	(1.569)	(0.027)	(0.036)	(0.027)	(0.029)	(0.025)
Lives in couple	-0.023	0.179	-0.061*	-3.666	-0.068*	-0.012	-0.056	0.021	-0.006
	(0.036)	(1.927)	(0.036)	(2.947)	(0.037)	(0.050)	(0.037)	(0.041)	(0.038)
Basic/relig. sch.	-0.016	6.386***	-0.044	8.846***	0.067*	-0.018	0.079**	0.011	-0.084**
	(0.039)	(1.881)	(0.039)	(2.215)	(0.040)	(0.052)	(0.039)	(0.044)	(0.040)
Secondary sch.	0.052	5.125***	0.015	7.112***	0.051	-0.065	0.022	-0.004	-0.020
	(0.040)	(1.862)	(0.039)	(2.350)	(0.043)	(0.056)	(0.041)	(0.046)	(0.041)
Tertiary sch.	0.037	2.158	0.006	4.857***	-0.014	-0.024	-0.013	-0.039	-0.009
	(0.040)	(2.052)	(0.039)	(1.765)	(0.043)	(0.056)	(0.042)	(0.047)	(0.042)
HH size	0.010***	0.142**	0.008***	-0.015	-0.003	-0.005**	-0.000	-0.001	0.004***
	(0.001)	(0.071)	(0.001)	(0.061)	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)
HH memb North	0.075***	-3.488*	0.054**	-3.221	-0.037	0.208***	-0.083**	-0.067*	0.061*
	(0.027)	(1.951)	(0.027)	(2.115)	(0.033)	(0.044)	(0.033)	(0.038)	(0.031)
Income gen. act.	0.011	-0.764	0.036	1.439	-0.036	-0.065	-0.079**	-0.024	0.013
	(0.030)	(2.421)	(0.030)	(1.437)	(0.032)	(0.046)	(0.034)	(0.034)	(0.031)
Asset index	-0.007	0.331	-0.000	-0.878	0.016	0.018	0.020*	-0.006	-0.003
	(0.010)	(0.611)	(0.010)	(0.767)	(0.010)	(0.015)	(0.011)	(0.012)	(0.011)
Risk averse	0.101***	-0.871	0.127***	1.265	-0.025	0.058	0.020	-0.032	-0.007
	(0.026)	(1.493)	(0.027)	(1.360)	(0.029)	(0.041)	(0.029)	(0.033)	(0.028)
Use saving tool	0.096***	1.184	0.088***	4.113**	0.023	-0.002	0.092***	-0.041	-0.003
	(0.028)	(1.503)	(0.029)	(1.647)	(0.029)	(0.042)	(0.031)	(0.033)	(0.029)
Lent money	-0.005	8.167***	-0.030	6.761**	0.041	-0.004	0.052	-0.003	-0.035
	(0.032)	(2.799)	(0.034)	(3.385)	(0.036)	(0.051)	(0.038)	(0.038)	(0.035)
Mopti	0.195***	7.624***	0.287***	10.12***	0.284***	0.179***	0.112***	0.133***	-0.012
	(0.029)	(1.217)	(0.029)	(1.178)	(0.030)	(0.041)	(0.031)	(0.032)	(0.031)
Contrib. in DG	0.001***	0.030**	0.001***	0.023	0.001***	0.000	0.001***	0.000	0.000
	(0.000)	(0.011)	(0.000)	(0.016)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Constant	0.271***	-5.179	0.185**	-10.68***	0.938***	0.735***	0.921***	1.043***	0.673***
	(0.092)	(5.730)	(0.086)	(3.368)	(0.087)	(0.121)	(0.084)	(0.100)	(0.089)
Observations	1,205	1,205	1,205	1,205	1,204	1,197	1,146	1,196	1,204
R-squared	0.149	0.094	0.181	0.100	0.157	0.075	0.082	0.042	0.020
Mean dep var	0.765	11.63	0.743	9.857	1.242	0.932	1.271	1.110	0.754

The table reports the correlation between the trust game outcome (the contribution as a share of the endowment received) and the real-world outcomes reported in the headings. Regression coefficients are estimated for the sample of receivers only. Voluntary hours are monthly; the measures of self-reported trust are on a 0-2 scale. Sample sizes may vary due to missing values in the dependent variable. Robust standard errors are in parentheses. ***p<0.01, **p<0.05, *p<0.1.

