# Can Economic Assistance Shape Combatant Support in Wartime? Experimental Evidence from Afghanistan: Supplementary Information\*

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<sup>\*</sup>All replication material, including R code and data, will be made available via Harvard University's Dataverse.

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# For Online Publication: Supplementary Information

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#### S1 Study Timeline

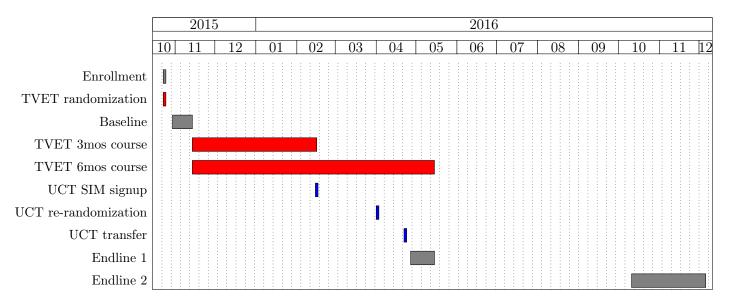


Figure S1: INVEST study timeline

#### S2 Sample Sizes and Compliance Rates

	TVET t	reatment	TVET c	ontrol	Totals	
	size (n)	size (%)	size (n)	size (%)	size (n)	size (%)
UCT original treatment	649	24.99	651	25.07	1300	50.06
(Missing IDs)	339	52.23	374	57.45	713	54.85
UCT original control	653	25.14	649	24.99	1302	50.13
(Missing IDs)	337	51.61	382	58.86	719	55.22
Totals	1298	49.98	1299	50.02	2597	100
(Missing IDs)	673	51.85	756	58.2	1429	55.03

Table S1: This table shows the intended factorial design of this project with the original four treatment groups. The sample size and proportion for each group are shown in black. As described in the paper, due to clerical errors, we could not match up all of the Roshan mobile numbers with the Mercy Corps TVET IDs after re-contacting attempts. In red, we show the number of people within each intended treatment group that we could not match and their proportion of that group; thus, these individuals became what we call the "Non-UCT group." Since we could not ensure that being able to match the IDs was as-if random, we re-randomized the UCT intervention within the identifiable group, blocking on their TVET status and gender and then pair matching them on their VTC and pre-baseline employment and displacement status.

	TVET treatment			TVET control			Totals		
	size (n)	size (%)	compliance $(\%)$	size (n)	size (%)	compliance $(\%)$	size (n)	size (%)	compliance (%)
UCT treatment	313	12.05	35.46	273	10.51	59.71	586	22.56	59.39
UCT control	312	12.01	60.9	270	10.4	99.63	582	22.41	100
Non-UCT group	673	25.91	47.55	756	29.11	98.28	1429	55.03	100
Totals	1298	49.98	54.55	1299	50.02	98.69	2597	100	69.16

Table S2: This table shows, after re-randomization for UCT, the sample size and proportion for each treatment group as well as the compliance rate within each group.

#### S3 Program Enrollment Form and Course List

Below is the enrollment form for the INVEST program which all participants filled out prior to taking the baseline survey and treatment assignment. This form asks about pre-treatment employment, household net income, education, and displacement status. It also asks for the participant's VTC and preferred TVET course. All TVET courses are listed in this form.

Registration #	دئبت نمبرReg.				Employment Status	دشغل حالت			دلوی څښتن تعلی په نامه	
Name	نوم	i			Paid work for someone else	د پل چا سره په ننځوا کار کول	1	()	MercyCorps	
Father name	دپلارنوم				Self-employment	زاد شغل زاد شغل	2	<b>Y</b>	/ wercycorps	
Gender	جنسيت	نارینه M	ښځينه -F		Have a job, but temporarily abse	وظيفه ادم ، خو دموقت وخت ا	3		Kandahar - INVEST Progr	am
National ID card number	د تذکری نمبر				Unpaid family work	كورنى وظيفه بغير له پيسو نه	4		Place two photos here	
داریکی شمیره Students Contact No					Attending school or training	ښونځي يا تريننګ تعقيبول	5		دلته دوی دانی عکسونه ومښولوی	
درس Father Agreement/Contact No/					Unemployed – looking for a job	ښونځي پا ټرپښت تعقيبون يي کاره ، کار پسي ګرخم	6		سه دوی دانی حصونه ومبنونوی	
Age (Year)	عمر (یه کال)				Unemployed – not looking for we		7		ورس وخنونه Time of Course	: دکر
Address - قرس									08:00 - 10:00 AM	1
Course name:		دکورس توم	Metal works		فلزكارى	13			10:00 AM - 12:00 PM	2
Sewing/tailoring	خياطى	1	Motorcycle repair		موترسايكل سازى	14			1:00-3:00 PM	3
Embroidery	گلدوزی	2	Car repair		مستريتوب	15			3:00-5:00 PM	4
Handicrafts	لاسى صنايع	3	Tractor repair		تراكتور سازى	16				
Calligraphy	خطاطي	4	Diesel engine repair		د ډيزلي ماشينانو ترميمول	17		For IDPs only: موو لياره	صرف داخلی بی خایو ش	
Beauty salon	آرایشگاه	5	Petrol engine repair		د پترولی ماشینانو ترمیمول	18		Do you intend to stay	هو Yes	1
Mobile repair	دمبايلو ترميمول	6	Electrical water pum	ıp repair	د برقى واټرپمپونو ترميمول	19			نه No	2
Air conditioning repair	د ایر کندیشن نرمیمولو	7	Construction service	es	ساختمانى خدمات	20			u want to stay in this place که هو، څومره مودی لیاره تصمیم لرې	
Refrigerator repair	د پخچال د ترمیمولو	8	Computer Software		كمپيوتري سافت وير	21		1 month	يو مياشت	1
Plumbing services	پيپكاري	9	Computer Hardware		کمپیوټري هارد ویر	22		3-6 months	ه 3-6 مياشتو	2
Wiring services	ويرينك كارى	10	<b>Kankor Preparation</b>		د کائکور آما <i>دگی</i>	23		6-12 months	ه 12-6 میشتو	3
Carpentry	نجارى	11	English Course		انگلیسی	24		More than 12 months	د 12 میاشتو نه زیات	4
Metal press	خرادى	12	Other:		نور، لطفاً روښانه يې کړی	25		I don't know	ځه نه پوهیږم	5
Fee by Afs فيس په افغانى: Three Months Courses 300	1	]	یزگری -		دلاندی منابعو څخه دولتی دنده			and productive societ ته ارزښت درکول کيږي (د موړ	r your contribution to secu y in your community? و فت کی، آیا موافق یاست چی تاسو مشرانو لخوا) لیارہ د دی چی تاسو د یے	،اوسنہ
Sixth Months Courses 600	2	İ	مالدارى		له هیواده بهر څخه راغلی عایدات			جوړولو کی ونډه اخلی؟	<u> </u>	
E		. '	له بزهری پرته نور واړه تجارتونا		انسانی مرستی (د مرستندیو موسساتو لخوا .			Strongly Agree	ati.	4
<u>تعلیم - Education</u> بی سواد	1	1	ورخ مزدوری		نور داده			Agree	پوره موافق مه افق	2
بی سود ابتدایی زده کړی ( ۱-۶) ټولګی پوری	2		رسمی دنده (تنخواه)		- مجموعه Total <u>Location:</u>			Nuetral	موافق بيطرف(نه موافق او نه غير موافق)	3
					1				بيعر عارعه مواس او عه حير مواس	
منخنی زده کړی (۷-۹) ټولګی پوری	3		KND Mirwais Mina Male V		كندهارميرويس مينه نارينه 1#		1	Disagree	غير موافق	4
لیسه (۱۰-۲۱) بَولگی پوری	4		KND Sofi Sahib Male VTC	:#2	كندهار صوفى صاحب نارينه 2#		2	Strongly Disagree	پوره غیر موافق	5
عالى دارالمطمين (۱۴-۱۳ ټولګى پورى	5		KND Mahmood Tarzai Fe		كندهار محمود طرزى ښخينه 3#		3	<del>-</del> -		
لیسانس (۱۳-۱۴	6		KND Spinboldak male VT	C#4	كندهارسپين بولدك نارينه 44		4	_		
ں درجی نه پورته زده کړې يا ماستری (۱۷-۹۹	7		KND Aino Mina Male & Fe	male VTC#5	كندهارعينو مېنه نارينه او ښځينه 5#		5	_		
تخنیکی زده کړی(د ۱۳-۱۳) ټولګی پوری	8		KND KabulShah Female \	/TC#6	كندهاركابل شاه ښځينه 6#		6	1		
مدرسه (د ۲-۱۱) ټولگی پوری	9		ho introduced you to زده کړو مرکزته معرفی کړی		Students Status & family &	<u>ده کوونکی حالت او کورن</u>	<u> </u>			
دارالطوم (د ۱۳-۱۴) تولیی پوری	10	Refuge	دمهاجرینو ریاست :es DPT	1	IDP	داخلی بی خای شوی	1			
دارالحفاظ (د ۱-۱۲) بَولگی پوری	11		شورا یا کمونیتی :om	2	Returnee/Emigrant	راستون شوى مهلجر	2			
		پلە:Self		3	Local Resident	ځایی ځلک	3			
الايت او ولسوالي - Province & District	1		دملەروملتنو عالى كمشنرى :	4	Disabled	مطول	4			
اصلی ولایت - Province of Origin			خایي اوسیدونکي :ersons	5	Martyrs	شهيدان	5	J		
اصلی ولسوالی - District of Origin		Other:		6	]					
ره ددولسم صنف تصدیق ضروی او حتمی دی اودو خ	نمپیوتیراو انگلیسی کورسو نپا	ی تکلیکور ، ک	ه اورګان تصدیق د خان سره وټر:	.فمَر او يا مريوط	نه وی، او دمهاجرینو دریاست یا(UNCHR) د د	ں کلن کم اوتر ۴۵ کلن زیات ا	١٠ پنځه	3		

# S4 Baseline Covariate Summary Statistics and Balance Test By Treatment Group

	TVET	TVET		UCT	UCT	
Baseline covariate	Control	Treatment	p-value	Control	Treatment	p-value
	Mean	Difference		Mean	Difference	
Displaced	0.50	0.01	0.67	0.52	0.00	0.95
Age (years)	20.26	0.27	0.22	20.10	-0.17	0.57
Pashtun ethnicity	0.84	0.01	0.42	0.86	0.02	0.46
Household Head	0.13	-0.00	0.89	0.13	0.02	0.45
Household Size	11.61	-0.30	0.18	11.86	-0.10	0.79
Married	0.26	-0.00	0.90	0.25	-0.04	0.09
Formal Education (years)	7.74	-0.03	0.84	8.18	-0.00	1.00
Madrassa Education (years)	1.19	0.04	0.71	1.38	-0.10	0.56
Student	0.29	0.03	0.07	0.34	0.01	0.63
Paid Work	0.12	-0.01	0.36	0.11	-0.01	0.68
Employed	0.29	0.01	0.58	0.32	-0.01	0.84
Not-rented House	0.45	0.01	0.53	0.53	-0.03	0.32
Rented House	0.44	-0.03	0.10	0.38	0.04	0.15
Electricity (hours)	2.98	0.02	0.79	2.99	-0.04	0.79
Past Month Profit (Afghanis)	320.48	28.98	0.57	391.17	-129.62	0.10
Formal Landowner	0.00	0.00		0.00	0.00	
No Land	0.56	0.01	0.73	0.54	-0.03	0.36
Personal Assets (5 items)	1.56	0.09	0.01	1.76	-0.02	0.68
Livestock (6 items)	0.44	-0.00	0.96	0.50	-0.06	0.17
Household Assets (12 items)	6.36	0.03	0.73	6.40	-0.18	0.19

Table S3: Baseline Covariate Summary Statistics and Balance Test by Treatment Group

The control group means (columns 1 and 4) and the difference of the treatment group means from the control group means (columns 2 and 5) as well as the standard errors are calculated within the 10 blocks and then averaged across blocks, weighted by block size. We then obtain the t-statistic using the difference in means and standard errors and report the p-value (columns 3 and 6). Unless otherwise specified, covariates are binary. The results suggest that the treatment and control groups are balanced well. As expected, Kolmogorov-Smirnov tests (KS tests) shows that the distribution of p-values cannot be distinguished from the uniform distribution, which is what we would expect if the randomization is properly conducted: the p-value of the KS test for column 3 is 0.66, and for column 6 is 0.99.

## S5 Baseline Covariate Summary Statistics and Balance Test Comparing Endline 2 Respondents and Endline 1 Respondents who Attritioned at Endline 2

Baseline covariate	Endline 2 Mean	Attrition Group Difference	p-value
TVET treatment	0.51	-0.02	0.35
UCT treatment	0.50	-0.02	0.64
Displaced	0.51	0.01	0.65
Age (years)	20.56	-0.46	0.10
Pashtun ethnicity	0.84	0.02	0.22
Household Head	0.13	-0.02	0.36
Household Size	11.50	-0.09	0.74
Married	0.27	-0.04	0.08
Formal Education (years)	7.63	0.72	0.00
Madrassa Education (years)	1.20	0.02	0.88
Student	0.29	0.08	0.00
Paid Work	0.12	-0.01	0.48
Employed	0.27	0.05	0.10
Not-rented House	0.45	0.03	0.18
Rented House	0.42	-0.03	0.25
Electricity (hours)	2.96	0.18	0.13
Past Month Profit (Afghanis)	307.52	83.56	0.23
Formal Landowner	0.00	0.00	
No Land	0.57	-0.03	0.27
Personal Assets (5 items)	1.56	0.22	0.00
Livestock (6 items)	0.41	0.08	0.05
Household Assets (12 items)	6.38	0.03	0.76

Table S4: Baseline Covariate Summary Statistics and Balance Test comparing Attrition Group and Endline 2 Group

The means for the Endline 2 respondent group (column 1) and the difference of the attrition group means from the Endline 2 group means (column 2) are calculated without respect to the blocks unlike in table S3, since only treatment was assigned with respect to the blocks. We run a simple two-sided T-test and report the p-value (column 3). Unless otherwise specified, covariates are binary. We find that the attrition may not be completely at random. The KS test rejects the null hypothesis that the p-values are uniformly distributed (with p-value 0.003). In addition, the mean differences for years of formal education, being a student, and number of personal assets are statistically significant at the conventional level. Thus, in our analysis, we use multiple imputation in Section S15 to address this non-random attrition.

#### S6 Endorsement Experiment Questions

For the endorsement survey questions, we randomize between treated (Armed Opposition group) and control (Government of Afghanistan) endorsers with equal probability. Once AOG or the Government of Afghanistan is assigned in the first question, all other questions in this section follow the first question (either AOG or Government).

Now Id like to ask a few questions about policies that have been proposed recently.

