EQUIPPED FOR PEACE

Conflict Resolution Training and Youth Violence Prevention in Niger

Appendix

A. Survey Experiments

I. List Experiment I

Prompt: I am going to read you a list of statements. I'd like you to tell me how many of these statements you agree with. Please don't tell me which items you agree with, just how many of them you agree with. Now, I will read the statements:		
Group	Items shown	Description
Control	Western powers should continue to intervene to keep the peace in Niger/Burkina Faso; All children should go to school; Other people in Niger/Burkina Faso are not at all trustworthy; In line with our customs, we should respect our elders;	Respondents see only the four non-sensitive items
Treatment	All of the above plus: It is justifiable to use violence for a political or religious cause	Respondents see the same list (of four) plus the sensitive item

II. List Experiment II

We asked respondents to:

Imagine the following scenario... [n]ow I am going to read you a list of ways that some people might respond to this scenario. I do not need to know which of these ways you might consider responding to the scenario, but please tell me how many of them you would consider

Hypothetical Scenarios:

1. Another person in your village has started encroaching on your land. In previous years, both of you had farmed neighboring parcels. This year, he has started farming your parcel as well as his.
2. A herder from a different ethnic group as you has driven their animals through your land. In the process, many of your crops were destroyed or damaged.
3. An elder has prevented all the youth from attending a meeting in which the village will discuss the location of a new well or borehole.
4. Somebody from the village has been giving bad advice to the village chief. You think that this advice will make the chief take decisions contrary to the interests of the village youth. For example, this advisor claims another ethnic group is responsible for violence, and so your village should chase them away.
5. Somebody from the village has given bad advice to the chief, which will lead him to take decisions which will make it more difficult for your ethnic group to access services.

This experiment followed a **2×3 factorial design**:

- **Two control lists** (non-sensitive items only), and
- **Three treatment statuses**:
    1. No sensitive item (pure control)
    2. Sensitive item I: *Threaten the person with a weapon*
    3. Sensitive item II: *Chase the person out of the village*

Each respondent was randomly assigned to **one of six possible arms**, based on:

- Which control list they received
- Whether and which sensitive item was added

Only **one list** was shown per scenario.

Table I: Control and Sensitive Items

Control List I	Ask another youth to intervene Complain to family Go to gendarmerie Contact an NGO Ignore the problem entirely
Control List II	Complain to friends Get help from an imam Summon the sous-prefect Wait for the problem to resolve itself Leave the village
Sensitive Items	I. Threaten the other person with a weapon II. Chase the other person out of the village

Table II: List Experiment II Experimental Arms

Condition	Description	Final Item List
$Control_1$	Control List I only	5 non-sensitive items from List I
$Control_2$	Control List II only	5 non-sensitive items from List II
$Treatment_1$	Control List I + Sensitive Item I	Control List I + **Threaten the other person with a weapon**
$Treatment_2$	Control List I + Sensitive Item II	Control List I + **Chase the other person out of the village**

$Treatment_3$	Control List II + Sensitive Item I	Control List II + **Threaten the other person with a weapon**
$Treatment_4$	Control List II + Sensitive Item II	Control List II + **Chase the other person out of the village**

B. Analytic Strategy

We estimate all models using ordinary least squares (OLS) with within-sample inverse-probability survey weights. To account for variation across enumerators and geographic units, we include enumerator and region fixed effects. Enumerator fixed effects absorb any measurement error introduced by differences in survey administration. Since enumerator assignment is uncorrelated with IBMN treatment status, this does not bias comparisons between IBMN and non-IBMN villages. Robust standard errors are clustered at the village level, reflecting the level of treatment assignment. We also control for whether respondents were recruited through the random walk method or from among direct beneficiaries.

Survey Outcomes

For the first set of outcomes—the direct attitudinal questions on justified violence—we estimate:

$$y_i = \beta_1 \text{PureControl} + \beta_2 \text{IBMN} + {}_{\psi 1}X_i + {}_{\psi 2}X_v + \gamma_r + \epsilon_i$$

Where y is the outcome of interest, X_i is a vector of respondent-level covariates, X_v is a vector of village-level covariates, γ_r are region fixed effects, and ϵ is the error term. Our coefficients of interest are β_1 and β_2. We report specifications with and without controls.