Table 4: Correlation of trust game contribution and real-world outcomes, sample of receivers, full model

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Accept wedding with			Provide	Contrib. for	Contrib.	Contrib	Contrib
	diff. lang.	diff. relig.	diff. ethnic group	public goods	econ support of memb.	econ support memb. CFA	for commun benefits	commun. benefits CFA
TG contrib, %	0.075***	-0.048	0.059	0.053	-0.035	702	0.197***	-941
	(0.023)	(0.059)	(0.052)	(0.064)	(0.072)	(2,098)	(0.074)	(3,223)
Female	-0.036	-0.056	-0.012	0.019	-0.072	-2,659*	-0.009	-2,914**
	(0.024)	(0.043)	(0.038)	(0.057)	(0.058)	(1,466)	(0.052)	(1,237)
Age	0.003**	0.005**	-0.002	0.002	-0.008***	-98	-0.002	12
	(0.001)	(0.002)	(0.002)	(0.003)	(0.003)	(86)	(0.003)	(89)
Minority lang.	-0.028**	-0.043	-0.054**	-0.040	-0.019	-2,377**	0.007	-993
	(0.014)	(0.028)	(0.025)	(0.037)	(0.039)	(1,132)	(0.037)	(1,283)
Lives in couple	-0.017	-0.050	0.019	-0.034	0.118*	5,311***	0.024	-884
	(0.022)	(0.041)	(0.038)	(0.059)	(0.062)	(1,950)	(0.058)	(1,972)
Basic/relig. sch.	0.008	-0.121***	-0.075*	0.114	-0.037	-4,638*	-0.029	563
	(0.026)	(0.042)	(0.041)	(0.072)	(0.074)	(2,815)	(0.069)	(2,389)
Secondary sch.	0.026	-0.049	-0.040	0.119	-0.088	-2,180	0.003	-1,312
	(0.026)	(0.044)	(0.042)	(0.072)	(0.074)	(2,593)	(0.069)	(2,171)
Tertiary sch.	0.048*	-0.001	0.031	0.097	-0.117	-2,511	-0.024	-2,912
	(0.024)	(0.046)	(0.041)	(0.074)	(0.075)	(2,584)	(0.070)	(2,097)
HH size	0.003***	0.005**	0.006***	-0.001	0.001	152**	0.002	43
	(0.001)	(0.002)	(0.001)	(0.002)	(0.002)	(74)	(0.002)	(69)
HH memb. North	0.028*	0.059*	0.197***	0.000	0.146***	1,436	0.135***	1,151
	(0.016)	(0.034)	(0.030)	(0.045)	(0.050)	(1,384)	(0.048)	(1,471)
Income gen. act.	-0.036**	0.007	0.039	-0.024	0.016	830	0.061	-407
	(0.016)	(0.035)	(0.031)	(0.041)	(0.046)	(1,284)	(0.044)	(1,565)
Asset index	0.002	0.014	0.005	-0.012	0.027*	120	0.012	683
	(0.005)	(0.012)	(0.010)	(0.014)	(0.015)	(452)	(0.014)	(506)
Risk averse	0.020	-0.016	-0.097***	0.010	-0.034	-144.072	0.033	-1,755.106
	(0.016)	(0.031)	(0.026)	(0.037)	(0.041)	(1,087)	(0.038)	(1,683)
Use saving tool	0.034**	-0.046	0.091***	-0.051	0.135***	356	0.095**	2,894**
	(0.016)	(0.033)	(0.029)	(0.038)	(0.041)	(1,324)	(0.038)	(1,427)
Lent money	-0.003	-0.008	-0.008	-0.036	0.061	480	0.081*	-484
	(0.019)	(0.039)	(0.031)	(0.045)	(0.048)	(1,200)	(0.047)	(1,424)
Mopti	0.054***	0.205***	-0.227***	0.022	-0.254***	-227	0.037	-242
	(0.017)	(0.033)	(0.030)	(0.043)	(0.047)	(1,376)	(0.043)	(1,449)
Contrib in DG	-0.000**	-0.000	0.001***	-0.000	0.000	-0.681	-0.000	10.461
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(6.658)	(0.000)	(11.428)
Constant	0.781***	0.459***	0.697***	0.684***	0.624***	7,395**	0.056	2,777
	(0.056)	(0.097)	(0.087)	(0.120)	(0.133)	(3,667)	(0.123)	(3,720)
Observations	1,203	1,201	1,203	667	667	667	667	667
R-squared	0.047	0.065	0.147	0.018	0.106	0.042	0.063	0.026
Mean dep var	0.934	0.632	0.728	0.735	0.486	5,666	0.297	5,365

The table reports the correlation between the trust game outcome (the contribution as a share of the endowment received) and the real-world outcomes reported in the headings. Regression coefficients in columns 1-3 are estimated for the sample of receivers only. Models in columns 4-8 are based on the sample of grin members. Voluntary hours are monthly; the measures of self-reported trust are on a 0-2 scale. Sample sizes may vary due to missing values in the dependent variable. Robust standard errors are in parentheses. ***p<0.01, **p<0.05, *p<0.1.