Q1: It has recently been suggested by the Government of Afghanistan [Armed Opposition Group] that expensive new religious schools be constructed in every district to help provide more opportunities to attend religious schools. Do you oppose or support such a policy, or are you indifferent to this policy? Do you strongly or only somewhat oppose/support?

```
1 ..... I strongly oppose this policy
```

2 ..... I somewhat oppose this policy

3 ..... I am indifferent to this policy

4 ..... I somewhat support this policy

5 ..... I strongly support this policy

98 .... Refuse to answer

99 .... Dont know

Q2: It has recently been suggested by the Government of Afghanistan [Armed Opposition Group] that the weak Independent Election Commission (IEC) be strengthened to prevent election fraud. Do you oppose or support such a policy, or are you indifferent to this policy? Do you strongly or only somewhat oppose/support?

```
1 ..... I strongly oppose this policy
```

2 ..... I somewhat oppose this policy

3 ..... I am indifferent to this policy

4 ..... I somewhat support this policy

5 ..... I strongly support this policy

98 .... Refuse to answer

99 .... Dont know

Q3: It has recently been suggested by the Government of Afghanistan [Armed Opposition Group] that the weak Office of Oversight for Anti-Corruption be strengthened by allowing it to collect information about government officials suspected of wrong-doing. Do you oppose or support such a policy, or are you indifferent to this policy? Do you strongly or only somewhat oppose/support?

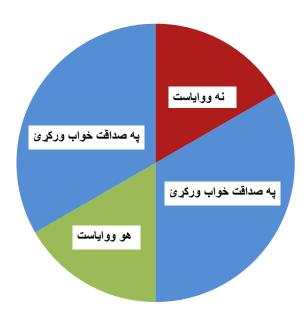
```
    I strongly oppose this policy
    I somewhat oppose this policy
    I am indifferent to this policy
    I somewhat support this policy
    I strongly support this policy
    Refuse to answer
    Dont know
```

Q4: The Government of Afghanistan [Armed Opposition Group] has recently endorsed calls to remove former mujahedin from high-ranking government positions. Do you oppose or support such a policy, or are you indifferent to this policy? Do you strongly or only somewhat oppose/support?

1 ..... I strongly oppose this policy
2 ..... I somewhat oppose this policy
3 ..... I am indifferent to this policy
4 ..... I somewhat support this policy
5 ..... I strongly support this policy
98 .... Refuse to answer
99 .... Dont know

#### S7 Randomized Response Protocol and Questions

For the randomized response survey questions, respondents are given this spinner showing a "Say Yes" section (green) with 1/6 probabilities, a "Say No" section (red) with 1/6 probability, and two "Answer honestly" sections (blue) with 1/3 probability each, and hear the following questions.



For these next questions, Im going to ask about you and the current war. For each question, I want you to answer "yes" or "no" using this spinner and considering where the spinner lands. Do not show me or tell me where the spinner lands. This is neither a game nor gambling.

I want you for each question to spin the spinner twice while my back is turned to you. Remember what you received from the first spin. If, for the first spin, the spinner arrow lands on the red area, just tell me "no" to the question I ask. If the spinner arrow lands on the green area, just tell me "yes" to the question I ask. But if the spinner arrow from the first spin lands on either blue area, tell me your true answer to the question.

We use this spinner process to help protect the confidentiality of your answers. For example, if you say yes to my question, I do not know whether it was the spinner

who forced you to say yes or whether your true answer to the question is yes. And we ask you to spin the spinner twice because I will definitely not be able to see what outcome you received on your first spin. Do you have any questions before we begin?

[MAKE SURE THE RESPONDENT UNDERSTANDS THE INSTRUCTIONS]

Now lets begin with a practice question. [ENUMERATOR TURN AROUND]

Please spin the arrow twice so that I cannot see where it lands, and remember where the spinner lands on the first spin. Please do not forget which color the first spin lands on.

[WAIT TO TURN ROUND UNTIL RESPONDENT SAYS YES TO] Have you spun the spinner twice yet?

Q0.1 This is a practice question. Does your father have a younger brother?

1 ..... Yes

0 ..... No

Now lets practice again with ME as the respondent. Please turn around while I spin the spinner twice. I will tell you when I am done spinning. Then ask me Does your father have a younger brother?

Q0.2 Do you understand how using this spinner lets you hide your true answer?

1 ..... Yes

0 ..... No

(If No, enumerator please explain the instructions again)

While I will never know your individual answer, this method allows me to approximate answers across all the respondents.

Now for EACH of the next TEN questions, I want you to repeat this spinner process.

Q1 Would	you be willing to pay additional taxes to support the government?
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)
Q2 Would	you be willing to share a pro-government SMS message?
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)
Q3 Would	you be willing to share information with the government about the Armed
	on Group?
1	-
0	
	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)
Q4 Would	you be willing to enlist in the Afghan National Security Forces?
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)
Q5 Would	you be willing to report corrupt government officials?
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)
	e past 12 months, have you personally ever used force or violence for a political
cause?	
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)
Q7 Would	you be willing to give money to the Armed Opposition Group?
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)

ns monta	you be willing to share information about the government with the Arm
Oppositi	on Group?
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)
Q9 Would	you be willing to share a pro-Armed Opposition Group SMS message?
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)
Q10 Woul	d you be willing to shelter the Armed Opposition Group in your house?
1	Yes
0	No
98	Refuse (ENUMERATOR DO NOT READ THIS OPTION ALOUD)

#### S8 Descriptive Plots of Endorsement Responses

The plots in this section depict the distribution of responses to four policy questions (columns) across two randomly assigned groups: Taliban endorsement versus Government endorsement, for all participants, by treatment assignment group, and by gender at Endline 1 and 2. Sample sizes are also shown.

#### S8.1 Endorsement Responses for All Participants

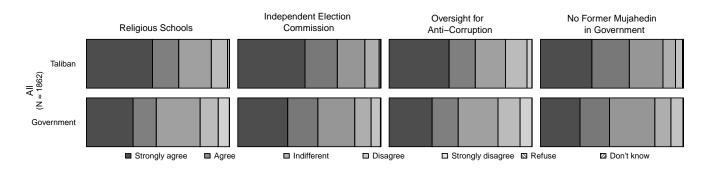


Figure S2: Endorsement Distribution at Endline 1 for all participants

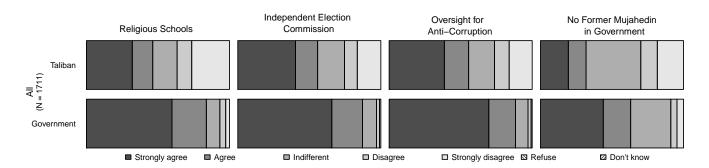


Figure S3: Endorsement Distribution at Endline 2 for all participants

#### S8.2 Endorsement Responses by TVET Treatment Status

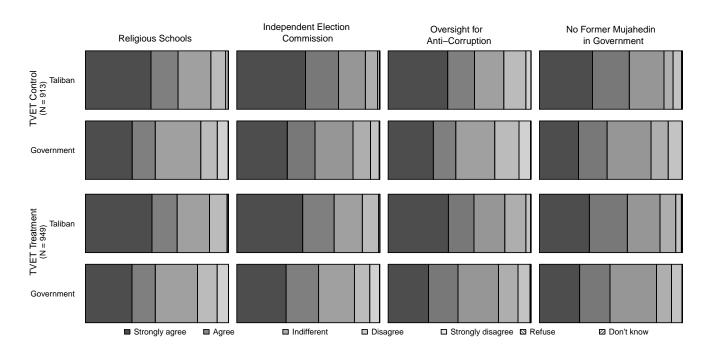


Figure S4: Endorsement Distribution at Endline 1 for all participants by TVET treatment status

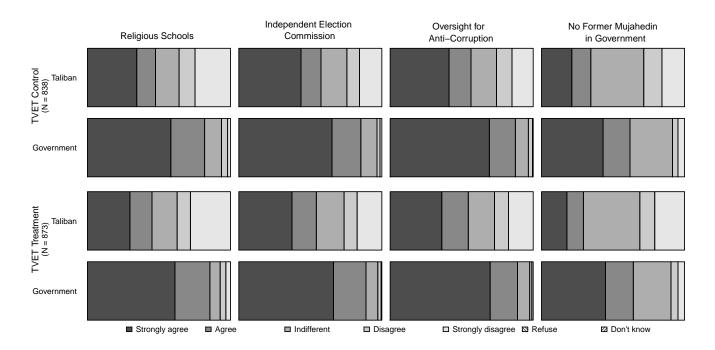


Figure S5: Endorsement Distribution at Endline 2 for all participants by TVET treatment status

#### S8.3 Endorsement Responses by UCT Treatment Status

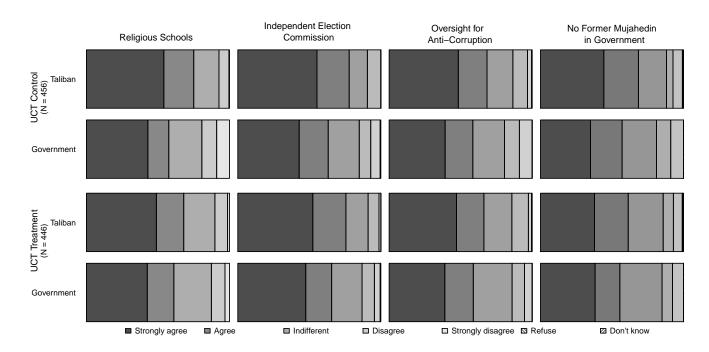


Figure S6: Endorsement Distribution at Endline 1 for all participants by UCT treatment status

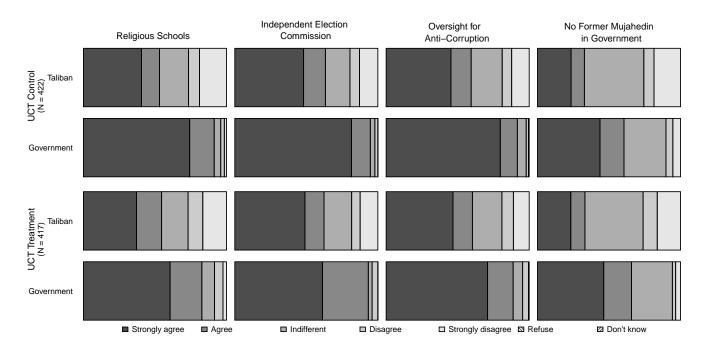


Figure S7: Endorsement Distribution at Endline 2 for all participants by UCT treatment status

#### S9 Empirical Strategy Additional Details

This section describes (1) the nonparametric estimation and statistical modeling for the TVET and UCT marginal effects of the indirect questions, (2) the non-parametric estimation and statistical modeling for the UCT-TVET average interaction effects, (3) calculations for the randomized response (RR) index measures, (4) the complier average treatment effects using instrumental variables analysis, and (5) the multiple imputation analysis procedure to account for attrition.

#### S9.1 Endorse and Randomized Response marginal effects

For the endorsement measure, we model the probability of support for the Taliban versus the Afghan government using the model based on the item response theory developed by Bullock, Imai and Shapiro (2011). This model includes only the program treatment status TVET or UCT as a covariate when estimating the ITT marginal effect for all participants, whereas we include an additional binary gender or displacement covariate when examining treatment effect heterogeneity by gender and displacement, respectively. While we defer the technical details of the model to the original article, we give a brief description of it below.

We use a hierarchical model with random intercepts by block to account for the block-randomized sampling design.

Formally,  $Y_{ij}$  is the observed ordered response of policy question j for each individual i, taking one of the following values  $\{1, 2, ..., L\}$ . The individual-level model is given by the following ordered probit factor analytic model:

$$\Pr(Y_{ij} \le l) = \Phi[\alpha_{jl} - \beta_j(x_i + s_{ij})]$$
(S1)

where  $\Phi(\cdot)$  is the cumulative distribution function of the standard normal random variable. The intercept parameters capture the overall level of support for each policy j and satisfies  $\alpha_{j1} = 0$ ,  $\alpha_{jL} = \infty$ , and  $\alpha_{jl} < \alpha_{j,l+1}$  for any j and l. The slope parameter  $\beta_j$  represents the amount of information each question reveals about respondents' support for the policy.

In this model,  $x_i$  represents respondent i's support for the policy in question j, but we are predominently interested in  $s_{ij}$ , which is the effect of endorsement of that policy by the Taliban (as opposed to the government) for respondent i. We model this parameter hierarchically with random intercepts by block, the program treatment indicator  $T_i$ , and only when examining heterogeneous

effects by gender or displacement, the female or displaced indicator  $V_i$ :

$$s_{ij} \mid \lambda_{\text{block}[i]}, T_i, V_i \sim \mathcal{N}(\lambda_{\text{block}[i]} + \gamma T_i + \delta V_i, \ \omega^2)$$
 (S2)

We fit this model using the R package *endorse* (Shiraito and Imai, 2012) with the standard convergence diagnostics based on four independent Markov chains.

The model allows us to examine how the program treatments and either participant gender or displacement status determine the size of endorsement effects. Specifically, within each block b, we estimate the average difference in the probability of positive support between the treatment and control conditions.

$$\tau_b = \frac{1}{N_b} \sum_{i: \text{block}[i] = b} \left\{ \Pr(s_{ij} > 0 \mid \lambda_b, T_i = 1, V_i) - \Pr(s_{ij} > 0 \mid \lambda_b, T_i = 0, V_i) \right\}$$
 (S3)

where  $N_b$  is the number of individuals in block b. Then we take the average across the blocks, weighted by assigned block size:  $\sum_{b=1}^{B} w_b \cdot \tau_b$ , where  $\sum_{b=1}^{B} w_b = 1$ ,  $0 < w_b$ , and  $w_b \propto N_b$  to obtain the overall ITT estimate. For the variance, we also aggregate across the blocks:  $\sum_{b=1}^{B} w_b^2 \text{Var}(\tau_b)$ .

The model for the UCT-TVET effect is similar except that we include the interaction of the two program treatments as a covariate in the model, and we estimate the AIE by computing the difference in the estimated average effect of UCT between the TVET treatment and control groups. We interpret the AIE as the additional effect of UCT attributable to participation in TVET.

Next, for the randomized response questions, we estimate the ITT marginal effects as a difference-in-means by taking into account the forced response design parameters that determine the probabilities of whether respondents give forced or truthful answers (Blair, Imai and Zhou, 2015). Here,  $Y_i$  is the observed binary "yes"/"no" response for each individual i. Let  $p_1$  denote the probability of a forced "yes" and  $p_0$  is the probability of a forced "no" by design; in our case, they are both equal to 1/6. Then, within each block b, we nonparametrically estimate the average difference in the proportion of affirmative response:

$$\tau_b = \frac{1}{N_b} \sum_{i: \text{block}[i] = b} \frac{\Pr(Y_i = 1 \mid T_i = 1, V_i) - p_1}{1 - p_1 - p_0} - \frac{\Pr(Y_i = 1 \mid T_i = 0, V_i) - p_1}{1 - p_1 - p_0}$$
(S4)

Similar to the endorsement estimate, we then take the weighted average of these within-block effects to obtain the overall ITT effect. For heterogeneous effects by gender and by displacement, we subset the data to either females, males, displaced or locals. Again, for the UCT-TVET effects we compute the difference in the estimated average effect of UCT between the TVET treatment and control groups.