Demographic covariates include ethnicity, education level (none, madrassa/Koranic school, primary, secondary or higher), autochthony status, sex, age, age squared, and an index of household wealth.[1] Village-level covariates are calculated using a 25-kilometer radius around the village centroid and include the number of ACLED-recorded incidents and fatalities in the two years prior to treatment, distance to a river with an average flow of at least one cubic meter per second, distance to an international border, and the number of Youth Connect beneficiaries in the village.

List Experiments

To estimate the effect of IBMN on support for political or religious violence, we use responses from a list experiment. We model:

$$y_i = \beta_1 \text{PureControl} + \beta_2 \text{IBMN} + \beta_3 \text{PureControl} \cdot \tau_i + \beta_4 \text{IBMNv} \cdot \tau_i + \beta_5 \tau_i + \psi_1 X_i + \psi_2 X_v + \gamma_c + \varepsilon_i$$

where τ is the treatment indicator for the survey experiment. We focus on the interaction terms between the treatment indicator and village group (β_3 and β_4), which estimate whether respondents in either the pure control or Youth Connect + IBMN villages differ in their responses relative to those in Youth Connect-only sites. Regressing the total number of items selected on the treatment indicator yields an estimate of the average support for the sensitive item across the population.

The second list experiment uses a factorial design. Respondents were randomly assigned to receive one of three combinations of control and sensitive items. Because of this design, simple OLS cannot decompose the effects of individual treatments. We instead estimate average marginal component interaction effects (AMCIEs), which capture the interaction between assignment to a sensitive item (e.g., “threaten with weapon” or “chase out of village”) and IBMN treatment status. This allows us to isolate the conditional effect of IBMN on endorsement of specific violent reactions to localized disputes.

[1] Autochthony status refers to whether individuals were born into (or whose family lineage originates from) the local community in which they now reside or not.

C. Findings

Table III: Respondents perceive lower community support for violence in villages which received IBMN training

	Defend ethnic group		Change policies		Defend religion		Retaliate	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Youth Connect + IBMN	−0.042	−0.037	−0.041	−0.069	−0.153**	−0.139**	−0.131*	−0.130*
	(0.055)	(0.055)	(0.051)	(0.048)	(0.050)	(0.052)	(0.053)	(0.051)
Pure control	0.025	0.031	0.075	0.046	−0.035	−0.033	0.018	0.048
	(0.074)	(0.085)	(0.081)	(0.082)	(0.096)	(0.117)	(0.079)	(0.091)
Demographic Controls		X		X		X		X
Demographic Controls		X		X		X		X
Region Fixed Effects	X	X	X	X	X	X	X	X
Enumerator Fixed Effects	X	X	X	X	X	X	X	X
Mean of outcome	1.838	1.838	1.546	1.546	1.898	1.898	1.654	1.654
Num.Obs.	1721	1719	1717	1715	1719	1717	1726	1724
R2	0.496	0.508	0.490	0.503	0.520	0.542	0.392	0.402

Note: Data are from the Youth Connect midline survey. Outcome variables are responses to '[d]o people in your community think it is sometimes, rarely, or never justified to use violence to do each of the following. . . ' The reference level is villages that received Youth Connect only. Demographic controls include ethnicity, autochthony, age, age squared, household wealth, and sex. Village-level controls include the count of all ACLED incidents within a 25-kilometer radius, the count of all ACLED casualties within a 25-kilometer radius, the number of Youth Connect beneficiaries per village, the distance to a permanent source of water, the distance to an international border, and a commune center indicator. All regressions use OLS with within-sample inverse probability weights; standard errors are clustered at the village level.