Table 5: Correlation of trust game contribution and real-world outcomes, sample of senders, multiple outcomes

	(1)	(2)	(3)	(4)	(5)
	Voluntary work				
Panel A: Volunteering	to help friends	Hours to help friends	in the neighb.	Hours in neighb.	
TG contrib>0	0.093*	1.773	0.070	2.397	
	(0.049)	(3.503)	(0.049)	(2.016)	
TG contrib>50%	0.031	-0.738	0.035	1.554	
	(0.027)	(2.066)	(0.027)	(1.160)	
Observations	1,313	1,313	1,313	1,313	
Mean dep var	0.688	18.84	0.667	14.22	
	Trust towards				
Panel B: Self-reported trust	same language	from the North	other ethnic groups	other language	Agree on: most Malians are selfish
TG contrib>0	0.023	0.011	0.022	-0.038	-0.061
	(0.048)	(0.061)	(0.043)	(0.045)	(0.046)
TG contrib>50%	0.030	0.001	-0.042	0.072***	0.019
	(0.027)	(0.035)	(0.026)	(0.027)	(0.028)
Observations	1,312	1,307	1,237	1,300	1,312
Mean dep var	1.204	0.832	1.245	1.038	0.655
	Accept wedding with				
Panel C: Tolerance	different language	different religion	different ethnic group		
TG contrib>0	0.004	0.072	0.012		
	(0.033)	(0.052)	(0.047)		
TG contrib>50%	-0.007	0.019	0.021		
	(0.017)	(0.029)	(0.027)		
Observations	1,313	1,313	1,313		
Mean dep var	0.908	0.550	0.711		
Panel D: Grin-specific outcomes	Provide public goods	Contrib for economic support of members	Contrib for economic support of members CFA	Contrib for community benefits	Contrib for community benefits CFA
TG contrb>0	0.163**	0.049	1,497	-0.019	-2,974
	(0.071)	(0.078)	(1,740)	(0.071)	(5,987)
TG contrb>50%	0.052	0.045	2,811*	0.039	3,686
	(0.039)	(0.043)	(1,554)	(0.042)	(2,937)
Observations	730	731	731	731	731
Mean dep var	0.691	0.518	7,591	0.377	11,174

The table reports the correlation between the trust game outcomes (a dummy for non-zero contribution, the contribution as a share of the endowment received, a dummy for contribution greater than 50% of the endowment) and the real-world outcomes reported in the headings. Regression coefficients are estimated for the sample of senders only. Panel D is based on the sample of grin members. Notes: in Panel A, Voluntary hours are monthly; in Panel B, the measures of self-reported trust are on a 0-2 scale. Each regression also includes the following controls: female, age, lives in couple, basic or religious school, secondary school, tertiary school, household size, household member from the North, minority language, has income generating activity, asset index, risk averse, lent money (last six months), Mopti, contribution in the dictator game. Sample sizes may vary due to missing values in the dependent variable. Robust standard errors are in parentheses. ***p<0.01, **p<0.05, *p<0.1.

Table 6: Correlation of trust game contribution and real-world outcomes, sample of receivers, multiple outcomes