For the randomized response index measures – Pro-Taliban and Pro-Government, we take the average over each  $\tau_b$  across the questions within the respective indices for each block and then take the weighted average across the blocks. For the Pro-Taliban vs. Pro-Government measure, we take the difference between the  $\tau_b$  averaged across the Pro-Taliban questions and the  $\tau_b$  averaged across the Pro-Government questions within block, and again take the weighted average of this quantity across the 10 blocks.

#### S9.2 Average interaction effects

For the endorsement measure, we follow the literature (Bullock, Imai and Shapiro, 2011; Lyall, Blair and Imai, 2013; Blair, Imai and Lyall, 2014) and use the item response theory model with the interaction of TVET and UCT as a covariate to estimate the average interaction effect (AIE) for all participants, whereas we include an additional gender or displacement covariate when examining treatment effect heterogeneity by gender and displacement, respectively. We model  $s_{ij}$ , which is the effect of endorsement of that policy by the Taliban (as opposed to the government) for respondent i hierarchically with random intercepts by block, the program treatment indicators  $TVET_i$  and  $UCT_i$ , and only when examining heterogeneous effects by gender or displacement, the female or displaced indicator  $V_i$ :

$$s_{ij} \mid TVET_i, UCT_i, V_i, \text{block}[i] \sim \mathcal{N}(\lambda_{\text{block}[i]} + \alpha TVET_i + \beta UCT_i + \gamma TVET_i \times UCT_i + \delta V_i, \omega^2)$$
 (S5)

We fit this model using the R package *endorse* (Shiraito and Imai, 2012) with the standard convergence diagnostics based on four independent Markov chains. Then within each block, we

estimate the average interaction effect of the probability of positive support.

$$\hat{\tau}_{b} = \frac{1}{N_{b}} \sum_{i=1}^{N} \mathbf{1} \{ \text{block}[i] = b \} \Big[ \Big( \Pr(s_{ij} > 0 \mid \text{TVET}_{i} = 1, \text{UCT}_{i} = 1, V_{i}, \text{block}[i] = b) - (S6) \Big]$$

$$\Pr(s_{ij} > 0 \mid \text{TVET}_{i} = 0, \text{UCT}_{i} = 1, V_{i}, \text{block}[i] = b) \Big) - \Big( \Pr(s_{ij} > 0 \mid \text{TVET}_{i} = 1, \text{UCT}_{i} = 0, V_{i}, \text{block}[i] = b) - \Big]$$

$$\Pr(s_{ij} > 0 \mid \text{TVET}_{i} = 0, \text{UCT}_{i} = 0, V_{i}, \text{block}[i] = b) \Big]$$

where  $N_b$  represents the sample size within block b. Then we take the average across the blocks, weighted by assigned block size:  $\sum_{b=1}^{B} w_b \cdot \hat{\tau}_b$ , where  $\sum_{b=1}^{B} w_b = 1$  and  $0 < w_b \propto N_b$  and the variance is  $\sum_{b=1}^{B} w_b^2 \text{Var}(\hat{\tau}_b)$ .

Next, for the randomized response questions, we estimate the ITT AIE effects by again taking into account the forced response design parameters that determine the probabilities of whether respondents give forced or truthful answers (Blair, Imai and Zhou, 2015).  $Y_i$  is the observed binary "yes"/"no" response for each individual i.  $p_1$  is the probability of a forced "yes" and  $p_0$  is the probability of a forced "no" by design; in our case, they are both equal to 1/6. Then, the nonparametric estimator for the proportion of affirmative response within each block  $\hat{\tau}_b$  is given by,

$$\hat{\tau}_{b} = \left(\frac{1}{N_{TT_{b}}} \sum_{i \in TT_{b}} \frac{Y_{i} - p_{1}}{1 - p_{1} - p_{0}} - \frac{1}{N_{CT_{b}}} \sum_{i \in CT_{b}} \frac{Y_{i} - p_{1}}{1 - p_{1} - p_{0}}\right) - \left(\frac{1}{N_{TC_{b}}} \sum_{i \in TC_{b}} \frac{Y_{i} - p_{1}}{1 - p_{1} - p_{0}} - \frac{1}{N_{CC_{b}}} \sum_{i \in CC_{b}} \frac{Y_{i} - p_{1}}{1 - p_{1} - p_{0}}\right)$$
(S7)

where  $N_{TT_b}$ ,  $N_{CT_b}$ ,  $N_{TC_b}$ , and  $N_{CC_b}$  indicate the number of observations within each block b for the group assigned to TVET treatment-UCT treatment, TVET control-UCT treatment, TVET treatment-UCT control, and TVET control-UCT control respectively. Moreover,  $i \in TT_b$ , for example, implies that observation i belongs to the TVET treatment-UCT treatment group in block b. Again, we then take the weighted average of these within-block estimates to obtain the overall ITT estimate. For heterogeneous effects by gender and by displacement, we subset the data to either females, males, displaced or locals.

#### S9.3 Randomized Response Index measures

First, we outline the procedure for estimating the Pro-Taliban and Pro-Government RR index measures for the marginal average treatment effect of either TVET or UCT. We have B blocks (a total of 10 blocks) and Q questions (4 for Pro-Taliban and 5 for Pro-Government).  $\hat{\mu}_q^b$  is the RR quantity of interest (i.e. difference in mean RR estimate for treatment group and mean RR estimate for control group) for block b, question q such that

$$\hat{\mu}_{q}^{b} = \frac{1}{N_{Tb}} \sum_{i: \text{block}[i] = b, T_{i} = 1} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}} - \frac{1}{N_{Cb}} \sum_{i: \text{block}[i] = b, T_{i} = 0} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}}$$
(S8)

To get the index point estimate, we simply take the average over the  $\hat{\mu}_q^b$  estimates across the Q questions within each block:  $\frac{1}{Q} \sum_{q=1}^Q \hat{\mu}_q^b$ . Then we aggregate across blocks using the weighted mean, weighted by block size:  $\sum_{b=1}^B w_b \left(\frac{1}{Q} \sum_{q=1}^Q \hat{\mu}_q^b\right)$  where  $\sum_{b=1}^B w_b = 1$  and  $0 < w_b \propto N_b$ . The variance is  $\sum_{b=1}^B w_b^2 \text{Var}\left(\frac{1}{Q} \sum_{q=1}^Q \hat{\mu}_q^b\right)$ , in which,

$$\operatorname{Var}\left(\frac{1}{Q}\sum_{q=1}^{Q}\hat{\mu}_{q}^{b}\right) = \frac{1}{Q^{2}}\left[\sum_{q=1}^{Q}\operatorname{Var}(\hat{\mu}_{q}^{b}) + 2\sum_{q=1}^{Q}\sum_{q'>q}\operatorname{Cov}(\hat{\mu}_{q}^{b},\hat{\mu}_{q'}^{b})\right]$$
(S9)

where  $Cov(\hat{\mu}_q^b, \hat{\mu}_{q'}^b)$  for q' > q includes every combination of unique question pairs. There will be 6 of these terms for Pro-Taliban and 10 for Pro-Government. For the covariance terms, we assume independence across respondents.

Taking  $Cov(\hat{\mu}_q^b, \hat{\mu}_{q'}^b)$  for q' > q, we first replace each  $\hat{\mu}_q^b$  with the full expression in equation (S8):

$$\operatorname{Cov}(\hat{\mu}_{q}^{b}, \hat{\mu}_{q'}^{b}) = \operatorname{Cov}\left(\frac{1}{N_{Tb}} \sum_{i: \operatorname{block}[i] = b, T_{i} = 1} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}} - \frac{1}{N_{Cb}} \sum_{i: \operatorname{block}[i] = b, T_{i} = 0} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}}, \right. \\
\left. \frac{1}{N_{Tb}} \sum_{i: \operatorname{block}[i] = b, T_{i} = 1} \frac{Y_{q',i} - p_{1}}{1 - p_{1} - p_{0}} - \frac{1}{N_{Cb}} \sum_{i: \operatorname{block}[i] = b, T_{i} = 0} \frac{Y_{q',i} - p_{1}}{1 - p_{1} - p_{0}}\right) \\
= \frac{d^{2}}{N_{Tb}} \operatorname{Cov}(Y_{q,i,b,T_{i} = 1}, Y_{q',i,b,T_{i} = 1}) + \frac{d^{2}}{N_{Cb}} \operatorname{Cov}(Y_{q,i,b,T_{i} = 0}, Y_{q',i,b,T_{i} = 0}) \tag{S10}$$

where  $d = \frac{1}{1 - p_1 - p_0}$ .

Second, we outline the procedure for estimating the Pro-Taliban and Pro-Government RR index measures for the interaction treatment effect of UCT conditional on TVET. Again, we have B blocks (B=10) and Q questions (4 for Pro-Taliban and 5 for Pro-Government).  $\hat{\mu}_q^b$  is the RR

interaction qoi for block b, question q such that

$$\hat{\mu}_{q}^{b} = \frac{1}{N_{TTb}} \sum_{i \in TT_{b}} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}} - \frac{1}{N_{CTb}} \sum_{i \in CT_{b}} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}} - \frac{1}{N_{TCb}} \sum_{i \in TC_{b}} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}} + \frac{1}{N_{CCb}} \sum_{i \in CC_{b}} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}}$$
(S11)

Taking  $Cov(\hat{\mu}_q^b, \hat{\mu}_{q'}^b)$  for q' > q, when we replace each  $\hat{\mu}_q^b$  with the full expression in equation (S11), we get:

$$\operatorname{Cov}(\hat{\mu}_{q}^{b}, \hat{\mu}_{q'}^{b}) = \operatorname{Cov}\left(\frac{1}{N_{TTb}} \sum_{i \in TT_{b}} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}}, \frac{1}{N_{TTb}} \sum_{i \in TT_{b}} \frac{Y_{q',i} - p_{1}}{1 - p_{1} - p_{0}}\right) + \\
\operatorname{Cov}\left(\frac{1}{N_{CTb}} \sum_{i \in CT_{b}} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}}, \frac{1}{N_{CTb}} \sum_{i \in CT_{b}} \frac{Y_{q',i} - p_{1}}{1 - p_{1} - p_{0}}\right) + \\
\operatorname{Cov}\left(\frac{1}{N_{TCb}} \sum_{i \in TC_{b}} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}}, \frac{1}{N_{TCb}} \sum_{i \in CT_{b}} \frac{Y_{q',i} - p_{1}}{1 - p_{1} - p_{0}}\right) + \\
\operatorname{Cov}\left(\frac{1}{N_{CCb}} \sum_{i \in CC_{b}} \frac{Y_{q,i} - p_{1}}{1 - p_{1} - p_{0}}, \frac{1}{N_{CCb}} \sum_{i \in CC_{b}} \frac{Y_{q',i} - p_{1}}{1 - p_{1} - p_{0}}\right) + \\
= \frac{d^{2}}{N_{TTb}} \operatorname{Cov}(Y_{q,i,b,TT}, Y_{q',i,b,TT}) + \frac{d^{2}}{N_{CTb}} \operatorname{Cov}(Y_{q,i,b,CT}, Y_{q',i,b,CC}) + \\
\frac{d^{2}}{N_{TCb}} \operatorname{Cov}(Y_{q,i,b,TC}, Y_{q',i,b,TC}) + \frac{d^{2}}{N_{CCb}} \operatorname{Cov}(Y_{q,i,b,CC}, Y_{q',i,b,CC}) \quad (S12)$$

Finally, we estimate the Pro-Taliban versus Pro-Government RR index measure, which is the difference-in-means between the O Pro-Taliban ("opposition") questions and the G Pro-Government questions within each block b:

$$\frac{1}{O} \sum_{o=1}^{O} \hat{\mu}_o^b - \frac{1}{G} \sum_{g=1}^{G} \hat{\mu}_g^b \tag{S13}$$

The variance for this estimate within block is:

$$\operatorname{Var}\left(\frac{1}{O}\sum_{o=1}^{O}\hat{\mu}_{o}^{b} - \frac{1}{G}\sum_{g=1}^{G}\hat{\mu}_{g}^{b}\right) = \operatorname{Var}\left(\frac{1}{O}\sum_{o=1}^{O}\hat{\mu}_{o}^{b}\right) + \operatorname{Var}\left(\frac{1}{G}\sum_{g=1}^{G}\hat{\mu}_{g}^{b}\right) - \frac{2}{OG}\sum_{o=1}^{O}\sum_{g=1}^{G}\operatorname{Cov}(\hat{\mu}_{o}^{b}, \hat{\mu}_{g}^{b})$$
(S14)

where the variance and covariance terms can be calculated similar to the previous sections depend-

ing on whether we are examining the marginal or interaction effects. We then take the weighted average of these within-block estimates to obtain the overall index measures.

#### S9.4 Complier average treatment effects

To identify the average treatment effects for compliers, we use the Neyman stratification method, namely we calculate each component of the standard Wald estimator as a weighted average across each of the 10 blocks

$$\widehat{IV}_W = \frac{\widehat{ITT}_Y}{\widehat{ITT}_T} = \frac{\sum_b w_b \widehat{ITT}_{Yb}}{\sum_b w_b \widehat{ITT}_{Tb}}$$
(S15)

 $\widehat{\text{ITT}}_{T_b}$  is the difference in  $R_i$ , which is actual treatment uptake for individual i (i.e. graduating the TVET program or receiving the UCT) between  $T_b$  those assigned to treatment and  $C_b$  those assigned to control within block b.

$$\widehat{ITT}_{T_b} = \frac{1}{N_{T_b}} \sum_{i \in T_b} R_i - \frac{1}{N_{C_b}} \sum_{i \in C_b} R_i$$
 (S16)

For the endorsement measure, we fit an item response theory model without covariates and with random intercepts by block, using the standard convergence diagnostics based on four independent Markov chains. We then calculate  $\widehat{ITT}_{Yb}$  using the support parameter, which is a sample from the posterior distribution of  $s_{ij}$ , for each respondent averaged over the individual endorsement questions as Y - i. For the individual randomized response questions,  $ITT_{Yb}$  is the intention-to-treat effect as defined in the paper in equation (S4).