Table IV: Combined Indices

	Additive index		1st principal component	
	(1)	(2)	(3)	(4)
Youth Connect + IBMN	−0.325*	−0.334*	−0.169*	−0.168*
	(0.146)	(0.149)	(0.071)	(0.075)
Pure control	0.101	0.139	0.035	0.036
	(0.213)	(0.234)	(0.104)	(0.114)
Demographic Controls		X		X
Geographic Controls		X		X
Region Fixed Effects	X	X	X	X
Enumerator Fixed Effects	X	X	X	X
Mean of outcome	6.898	6.898	0.084	0.084
Num.Obs.	1734	1732	1694	1692
R2	0.574	0.588	0.607	0.621

Note: Data are from the Youth Connect midline survey. Outcome variables are responses to '[d]o people in your community think it is sometimes, rarely, or never justified to use violence to do each of the following. . . ' The reference level is villages that received Youth Connect only. Demographic controls include ethnicity, autochthony, age, age squared, household wealth, and sex. Village-level controls include the count of all ACLED incidents within a 25- kilometer radius, the count of all ACLED casualties within a 25-kilometer radius, the number of Youth Connect beneficiaries per village, the distance to a permanent source of water, the distance to an international border, and a commune center indicator. All regressions use OLS with within-sample inverse probability weights; standard errors are clustered at the village level.

Table V:
Respondents in IBMN treatment villages are less likely to support using violence

	(1)	(2)	(3)	(4)
List treatment	0.043	0.058	0.137	0.201*
	(0.058)	(0.059)	(0.086)	(0.083)
List treatment * Pure control village			−0.031	−0.089
			(0.157)	(0.157)
List treatment * IBMN village			−0.224+	−0.322*
			(0.127)	(0.127)
Demographic Controls		X		X
Geographic Controls		X		X
Region Fixed Effects	X	X	X	X
Enumerator Fixed Effects	X	X	X	X
Mean of outcome	2.425	2.425	2.425	2.425
Num.Obs.	1730	1728	1730	1728
R2	0.307	0.356	0.317	0.366

Note: Data are from the Youth Connect midline survey. Outcome variables are responses to 'how many of these statements you agree with? Please don't tell me which items you agree with, just how many of them you agree with.' The list treatment item is 'it is justifiable to use violence for a political or religious cause.' The reference level is villages that received Youth Connect only. Demographic controls include ethnicity, autochthony, age, age squared, household wealth, and sex. Village-level controls include the count of all ACLED incidents within a 25-kilometer radius, the count of all ACLED casualties within a 25-kilometer radius, the number of Youth Connect beneficiaries per village, the distance to a permanent source of water, the distance to an international border, and a commune center indicator. All regressions use OLS with within-sample inverse probability weights; standard errors are clustered at the village level.

D. Economic Effects of Youth Connect

Tables VI and VII present the economic impacts of Youth Connect. Respondents in communities that did not receive the program (the pure control group) reported lower levels of asset ownership, employment, and access to training and opportunity. This suggests the program had a positive effect on economic outcomes. As expected, we found no differences between Youth Connect beneficiaries who did or did not participate in the IBMN training, which focused on peacebuilding rather than economic support.

While we are cautious about directly comparing the pure control group to Youth Connect participants—because they were surveyed by different enumerator teams—this concern is less relevant for economic questions. Enumerator effects were far smaller for economic indicators (4% of variation) than for more sensitive topics like violence (44%). This gives us greater confidence in the reliability of the economic results.

Table VI: Wealth and Employment are Better in Youth Connect Villages

	Wealth index		Employment	
	(1)	(2)	(3)	(4)
Youth Connect + IBMN	−0.229	−0.188	0.000	−0.012
	(0.222)	(0.134)	(0.031)	(0.029)
Pure control	−0.723**	−0.659**	−0.200***	−0.142**
	(0.271)	(0.242)	(0.056)	(0.052)
Direct YC recipient	0.245	0.287	−0.482***	−0.488***
	(0.241)	(0.202)	(0.062)	(0.067)
Ethnicity: Peul		−0.105		−0.160***
		(0.144)		(0.047)
Ethnicity: Tuareg		−0.627***		−0.075
		(0.178)		(0.051)
Ethnicity: Zarma		−0.135		−0.142**
		(0.212)		(0.043)
Autochthone		−0.270		0.006
		(0.206)		(0.041)
Age		−0.065		−0.023
		(0.078)		(0.024)
Age squared		0.001		0.001
		(0.002)		(0.000)
Female		−0.043		−0.154***
		(0.094)		(0.028)
ACLED events		−0.008+		−0.001
		(0.004)		(0.001)
ACLED deaths		0.002		−0.002
		(0.003)		(0.001)
N. of YC beneficiaries		0.001		0.000
		(0.001)		(0.000)
Distance to a river		0.006		−0.001
		(0.011)		(0.002)
Distance to the border		0.000		−0.001+
		(0.002)		(0.000)
Commune seat		0.759***		0.078**
		(0.117)		(0.029)
Region Fixed Effects	X	X	X	X
Enumerator Fixed Effects	X	X	X	X
Mean of outcome	0.974	0.974	0.298	0.298
Num.Obs.	1734	1732	1734	1732
R2	0.135	0.239	0.243	0.307