	(1)	(2)	(3)	(4)	(5)
	Voluntary work				
Panel A: Volunteering	to help friends	Hours to help friends	in the neighb.	Hours in neighb.	
TG contrib>0	0.004	1.913	-0.025	3.774**	
	(0.041)	(1.701)	(0.042)	(1.504)	
TG contrib>50%	0.022	3.948**	0.045	4.536***	
	(0.028)	(1.698)	(0.028)	(1.754)	
Observations	1,205	1,205	1,205	1,205	
Mean dep var	0.765	11.63	0.743	9.857	
	Trust towards				
Panel B: Self-reported trust	same language	from the North	other ethnic groups	other language	Agree on: most Malians are selfish
TG contrib>0	0.103**	0.097	0.081*	0.045	-0.050
	(0.043)	(0.061)	(0.046)	(0.048)	(0.043)
TG contrib>50%	0.165***	0.062	0.072**	0.102***	0.017
	(0.032)	(0.044)	(0.033)	(0.035)	(0.029)
Observations	1,204	1,197	1,146	1,196	1,204
Mean dep var	1.242	0.932	1.271	1.110	0.754
	Accept wedding with				
Panel C: Tolerance	different language	different religion	different ethnic group		
TG contrib>0	0.012	0.069	0.083*		
	(0.027)	(0.051)	(0.046)		
TG contrib>50%	0.040***	-0.025	0.018		
	(0.015)	(0.034)	(0.029)		
Observations	1,203	1,201	1,203		
Mean dep var	0.934	0.632	0.728		
Panel D: Grin-specific outcomes	Provide public goods	Contrib for economic support of members	Contrib for economic support of members CFA	Contrib for community benefits	Contrib for community benefits CFA
TG contrb>0	-0.027	-0.020	-2,335	0.083	-2,990
	(0.064)	(0.070)	(2,580)	(0.061)	(4,545)
TG contrb>50%	0.008	0.014	566	0.167***	310
	(0.039)	(0.043)	(1,211)	(0.042)	(1,511)
Observations	667	667	667	667	667
Mean dep var	0.735	0.486	5,666	0.297	5,365

See notes on Table 5. The table reports the correlation between the trust game outcomes (a dummy for non-zero contribution, the contribution as a share of the endowment received, a dummy for contribution greater that 50% of the endowment) and the real-world outcomes reported in the headings. Regression coefficients are estimated separately for the sample of receivers only. Panel D is based on the sample of grin members. Notes: in Panel A, Voluntary hours are monthly; in Panel B, the measures of self-reported trust are on a 0-2 scale. Each regression also includes the following controls: female, age, lives in couple, basic or religious school, secondary school, tertiary school, household size, household member from the North, minority language, has income generating activity, asset index, risk averse, lent money (last 6 months), Mopti, contribution in the dictator game. Sample sizes may vary due to missing values in the dependent variable. Robust standard errors are in parentheses. ***p<0.01, **p<0.05, *p<0.1.

6 Focus Group Data: Sampling and Research Protocol

Grinw where focus groups are conducted were identified through snowball samples from members of our research team who approached *grinw* in their neighborhoods or within their networks. We opted to use a snowball (rather than random) sample because we wanted to record focus group discussions and given the tense political climate and insecurity we felt this would be more effective and safe working through *grinw* which we already link to. We believe that sourcing *grinw* from within the enumerators' networks and using a referral when we reached out to them helped to ensure more candid discussions in the groups. Enumerators were instructed to seek diversity in terms of average educational levels of members, ethnic composition, and neighborhood. An author was present at eight focus groups to ensure that the script and protocol were effective. Focus groups were led by two teams of enumerators (one in each city); one team leader served as the moderator. The moderator asked questions about the role of *grinw* in Malian society. The majority of focus groups took place in Bambara. The other team member recorded the focus group conservation. Enumerators were instructed to encourage participation and to gently solicit multiple opinions on each question, but to refrain from very direct intervention in the focus group. Then, two enumerators independently transcribed and translated all of the transcripts into French. We looked across both sets of transcripts to confirm inter-coder reliability. This transcript included 555 discrete statements (some of which include reference to multiple factors).

Focus Group Script Translations (English and Bambara)

What role do *grinw* play in Malian society ? Grinw nafa bè se ka kè mun ye Mali jamana kònò?

Can *grinw* create social cohesion in our society? Yala grinw be ben ni keleya sabati an ka sigida kònò wa ?

Can *grinw* create divisions? Can prevent people from achieving "entente" and unity with others who are not in the *grinw*? *Yala grinw bè se ka dan sigi mogo ni nyògòn cè? Yala grinw bè se ka dan fara sigi mogo ni nyògòn cè? Yala grinw bè se ka mògò bali ka bèn ni kelenya sòrò ni mògò wèrèw ye minnu tè grinw kònò ?*

Do *grinw* provide localities with access to public goods ? *Yala grinw be nafa-sòrò-sira lase sigidaw ma wa ?*

If there were not grinw in Mali, what would the situation look like today? *Ni grinw tun tè Mali la, Mali tun bè kè cogo di ?*

The first module of our focus group questionnaire asked questions directly about *grinw* and their role in wider society. Subsequent modules focused on Malian politics and policy and were not used in this study. The full transcripts of statements that we draw on are available on Bleck's website (in French). The coding and analysis use the (*Causal Map*, 2023), which is designed to help identify and visualize cause and effect statements made by respondents (https://causalmap.app).