The variance of the Wald estimator is:

$$\operatorname{Var}(\widehat{\mathrm{IV}}_{W}) \approx \frac{1}{\operatorname{ITT}_{Y}^{4}} \left\{ \operatorname{ITT}_{T}^{2} \operatorname{Var}(\widehat{\mathrm{ITT}}_{Y}) + \operatorname{ITT}_{Y}^{2} \operatorname{Var}(\widehat{\mathrm{ITT}}_{T}) - 2\operatorname{ITT}_{Y} \operatorname{ITT}_{T} \operatorname{Cov}(\widehat{\mathrm{ITT}}_{Y}, \widehat{\mathrm{ITT}}_{T}) \right\}$$
(S17)

where each component is defined as the weighted average as the weighted average such that

$$Var(\widehat{ITT}_Y) = \sum_b w_b^2 Var(\widehat{ITT}_{Yb})$$
 (S18)

$$Var(\widehat{ITT}_T) = \sum_b w_b^2 Var(\widehat{ITT}_{Tb})$$
 (S19)

$$Cov(\widehat{ITT}_Y, \widehat{ITT}_T) = \sum_b w_b^2 Cov(\widehat{ITT}_{Yb}, \widehat{ITT}_{Tb})$$
 (S20)

Next, we adapt this estimator to the RR index measures. Again, we have B blocks (10) and Q questions (4 for Pro-Taliban and 5 for Pro-Government). When aggregating across Q questions, the Wald estimator is defined as:

$$\widehat{IV}_W = \frac{\sum_b w_b \frac{1}{Q} \sum_{q=1}^Q \widehat{ITT}_{Yb}^q}{\sum_b w_b \frac{1}{Q} \sum_{q=1}^Q \widehat{ITT}_{Tb}^q}$$
(S21)

As  $\widehat{\text{ITT}}_{Tb}^q$  is the same across questions, this is equivalent to

$$\widehat{IV}_W = \frac{1}{\sum_b w_b \widehat{ITT}_{Tb}} \left( \sum_b w_b \frac{1}{Q} \sum_{q=1}^Q \widehat{ITT}_{Yb}^q \right)$$
 (S22)

We define the two components of this Wald estimator as:

$$\widehat{\text{ITT}}_{Yb}^{q} = \frac{1}{N_{Tb}} \sum_{i \in Tb} \frac{Y_i - p_1}{1 - p_1 - p_0} - \frac{1}{N_{Cb}} \sum_{i \in Cb} \frac{Y_i - p_1}{1 - p_1 - p_0}$$
(S23)

$$\widehat{\text{ITT}}_{Tb} = \frac{1}{N_{Tb}} \sum_{i \in Tb} R_i - \frac{1}{N_{Cb}} \sum_{i \in Cb} R_i$$
 (S24)

To derive the asymptotic variance of this Wald estimator, we calculate three quantities for each block —  $Var(\widehat{ITT}_{Yb})$ ,  $Var(\widehat{ITT}_{Tb})$ , and  $Cov(\widehat{ITT}_{Yb}, \widehat{ITT}_{Tb})$ . We derived  $Var(\widehat{ITT}_{Yb})$  in previous sections, and  $Var(\widehat{ITT}_{Tb})$  is straightforward. We derive  $Cov(\widehat{ITT}_{Yb}, \widehat{ITT}_{Tb})$  below:

$$\operatorname{Cov}(\widehat{\operatorname{ITT}}_{Yb}, \widehat{\operatorname{ITT}}_{Tb}) = \operatorname{Cov}\left(\frac{1}{Q}\sum_{q=1}^{Q}\widehat{\operatorname{ITT}}_{Yb}^{q}, \widehat{\operatorname{ITT}}_{Tb}\right)$$

$$= \frac{1}{Q}\sum_{q=1}^{Q}\left[\frac{d}{N_{Tb}}\operatorname{Cov}(Y_{q,i,b,T_{i}=1}, R_{i,b,T_{i}=1}) + \frac{d}{N_{Cb}}\operatorname{Cov}(Y_{q,i,b,T_{i}=0}, R_{i,b,T_{i}=0})\right]$$
(S25)

where  $d = \frac{1}{1-p_1-p_0}$ . We then take the weighted average of these within-block estimates to obtain the overall CATE estimate.

Finally, we adapt this estimator to the Pro-Taliban versus Pro-Government RR index measure, which is the difference-in-means between the O Pro-Taliban ("opposition") questions and the G Pro-Government questions within each block b. In this case, we define the two components of this Wald estimator as:

$$\widehat{\text{ITT}}_{Yb} = \frac{1}{O} \sum_{o=1}^{O} \hat{\mu}_o^b - \frac{1}{G} \sum_{g=1}^{G} \hat{\mu}_g^b$$
 (S26)

$$\widehat{\text{ITT}}_{Tb} = \frac{1}{N_{Tb}} \sum_{i \in Tb} R_i - \frac{1}{N_{Cb}} \sum_{i \in Cb} R_i$$
 (S27)

with  $\hat{\mu}_o^b$  and  $\hat{\mu}_g^b$  defined in the previous section.

To derive the asymptotic variance of the Wald estimator, we again calculate three quantities for each block —  $Var(\widehat{ITT}_{Yb})$ ,  $Var(\widehat{ITT}_{Tb})$ , and  $Cov(\widehat{ITT}_{Yb}, \widehat{ITT}_{Tb})$ . We derived  $Var(\widehat{ITT}_{Yb})$  in previous sections, and  $Var(\widehat{ITT}_{Tb})$  is straightforward. We derive  $Cov(\widehat{ITT}_{Yb}, \widehat{ITT}_{Tb})$  below.

$$\operatorname{Cov}(\widehat{\operatorname{ITT}}_{Yb}, \widehat{\operatorname{ITT}}_{Tb}) = \operatorname{Cov}\left(\frac{1}{O}\sum_{o=1}^{O}\hat{\mu}_{o}^{b} - \frac{1}{G}\sum_{g=1}^{G}\hat{\mu}_{g}^{b}, \widehat{\operatorname{ITT}}_{Tb}\right) \\
= \frac{1}{O}\sum_{o=1}^{O}\left[\frac{d}{N_{Tb}}\operatorname{Cov}(Y_{o,q,i,b,T_{i}=1}, R_{i,b,T_{i}=1}) + \frac{d}{N_{Cb}}\operatorname{Cov}(Y_{o,q,i,b,T_{i}=0}, R_{i,b,T_{i}=0})\right] - \\
\frac{1}{G}\sum_{g=1}^{G}\left[\frac{d}{N_{Tb}}\operatorname{Cov}(Y_{g,q,i,b,T_{i}=1}, R_{i,b,T_{i}=1}) + \frac{d}{N_{Cb}}\operatorname{Cov}(Y_{g,q,i,b,T_{i}=0}, R_{i,b,T_{i}=0})\right]$$

where  $d = \frac{1}{1-p_1-p_0}$ . We then take the weighted average of these within-block estimates to obtain the overall CATE estimate.

#### S9.5 Multiple imputation

We use the R package mi to multiply impute the data with four chains. The variables we include are block, displacement status, female and program treatment assignment for which there is no missingness; baseline covariates employment, age, household head, household size, married, formal education years, madrassa years, electricity hours, landownership and monthly net income at baseline, endline 1 and endline 2. We also include both the indirect outcome questions and direct violence attitude and behavior questions at baseline, endline 1, and

#### endline 2.

For the endorsement status, we still randomly assign those who attritioned to endorsement by the Taliban or endorsement by the government with equal probability rather than impute this value to follow the true data generating process.

Once we obtain the estimates for all four chains, we simply take the mean and use the standard variance formula:

$$Var(\hat{\phi}) = \frac{1}{M} \sum_{i=1}^{M} Var(\hat{\phi}_i) + \left(1 + \frac{1}{M}\right) \frac{1}{M-1} \sum_{i=1}^{M} (\hat{\phi}_i - \hat{\phi})^2$$
 (S29)

where M indicates the number of chains and  $\hat{\phi}_i$  is the point estimate from the i'th chain.

#### S10 Multiple Hypothesis Testing using Benjamini-Hochberg Procedure

In this section, we address concerns about multiple hypothesis testing by adjusting for the false discovery rate (FDR). We show the Benjamini-Hochberg (BH) adjusted p-values for each test of our main findings shown in Figures 5 (Combatant Support) and 6 (Violence Attitudes and Behaviors) in the paper.<sup>1</sup> Since these are two separate categories of outcomes, we adjust within each category. Futhermore, for the sets of outcomes, we show the adjusted p-values within estimates (TVET, UCT, UCT-TVET) across outcomes, and then within outcomes across estimates. There are only two estimates which lose statistical significance once we use the BH adjusted p-value and only when comparing across other estimates within the same outcome: the Endorse estimate for UCT at Endline 2 (adjusted BH p-value 0.105) and the Dispute with Police estimate for UCT at Endline 2 (adjusted BH p-value 0.115).

S10.1 Multiple Hypothesis Testing for Combatant Support

Estimate	Outcome	Effect size	SE	p-value	adjusted p-value
TVET	Endorse Endline 1	-0.005	0.040	0.451	0.451
TVET	RR Versus Index Endline 1	-0.017	0.029	0.282	0.375
TVET	Endorse Endline 2	-0.014	0.013	0.143	0.375
TVET	RR Versus Index Endline 2	-0.015	0.024	0.264	0.375
UCT	Endorse Endline 1	-0.128	0.059	0.015	0.030
UCT	RR Versus Index Endline 1	-0.096	0.041	0.010	0.030
UCT	Endorse Endline 2	0.045	0.025	0.035	0.047
UCT	RR Versus Index Endline 2	0.016	0.033	0.319	0.319
UCT-TVET	Endorse Endline 1	0.012	0.096	0.451	0.451
UCT-TVET	RR Versus Index Endline 1	-0.020	0.084	0.404	0.451
UCT-TVET	Endorse Endline 2	-0.057	0.051	0.132	0.265
UCT-TVET	RR Versus Index Endline 2	-0.167	0.067	0.006	0.026

Table S5: Adjusted p-values using Benjamini-Hochberg for ITT Combatant Support Analysis (Fig. 5 in the paper): adjusting within each set of estimates, across outcomes.

<sup>&</sup>lt;sup>1</sup>We do not include the Economic or Asset Outcomes because we find that the results for these sets of outcomes are generally null.

Estimate	Outcome	Effect size	SE	p-value	adjusted p-value
TVET	Endorse Endline 1	-0.005	0.040	0.451	0.451
UCT	Endorse Endline 1	-0.128	0.059	0.015	0.045
UCT-TVET	Endorse Endline 1	0.012	0.096	0.451	0.451
TVET	Endorse Endline 2	-0.014	0.013	0.143	0.143
UCT	Endorse Endline 2	0.045	0.025	0.035	0.105
UCT-TVET	Endorse Endline 2	-0.057	0.051	0.132	0.143
TVET	RR Versus Index Endline 1	-0.017	0.029	0.282	0.404
UCT	RR Versus Index Endline 1	-0.096	0.041	0.010	0.029
UCT-TVET	RR Versus Index Endline 1	-0.020	0.084	0.404	0.404
TVET	RR Versus Index Endline 2	-0.015	0.024	0.264	0.319
UCT	RR Versus Index Endline 2	0.016	0.033	0.319	0.319
UCT-TVET	RR Versus Index Endline 2	-0.167	0.067	0.006	0.019

Table S6: Adjusted p-values using Benjamini-Hochberg for ITT Combatant Support Analysis (Fig. 5 in the paper): adjusting within each set of outcomes, across estimates.

S10.2 Multiple Hypothesis Testing for Violence Attitudes and Behaviors

Estimate	Outcome	Effect size	SE	p-value	adjusted p-value
TVET	Unfair State	-0.002	0.018	0.446	0.446
TVET	Defend Family	0.006	0.024	0.400	0.446
TVET	Defend Assets	-0.019	0.024	0.210	0.446
TVET	Dispute w/ Police	-0.028	0.022	0.107	0.446
TVET	Dispute w/ Neighbor	-0.004	0.022	0.432	0.446
TVET	Dispute w/ Leader	0.003	0.014	0.408	0.446
UCT	Unfair State	0.037	0.027	0.084	0.084
UCT	Defend Family	0.077	0.034	0.012	0.020
UCT	Defend Assets	0.076	0.034	0.013	0.020
UCT	Dispute w/ Police	0.059	0.033	0.038	0.046
UCT	Dispute w/ Neighbor	0.073	0.029	0.006	0.020
UCT	Dispute w/ Leader	0.050	0.022	0.011	0.020
UCT-TVET	Unfair State	-0.200	0.054	0.000	0.001
UCT-TVET	Defend Family	-0.077	0.068	0.130	0.195
UCT-TVET	Defend Assets	-0.085	0.069	0.109	0.195
UCT-TVET	Dispute w/ Police	-0.028	0.068	0.344	0.413
UCT-TVET	Dispute w/ Neighbor	0.012	0.058	0.418	0.418
UCT-TVET	Dispute w/ Leader	-0.053	0.043	0.109	0.195

Table S7: Adjusted p-values using Benjamini-Hochberg for ITT Violence Attitudes and Behaviors Analysis (Fig. 6 in the paper): adjusting within each set of estimates, across outcomes.

Estimate	Outcome	Effect size	SE	p-value	adjusted p-value
TVET	Unfair State	-0.002	0.018	0.446	0.446
UCT	Unfair State	0.037	0.027	0.084	0.125
UCT-TVET	Unfair State	-0.200	0.054	0.000	0.000
TVET	Defend Family	0.006	0.024	0.400	0.400
UCT	Defend Family	0.077	0.034	0.012	0.036
UCT-TVET	Defend Family	-0.077	0.068	0.130	0.195
TVET	Defend Assets	-0.019	0.024	0.210	0.210
UCT	Defend Assets	0.076	0.034	0.013	0.040
UCT-TVET	Defend Assets	-0.085	0.069	0.109	0.164
TVET	Dispute w/ Police	-0.028	0.022	0.107	0.161
UCT	Dispute w/ Police	0.059	0.033	0.038	0.115
UCT-TVET	Dispute w/ Police	-0.028	0.068	0.344	0.344
TVET	Dispute w/ Neighbor	-0.004	0.022	0.432	0.432
UCT	Dispute w/ Neighbor	0.073	0.029	0.006	0.018
UCT-TVET	Dispute w/ Neighbor	0.012	0.058	0.418	0.432
TVET	Dispute w/ Leader	0.003	0.014	0.408	0.408
UCT	Dispute w/ Leader	0.050	0.022	0.011	0.032
UCT-TVET	Dispute w/ Leader	-0.053	0.043	0.109	0.164

Table S8: Adjusted p-values using Benjamini-Hochberg for ITT Violence Attitudes and Behaviors Analysis (Fig. 6 in the paper): adjusting within each set of outcomes, across estimates.