Note: Data are from the Youth Connect midline survey. Outcome variables are an index of household wealth and whether a respondent reports being employed. The independent variable is treatment status; the reference level is villages that received Youth Connect only. ACLED data are calculated using a 25-kilometer radius from the village centroid. All regressions use OLS with within-sample inverse probability weights; standard errors are clustered at the village level.

Table VII: Villages that Received Youth Connect Have Greater Access to Training

	Technical training		Life skills training		Perceived opportunity	
	(1)	(2)	(3)	(4)	(5)	(6)
Youth Connect + IBMN	−0.032	−0.041	−0.028	−0.047+	−0.050	−0.058
	(0.032)	(0.030)	(0.033)	(0.028)	(0.083)	(0.078)
Pure control	−0.190***	−0.136*	−0.104**	−0.086*	−0.417*	−0.509**
	(0.047)	(0.054)	(0.033)	(0.035)	(0.163)	(0.175)
Direct YC recipient	0.285**	0.267**	0.556***	0.532***	0.222	0.266
	(0.090)	(0.093)	(0.076)	(0.077)	(0.220)	(0.214)
Ethnicity: Peul		−0.070		0.003		−0.279*
		(0.043)		(0.032)		(0.138)
Ethnicity: Tuareg		−0.089+		0.100*		−0.126
		(0.045)		(0.043)		(0.137)
Ethnicity: Zarma		−0.071		0.099*		−0.165
		(0.043)		(0.040)		(0.119)
Autochthone		0.057		0.068*		−0.249+
		(0.035)		(0.031)		(0.128)
Age		0.053*		0.027+		0.160*
		(0.025)		(0.015)		(0.073)
Age squared		−0.001+		0.000		−0.003*
		(0.001)		(0.000)		(0.002)
Female		−0.027		0.015		0.121+
		(0.022)		(0.024)		(0.072)
ACLED events		−0.002*		0.001		−0.005*
		(0.001)		(0.001)		(0.002)
ACLED deaths		0.001		0.000		0.007*
		(0.001)		(0.001)		(0.003)
N. of YC beneficiaries		0.001**		0.000		−0.001
		(0.000)		(0.000)		(0.001)
Distance to a river		−0.005*		−0.007*		−0.009
		(0.002)		(0.003)		(0.008)
Distance to the border		0.000		0.000		−0.001
		(0.000)		(0.000)		(0.002)
Commune seat		0.062*		0.026		0.159+
		(0.029)		(0.025)		(0.082)
Region Fixed Effects	X	X	X	X	X	X
Enumerator Fixed Effects	X	X	X	X	X	X
Mean of outcome	0.369	0.369	0.325	0.325	3.755	3.755
Num.Obs.	1733	1731	1733	1731	1729	1727
R_2	0.307	0.329	0.465	0.479	0.319	0.350

Note: Data are from the Youth Connect midline survey. Outcome variables are: responses to (1) Have you received technical training; (2) Have you ever received training in life skills, such as management skills, leadership skills, social skills, or civic engagement; and (3) To what extent do you agree or disagree with the following statement: I have access to trainings and educational opportunities to learn new skills. The independent variable is treatment status; the reference level is villages that received Youth Connect only. ACLED data are calculated using a 25 kilometer radius from the village centroid. All regressions use OLS with within-sample inverse probability weights; standard errors are clustered at the village level.