This approach privileges respondents' understanding of causation and allows researchers to code chains of "influence" and "consequence" factors within qualitative transcripts. A PI coded all influence and consequence factors that were contained in the transcript.

This process was an inductive one, where we developed categories of consequence factors as they came up in the text and later consolidated related pathways. The consolidation into categories was guided by mechanisms already identified by the existing literature, but was also open and responsive to original pathways cited by respondents. For instance, the umbrella terms (bonding, bridging) were guided by insights from the social capital literature, but socialization and psychological effects were identified in the text as key mechanisms due to the frequency with which they were mentioned. Through the coding, categories are consolidated under broader thematic headings to capture a trend. For instance, "lent a bike" and "lent a laptop" as discrete categories of effects can be later rolled under a sub-heading of "lent possessions (bike, laptop, etc)." Eventually, we rolled up lent possessions into material support. Ultimately, we attached an umbrella heading "bonding" to all references to solidarity and support among members.

In this analysis, we restrict the text to all statements that start with membership in a *grin* as an influencing factor and look for consequence factors as stated by respondents. For instance, there were statements that looked at factors that influence membership, but we did not include them in the analysis. We count the number of statements citing each consequence factor and map the most frequently cited pathways.

The causal map in the text was created by asking the software to highlight the most cited consequence factors coming from membership in a *grin* (as the influence factor). Data could reference respondents' generalizations about what *grinw* do or specific experiences they cited from their own *grinw* or other *grinw* they know. The figure displays the most frequently cited consequence factors as linked to membership. The map shows the top 15 links within the 10 variables. The arrows indicate movement from an influence factor to a consequence factor. Note that the arrow from bonding to bonding indicates respondents describing how processes of bonding lead to other processes of bonding, which are both grouped under the umbrella heading of bonding.

Mentions of "social cohesion," "peace and stability" and "benefits to society" were relatively straightforward outcomes to code.

"Bonding" referenced the building of solidarity and intimacy among members of a group (e.g. members of a *grin*). As discussed above, this included references to mutual aid, reciprocity, and support and two other subcategories of bonding: idea sharing and brainstorming together, and shared intimacy and understanding. We code instances of "bridging" as times when respondents referenced exposure to new networks and new people from outside their immediate group (e.g. non-*grin* members). This often came through attending other members' life ceremonies (baptisms, funerals, and weddings), meeting a spouse through the *grin*, or how *grin* activities brought them in contact with other non-members in their community. We code instances of "socialization" as learning through the *grinw*. When someone discusses an evolution of understanding from mem-

bership or the *grin* as correcting bad behavior - this is grouped under a broader subheading of socialization. We group any references to actions or funding for the broader community as "public goods provision." "Psychological support" was created as an umbrella heading after numerous respondents referenced the *grin* as facilitating relaxation, helping them to escape stress, or providing a place to feel like oneself.

7 Research Ethics

This research was approved by the Notre Dame's IRB (Protocols 14-06-1875 and 15-09-2676), Heriot Watt's School of Management and Languages Ethics Officer in June 2014 as well as the CNRST (`https://cnrst.edu.ml`) and Instat (`https://instat-mali.org/fr`) in Mali. Two of the authors lived in Mali during the entire period of research and recruited, trained, and supervised the entire team of enumerators. This enabled them to assess various conditions on the ground and to develop contingencies as they needed to adjust the research plan. For instance, during the Ebola outbreak in Mali, research was delayed in order to assess the public health situation in the country, and additional hygiene protocols were implemented once the research was deemed feasible.

In all instances, the research team obtained consent for participation from respondents, and when relevant, the entire *grin*. *Grinw* were compensated with tea and sugar during team meetings -and individuals, members, and non-members received a small sum of money for participating in the individual survey (200 CFA) as well as whatever they were awarded in the trust games (between 0-900 CFA depending on their role and the game).

As in all focus groups, we could not ensure anonymity or confidentiality of statements in front of other peers (though we do not identify the group or the respondent by name). We made sure to remind participants that their comments, while not identifiable in our transcripts, can be heard and attributed by other participants. We felt more comfortable with the lack of anonymity in these groups in that they are already places where members know each other well and regularly discuss contentious and intimate subjects with each other.

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