#### S11 Showing the Components of the UCT-TVET Interaction Effect

The section shows all the intention-to-treat (ITT) analyses in the paper while also including the two components used to calculate the UCT-TVET interaction effect: the effect of UCT under TVET treatment condition and the effect of UCT under TVET control condition. The UCT-TVET interaction effect (black squares) is the difference between the effect of UCT conditional on TVET treat (black cross) and UCT conditional on TVET control (black open box).

#### S11.1 Economic Outcomes Main Analysis

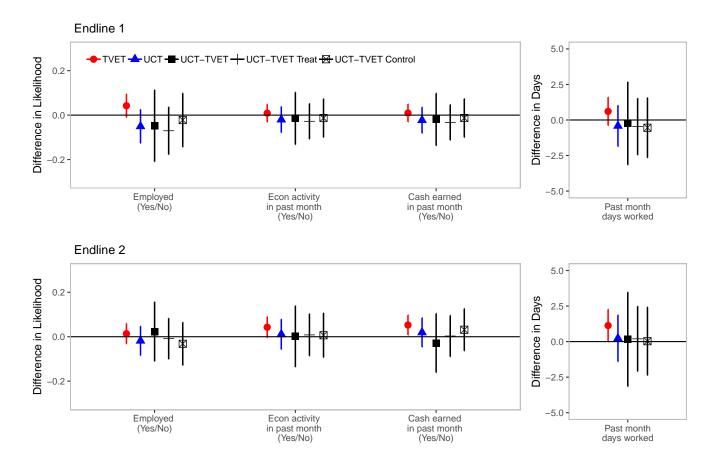


Figure S8: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for all participants, with 95% confidence intervals.

#### S11.2 Asset Outcomes Main Analysis

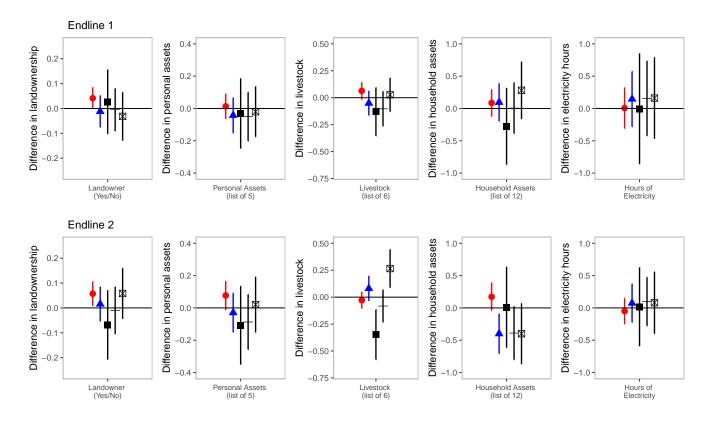


Figure S9: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for all participants, with 95% confidence intervals.

#### S11.3 Combatant Support Main Analysis

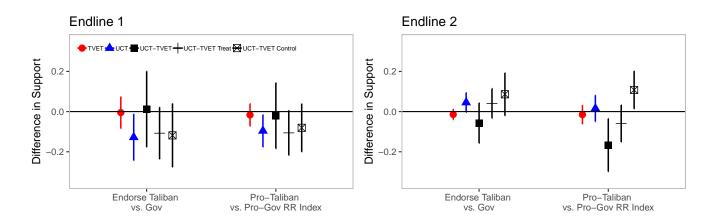


Figure S10: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of combatant support outcomes for all participants, with 95% confidence intervals.

#### S11.4 Violence Attitudes and Behaviors Main Analysis

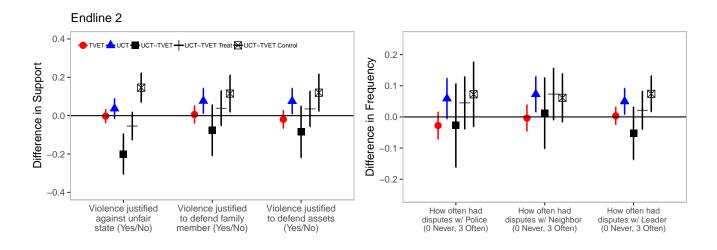


Figure S11: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for all participants, with 95% confidence intervals.

### S12 Expanded ITT Estimates of Randomized Response for Combatant Support

This section shows the intention-to-treat (ITT) analysis for the effects of TVET marginal, UCT marginal, UCT-TVET interaction, UCT conditional on TVET treat, and UCT conditional on TVET control on the randomized response indices of taking Pro-government and Pro-Taliban actions and the individual randomized response questions. These figures expand upon Figure 5 in the paper.

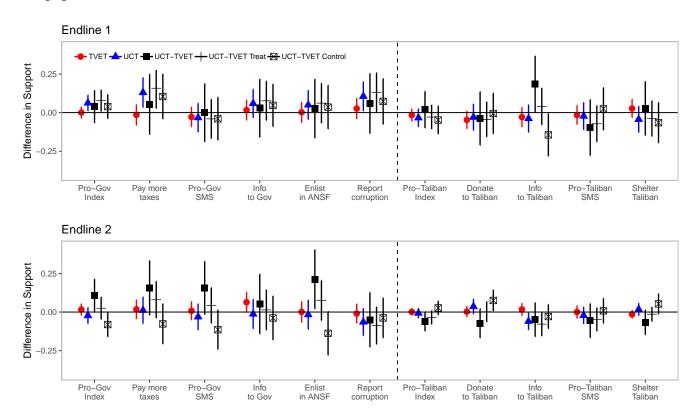


Figure S12: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for all participants, with 95% confidence intervals.

#### S13 ITT Estimates for Perceptions of Government Performance

This section shows how the economic interventions affected perceptions of national and local government performance and responsiveness. These questions, asked on a scale from 1 to 5, were only measured during Endline 1. The first two outcomes in figure S13 show national and local government performance, which are indices constructed by averaging across 10 different sectors, including education, employment opportunities, and security, to assess respondents' beliefs about government performance at each level. Figures S14 and S15 show the individual sectors separately for the national and local government respectively.

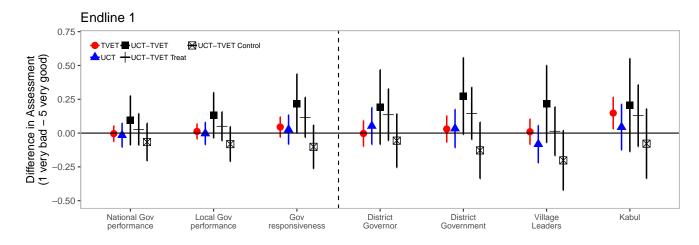


Figure S13: Intention-to-Treat analysis at Endline 1 on assessments of government performance and responsiveness as indices (left) and responsiveness disaggregated by levels of government with 95% confidence intervals.

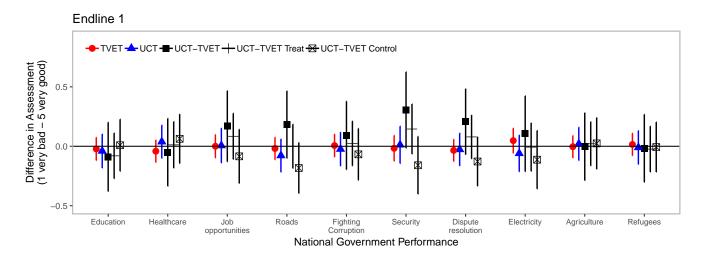


Figure S14: Intention-to-Treat analysis at Endline 1 on assessments of national government performance across 10 sectors for all participants, with 95% confidence intervals.

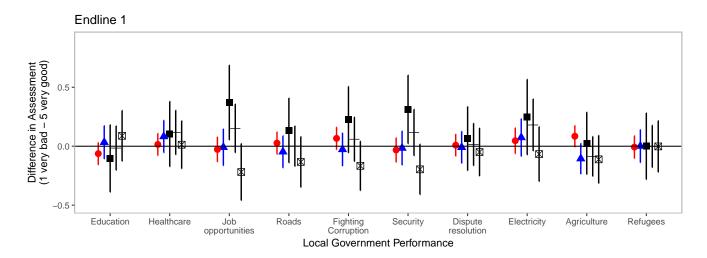


Figure S15: Intention-to-Treat analysis at Endline 1 on assessments of local government performance across 10 sectors, with 95% confidence intervals.

Neither TVET nor the UCT has a positive (or any) effect on perceptions of either national or local government performance whether using the composite indices shown in the first two sets of estimates in Figure S13 or individual measures (see Section S13 in the SI). UCT-TVET interaction, however, records improvements in the views about government performance, though these positive differences (narrowly) miss conventional levels of significance using the composite indices. Using the individual measures, however, perceptions of the local government's ability to provide jobs (0.37, CI = [0.05, 0.69]) and security (0.31, CI = [0.02, 0.6]) have both improved for the UCT-TVET interaction. This change in beliefs about the local government's provision of greater economic opportunities is exactly what we should expect if credit capture is underway.

The belief that the government is responsive to their needs is also higher for the UCT-TVET interaction, 0.22 (CI = [0,0.44]), as depicted in the third set of estimates in Figure S13. On the right-hand of the dotted line, we disaggregate the government into four possible agents — the district governor, the district government, local leaders, and Kabul — to trace where credit is accruing. For UCT-TVET interaction, while perceptions of responsiveness have improved across all four agents, the effects for district (local) government is the highest at 0.27 (CI = [-0.01, 0.56]). While TVET did improve perceptions of Kabul, TVET and UCT recipients do not report the same broad-based improvements in responsiveness. In some ways, this may be a positive finding given concerns that cash transfers can erode perceptions of government performance and responsiveness (Evans, Holtemeyer and Kosec, 2018). In short, these attitudinal findings are consistent with a credit capture argument in which UCT-TVET recipients use their two treatment arms as evidence

of government efforts to fulfill a duty of care in a difficult, low-information environment.

Lastly, the UCT-TVET control group is particularly instructive. These individuals never recorded any positive updating in their beliefs about government performance and responsiveness. Contrary to all other groups, they report diminished views of all levels of government and local leaders, although these decreases are not statistically significant. The moderating effects of vocational training are clearly apparent; it is the UCT-TVET treatment group that is limiting the damage of the cash transfers, especially for the aggregate measure of government responsiveness as well as district government and village leaders.

# S14 Heterogeneous (Sub-Group) ITT Effects

Average treatment effects are useful summaries but can obscure important variation within our sample of INVEST participants. It is plausible, for example, that INVEST programming actually has heterogeneous effects that hinge on particular traits of the individual participants. We therefore extend our ITT analysis to explore INVEST effects across two pre-specified characteristics thought to condition political attitudes and the prospects of insurgent recruitment: gender and experience of displacement. We also preregistered exploring these heterogeneous effects in our PAP.

Per suggestions by our reviewers, we also include sub-group analyses by age, education, and 3 vs. 6 month TVET courses. Please note, these analyses were not pre-registered in our PAP.

#### S14.1 Heterogeneous Effects by Gender

Gender can dictate the nature of an individual's social network and thus condition the nature and frequency of his or her interactions with combatants (Parkinson, 2013). In the Afghan context, women do not have the opportunity to be active fighters in the Taliban. They do, however, play a critical role in sustaining armed conflict by providing logistical support, including access to food and shelter, to the Taliban. Similarly, women are less likely to serve in the ANSDF than their male counterparts, despite persistent government efforts to enlist them in police and military roles. With far less mobility than men in Kandahar, women also have different opportunities to obtain information about insurgent activities, drawing on inter-household networks for localized information. Reduced mobility also conditions opportunities for entering the labor force and earning net income from employment outside the home. Cultural norms surrounding female labor force participation may blunt the effects of TVET-style training; for most women in our sample, INVEST represented the first opportunity to earn net income and to travel for a sustained period of time outside the home. Finally, property rights disproportionately favor men in Kandahar, suggesting that the severity of opportunity costs for supporting the insurgency hinge at least partly on gender.

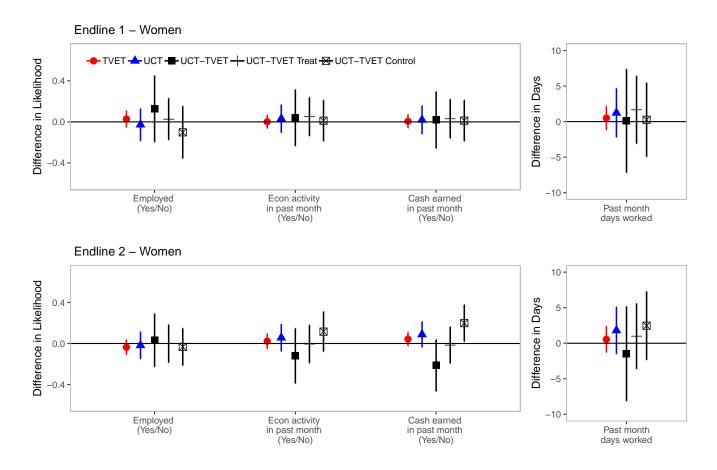


Figure S16: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for women, with 95% confidence intervals.

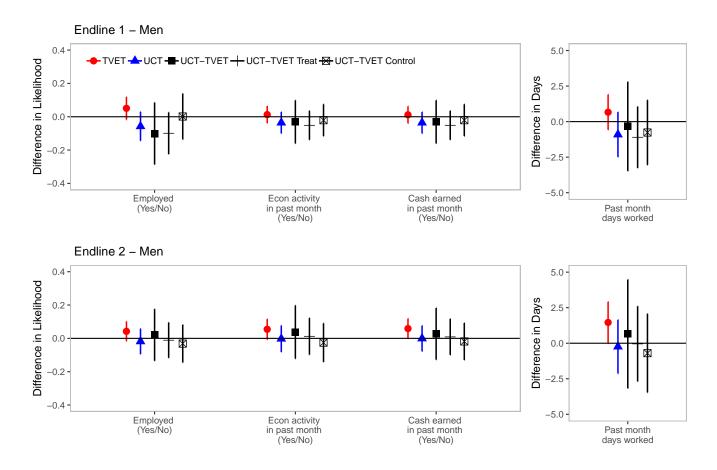


Figure S17: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for men, with 95% confidence intervals.

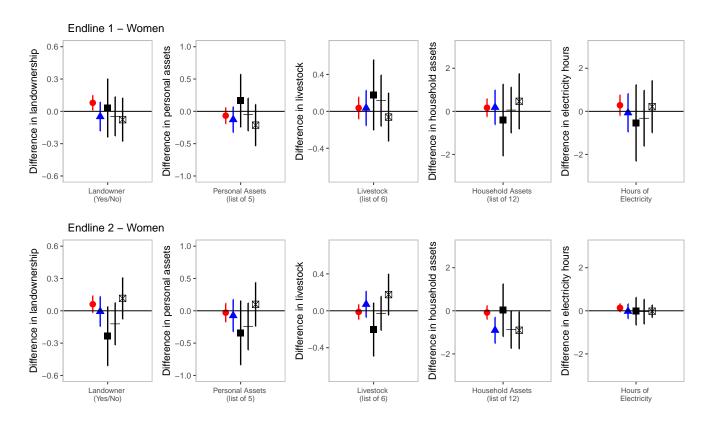


Figure S18: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for women, with 95% confidence intervals.

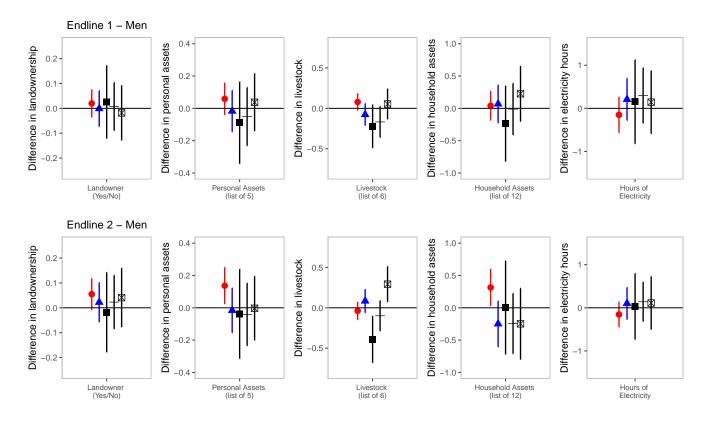


Figure S19: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for men, with 95% confidence intervals.

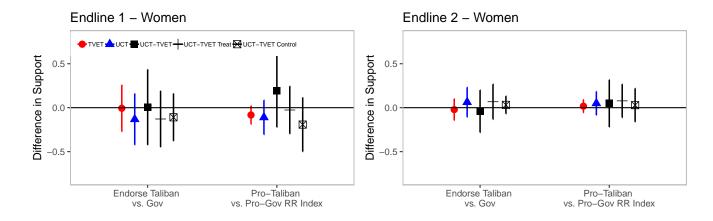


Figure S20: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for women, with 95% confidence intervals.

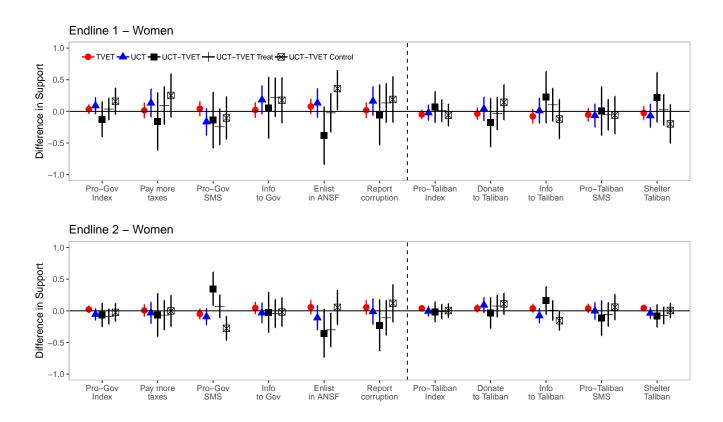


Figure S21: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for women, with 95% confidence intervals.

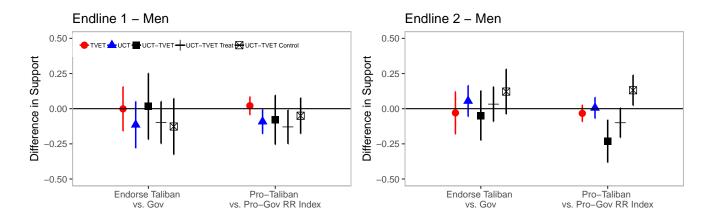


Figure S22: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for men, with 95% confidence intervals.

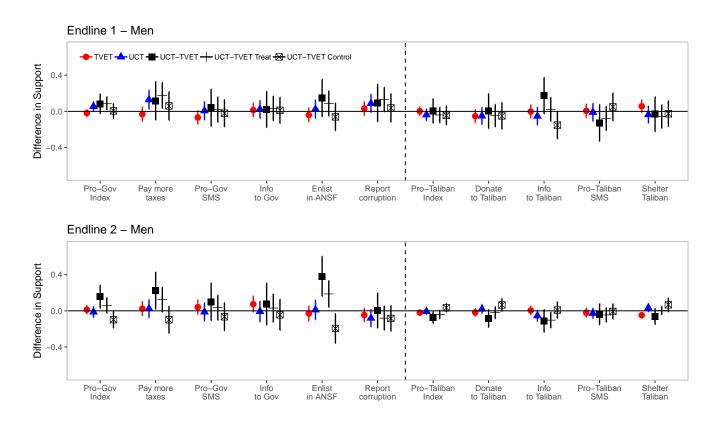


Figure S23: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for men, with 95% confidence intervals.

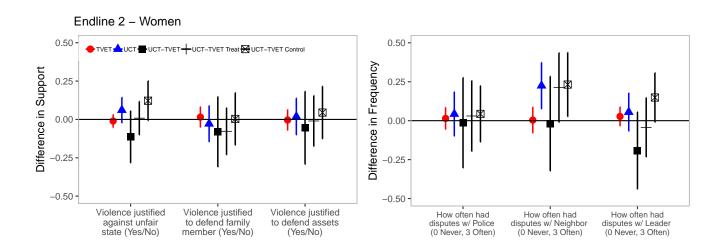


Figure S24: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for women, with 95% confidence intervals.

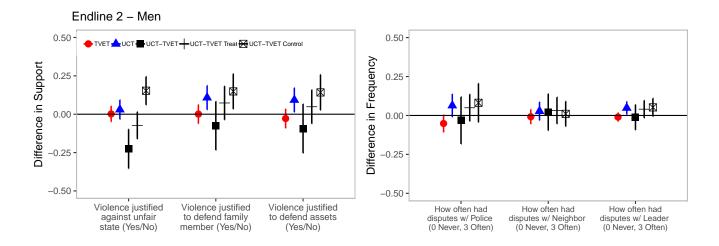


Figure S25: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for men, with 95% confidence intervals.

These results confirm that male respondents are responsible for nearly all of the statistically significant estimated TVET and UCT effects reported earlier. Female support for either combatant remains largely unchanged at either endline across both measures of support.

Men who received the UCT treatment, however, experience an average of 9.17 percentage point decrease in their relative willingness to engage in pro- Taliban acts (CI = [-17.82, -0.53]) at Endline 1. Consistent with the pattern observed earlier, this effect has dissipated by Endline 2. In addition, among male TVET recipients, UCT has an average of -23.11 percentage point effect on their willingness to engage in pro-Taliban actions (CI = [-38.2, -8.01]).

These gender-specific differences are likely due to several factors stemming from the divergent nature of social networks and labor opportunities. In general, men have greater freedom of action across the individual measures of pro-government and pro-Taliban actions than women, who face a lower ceiling on their involvement with the combatants. Cash effects may also have been diluted among female recipients; in practice, some women turned their cash transfer over to (male) heads of households. Finally, there are only 69 women in the UCT-TVET group, for example, and 135 in the UCT group, and so caution is warranted when interpreting these results.

#### S14.2 Heterogeneous Effects by Displacement

The INVEST program may also have differential effects depending on whether participants had experienced forcible displacement due to ongoing combat operations or insecurity. Prior studies have demonstrated that individuals exposed to violence tend to exhibit greater prosocial behavior, including greater community participation, and have higher levels of altruism, particularly toward in-group members (Bauer et al., 2016). In our setting, displaced individuals currently residing in IDP camps may have fewer (and poorer) employment opportunities, capping the effects of TVET-style training.<sup>2</sup> It is also plausible that exposure to violence hardens attitudes toward the combatants, rendering it more difficult to shift political attitudes toward the combatant blamed for harming the individual and his family (Lyall, Blair and Imai, 2013).

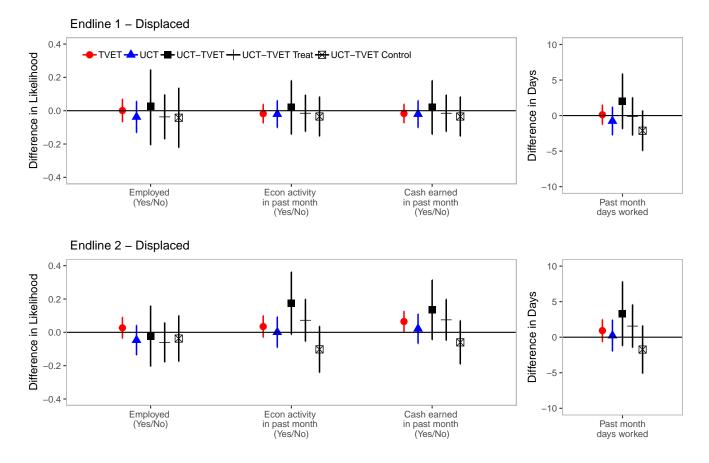


Figure S26: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for the displaced, with 95% confidence intervals.

<sup>&</sup>lt;sup>2</sup>Scholars have linked displaced peoples to the spread of conflict, but often only in certain demographic and political circumstances (Lischer, 2005; Salehyan and Gleditsch, 2006; Zhou and Shaver, 2018).

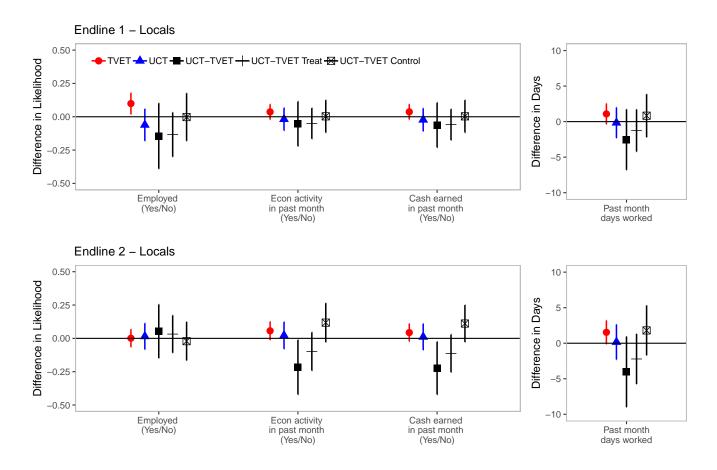


Figure S27: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for locals, with 95% confidence intervals.

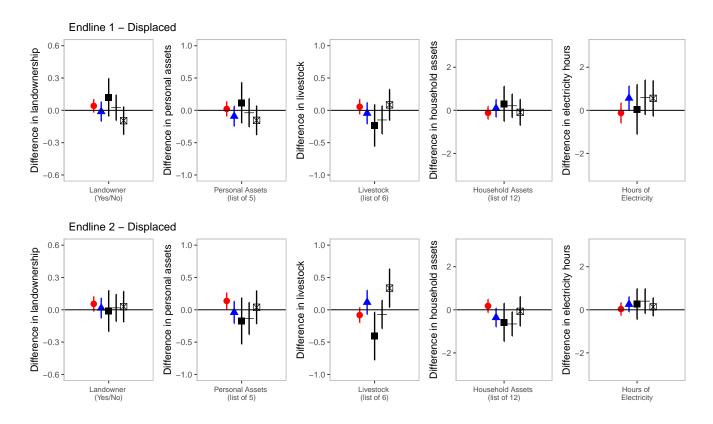


Figure S28: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for the displaced, with 95% confidence intervals.

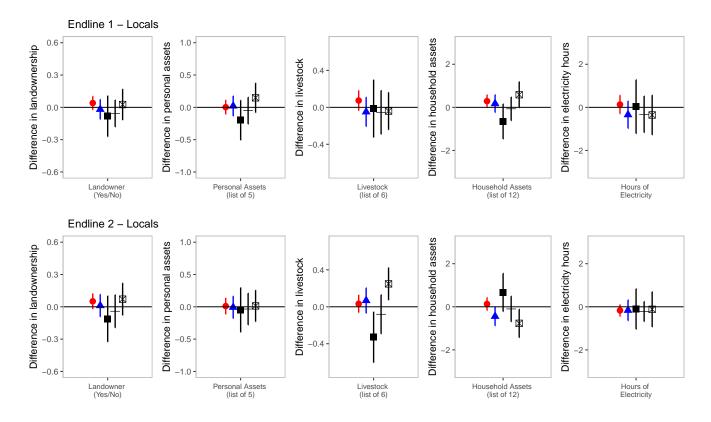


Figure S29: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for locals, with 95% confidence intervals.

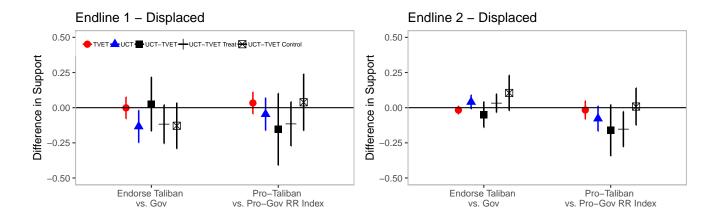


Figure S30: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for the displaced, with 95% confidence intervals.

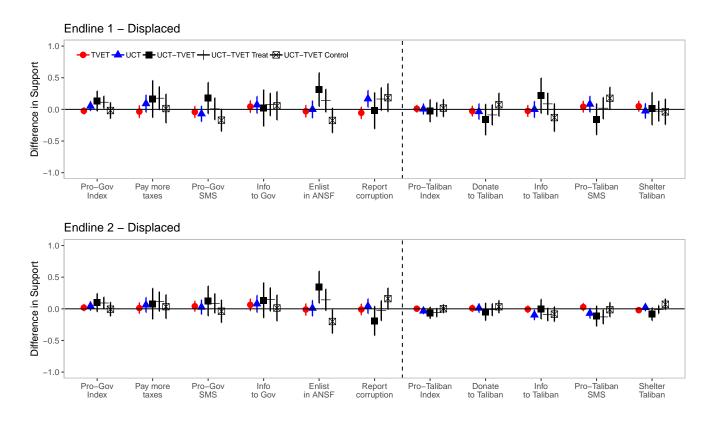


Figure S31: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for the displaced, with 95% confidence intervals.

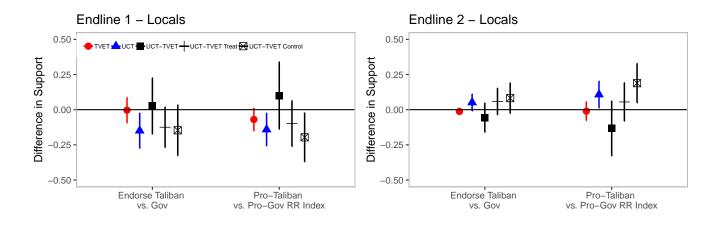


Figure S32: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for locals, with 95% confidence intervals.

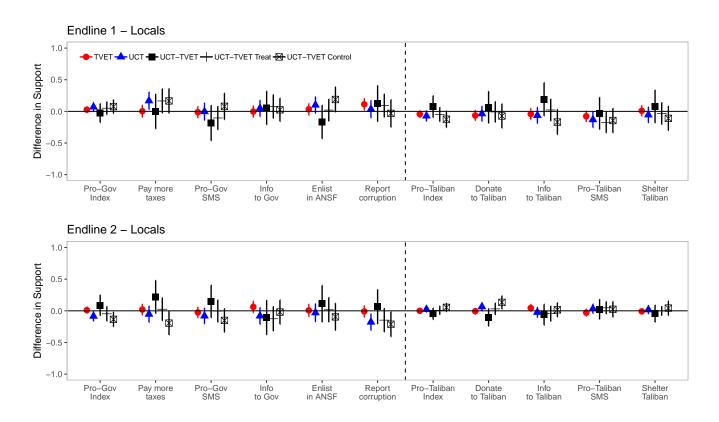


Figure S33: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for locals, with 95% confidence intervals.

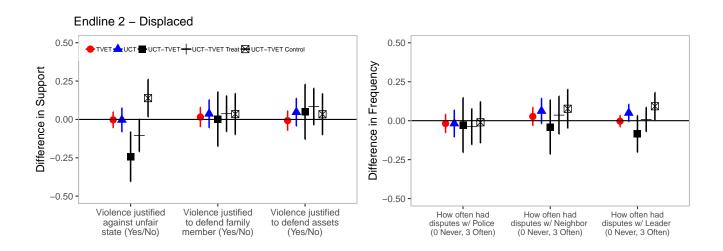


Figure S34: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for the displaced, with 95% confidence intervals.

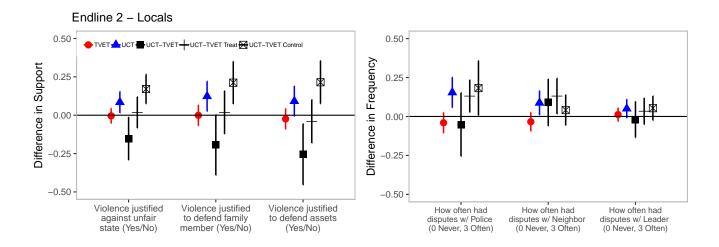


Figure S35: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for locals, with 95% confidence intervals.

Among the displaced, TVET has no effect across any measure at either endline. UCT displaced individuals, however, experience an average of 13.35 percentage point decrease (CI = [-24.87, -1.84]) in relative Taliban support at Endline 1. Consistent with earlier results, this effect reverses by Endline 2, where only a modest 4.06 percentage point uptick in relative Taliban support (CI = [-0.92, 9.04]) is identified. More tentatively, it appears that cash transfers reduce willingness to undertake pro-Taliban actions at Endline 2 by 7.75 percentage points (CI = [-16.73, 1.22]). Similarly, the UCT-TVET combination appears to reduce support for pro-Taliban actions by 16.08 percentage points (CI = [-34.34, 2.17]). Again, these estimates have wide confidence intervals due to small sample sizes and hence should be interpreted only as suggestive findings.

Among local participants, cash transfers alone suppress Taliban support, as measured by the endorsement experiment, by 14.92 percentage points (CI = [-27.51, -2.33]). Though of larger magnitude than among the displaced population, this effect also reverses by Endline 2; support for the Taliban for the UCT group is 5.11 percentage points greater (CI = [-0.96, 11.17]) among locals. UCT recipients also experience a 14.1 percentage point decrease in their willingness to engage in pro-Taliban action at Endline 1 (CI = [-25.83, -2.38]). Again, however, these effects are short-lived. Alarmingly, these UCT recipients experience an average of 10.75 percentage point increase in their willingness to engage in pro-Taliban actions (CI = [1.19, 20.32]), a shift not observed among displaced individuals.

In short, both locals and displaced individuals appear to respond to cash transfers similarly,

with initial increases in pro-government sentiment shifting toward pro-Taliban sympathies by Endline 2. The magnitude of this shift is especially pronounced among locals, however, as the reversal at Endline 2 is captured across both measures of support. IDP populations may have lower expectations of employment and government responsibility than locals, dampening their frustration at their inability to secure steady employment after graduating from INVEST. Evidence, albeit weaker, also suggests that the UCT, when combined with TVET, more reliably reduces pro-Taliban support, including willingness to engage in pro-Taliban actions at Endline 2, among displaced individuals.

# S14.3 Heterogeneous Effects by Age

This section shows subgroup results by age, comparing younger participants who are less than or equal to 18 years old, the median age (N = 1386) and older participants who are older than 18 years of age (N = 1220).

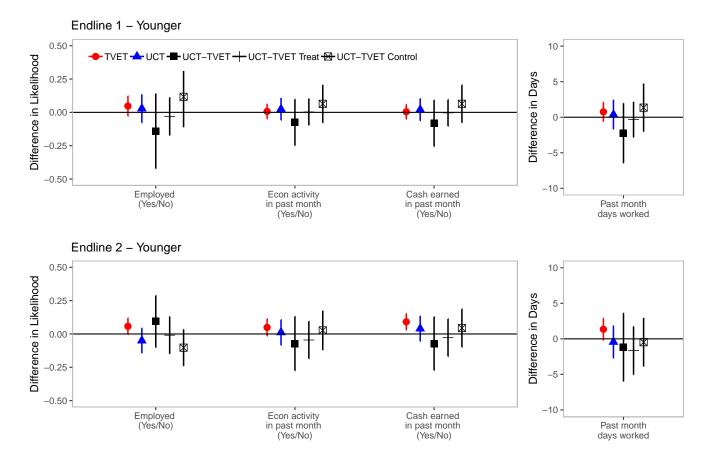


Figure S36: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for younger participants (less than or equal to 18 years old), with 95% confidence intervals.

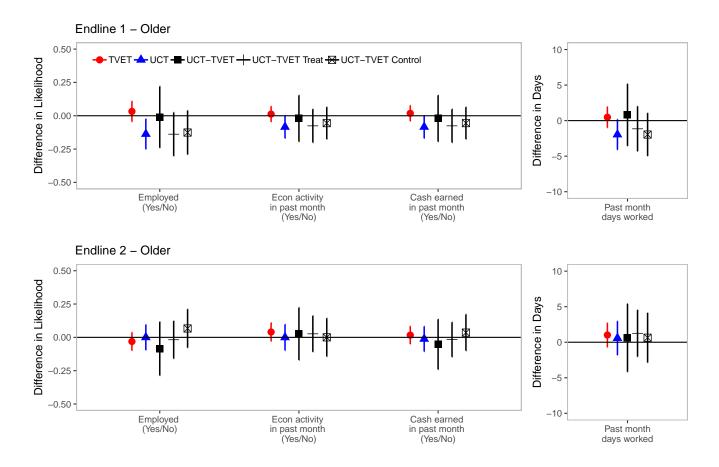


Figure S37: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for older participants (older than 18 years), with 95% confidence intervals.

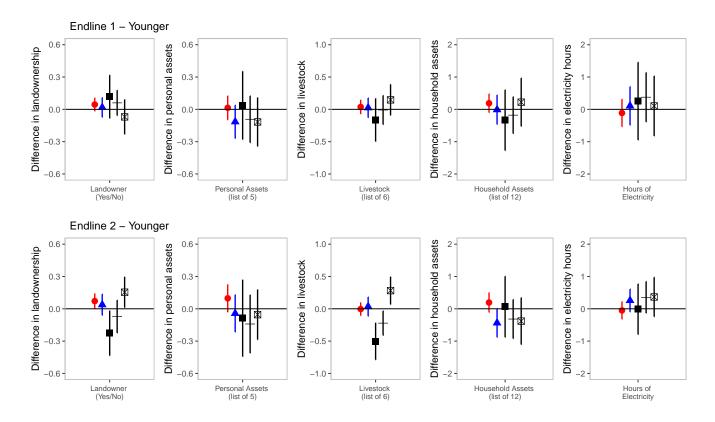


Figure S38: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for younger participants (less than or equal to 18 years old), with 95% confidence intervals.

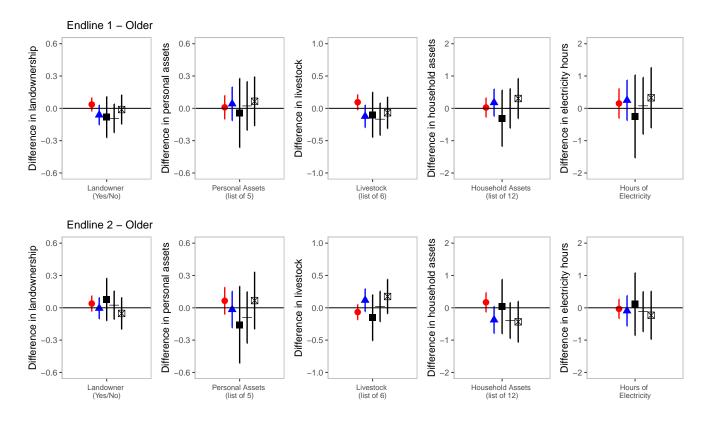


Figure S39: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for older participants (older than 18 years), with 95% confidence intervals.

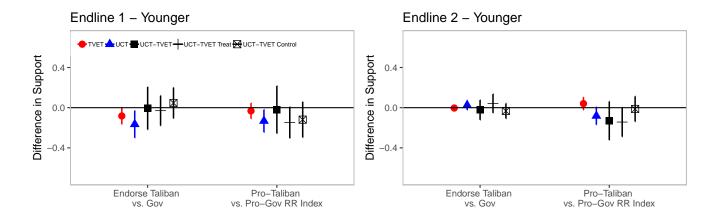


Figure S40: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for younger participants (less than or equal to 18 years old), with 95% confidence intervals.

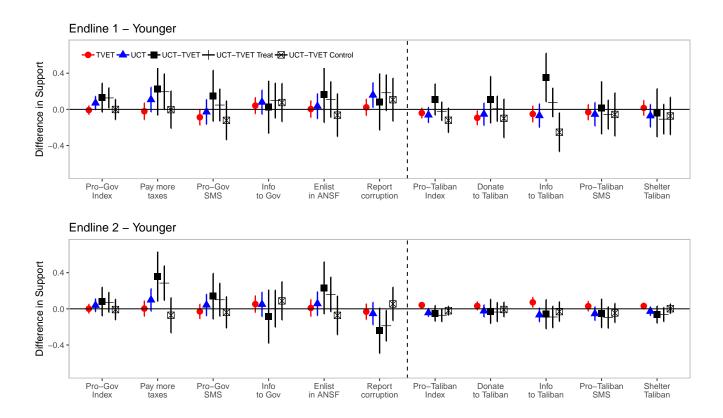


Figure S41: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for younger participants (less than or equal to 18 years old), with 95% confidence intervals.

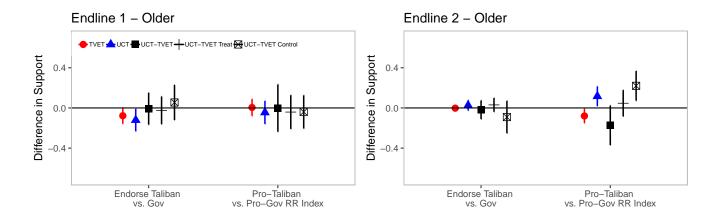


Figure S42: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for older participants (older than 18 years), with 95% confidence intervals.

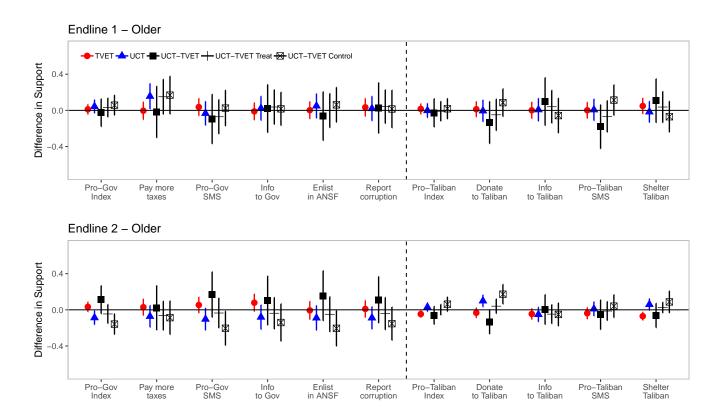


Figure S43: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for older participants (older than 18 years), with 95% confidence intervals.

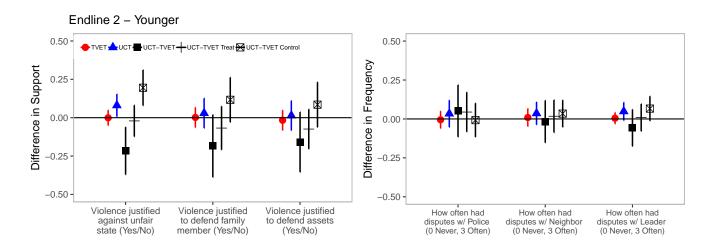


Figure S44: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for younger participants (less than or equal to 18 years old), with 95% confidence intervals.

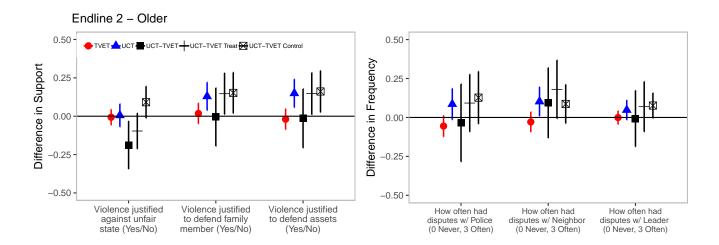


Figure S45: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for older participants (older than 18 years), with 95% confidence intervals.

These results show that at Endline 2, older participants who received the UCT treatment were 11.63 percentage points more willing to engage in pro-Taliban acts (CI = [1.95, 21.31]), specifically by donating to the Taliban. This group is also 12.94 percentage points (CI = [3.81, 22.07]) more likely to believe that violence is justified to defend family; 14.92 percentage points (CI = [5.71, 24.13]) more likely to believe that violence is justified to defend assets.

# S14.4 Heterogeneous Effects by Education

This section shows subgroup results by education, comparing participants with more formal education, which is having greater than or equal to 9 years, the median (N = 1527) and those with less formal education, less than 9 years (N = 1237) at baseline.

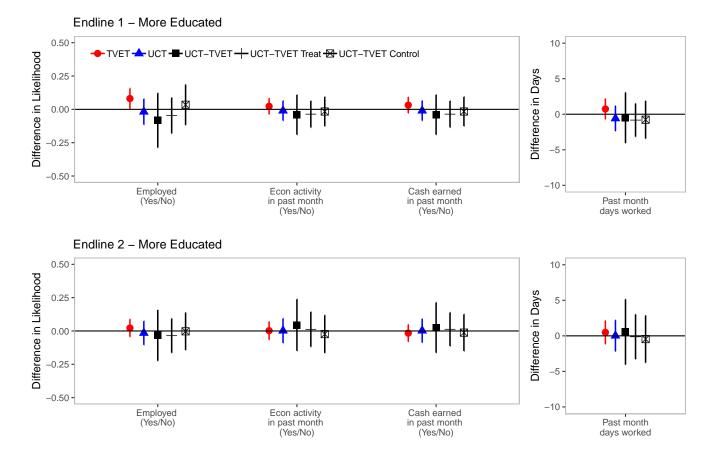


Figure S46: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for more educated participants (greater than or equal to 9 years of formal education), with 95% confidence intervals.

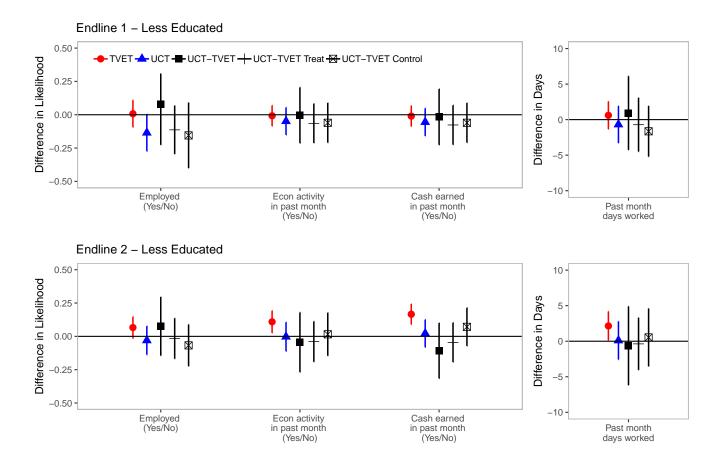


Figure S47: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for less educated participants (less than 9 years of formal education), with 95% confidence intervals.

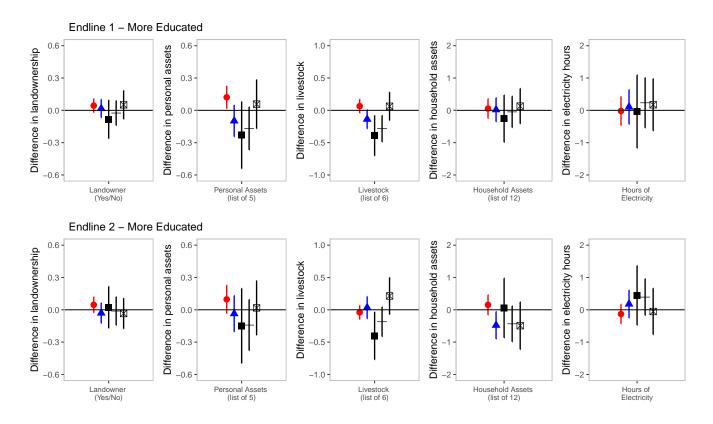


Figure S48: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for more educated participants (greater than or equal to 9 years of formal education), with 95% confidence intervals.

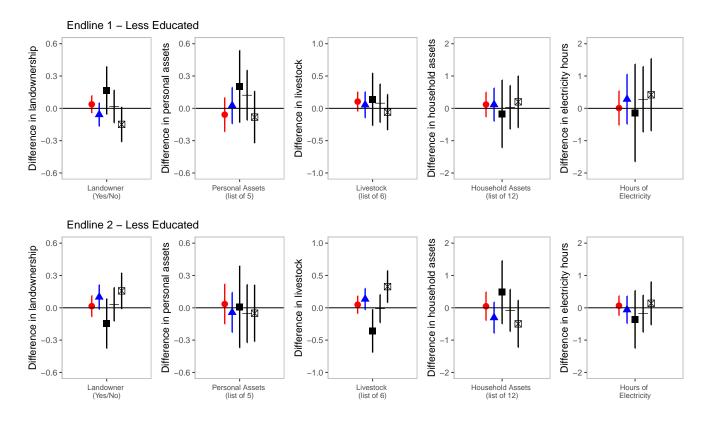


Figure S49: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for less educated participants (less than 9 years of formal education), with 95% confidence intervals.

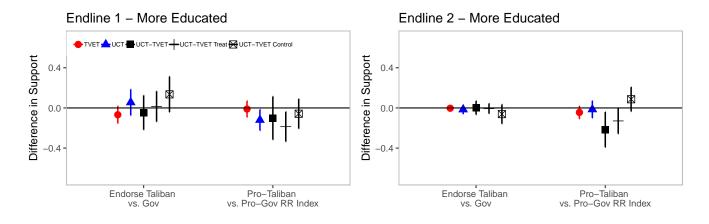


Figure S50: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for more educated participants (greater than or equal to 9 years of formal education), with 95% confidence intervals.

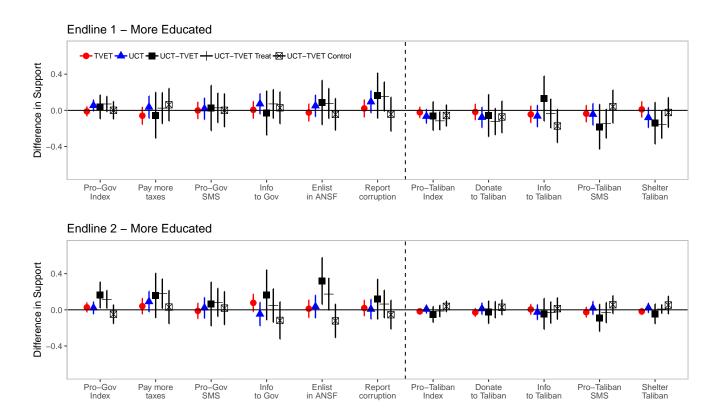


Figure S51: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for more educated participants (greater than or equal to 9 years of formal education), with 95% confidence intervals.

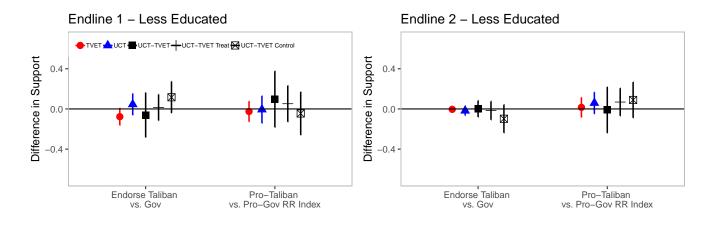


Figure S52: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for less educated participants (less than 9 years of formal education), with 95% confidence intervals.

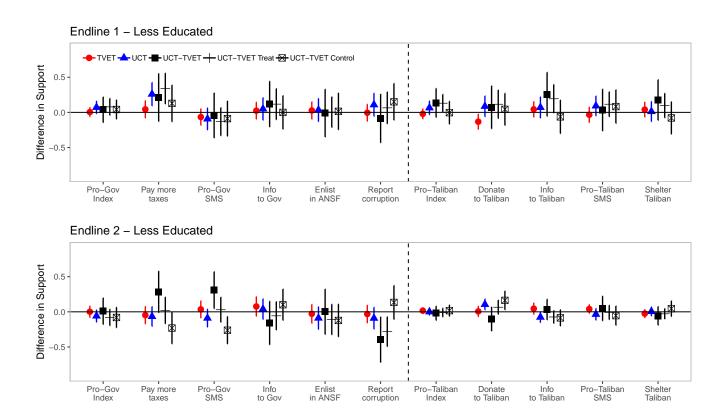


Figure S53: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for less educated participants (less than 9 years of formal education), with 95% confidence intervals.

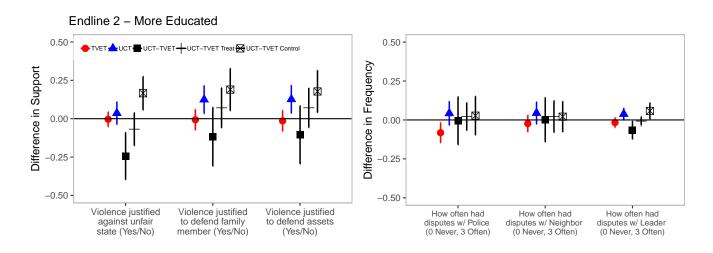


Figure S54: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for more educated participants (greater than or equal to 9 years of formal education), with 95% confidence intervals.

#### Endline 2 - Less Educated 0.50 0.50 ■UCT-TVET + UCT-TVET Treat X UCT-TVET Control Difference in Frequency Difference in Support 0.25 0.25 0.00 0.00 -0.25 -0.25 -0.50-0.50Violence justified Violence justified Violence justified How often had How often had How often had against unfair to defend family to defend assets disputes w/ Police disputes w/ Neighbor disputes w/ Leader state (Yes/No) member (Yes/No) (Yes/No) (0 Never, 3 Often) (0 Never, 3 Often) (0 Never, 3 Often)

Figure S55: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for less educated participants (less than 9 years of formal education), with 95% confidence intervals.

At Endline 2, the less educated participants who received TVET saw gains in likelihood of economic activity (10.92 percentage points, CI = 2.56, 19.27); likelihood of earning cash (16.6 percentage points, CI = 8.93, 24.27); and 2.15 more days worked in the past month (CI = 0.12, 4.18).

Nevertheless, the more educated TVET-UCT participants were 21.57 percentage points more willing to engage in pro-Government acts (CI = [4.02, 39.12]), specifically by enlisting in the ANSF.

# S14.5 Heterogeneous Effects by Course Duration

This section shows subgroup results by TVET course duration, comparing participants in the 3 month courses (N = 1605) with those in the 6 month courses (N = 992).

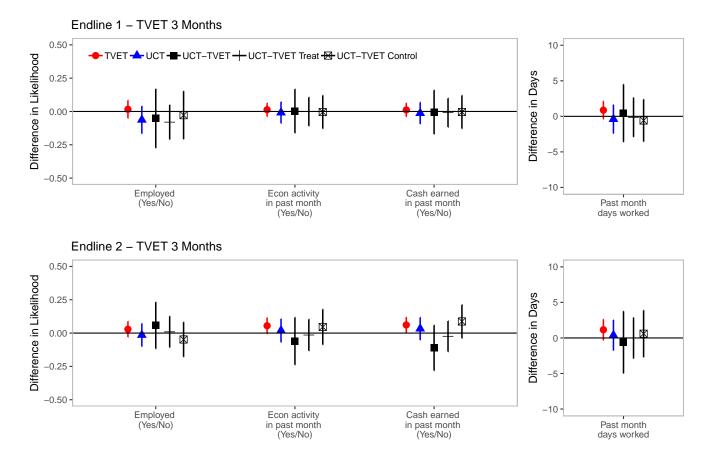


Figure S56: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for TVET 3 month participants, with 95% confidence intervals.

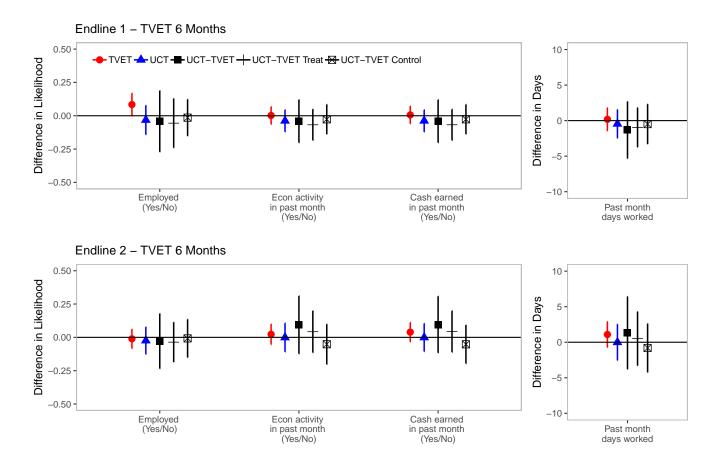


Figure S57: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for TVET 6 month participants, with 95% confidence intervals.

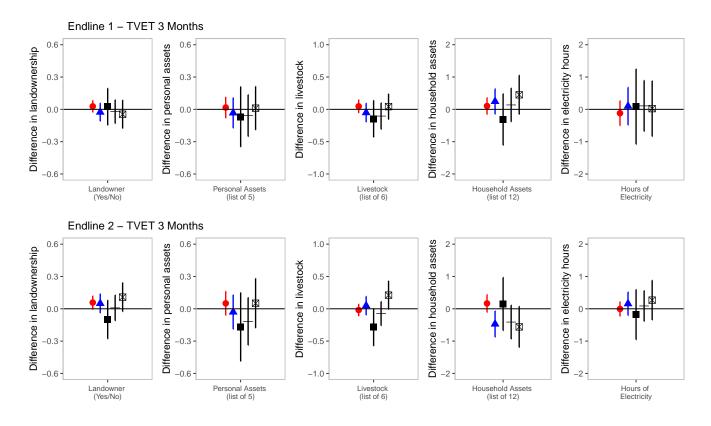


Figure S58: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for TVET 3 month participants, with 95% confidence intervals.

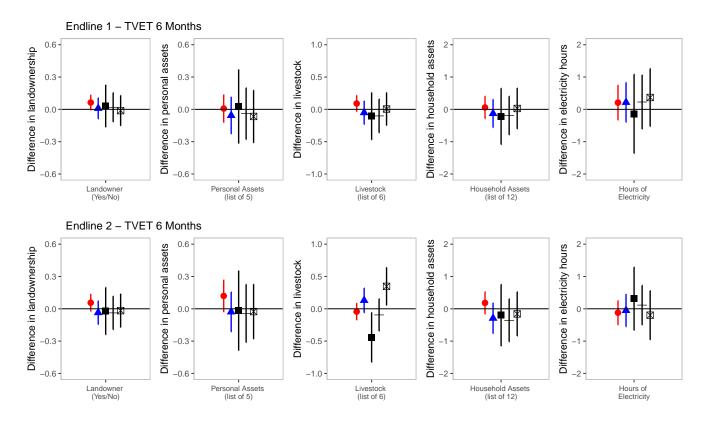


Figure S59: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for TVET 6 month participants, with 95% confidence intervals.

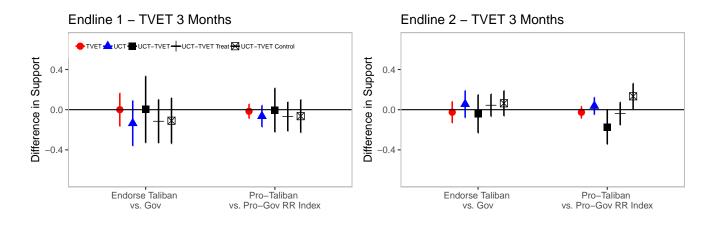


Figure S60: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for TVET 3 month participants, with 95% confidence intervals.

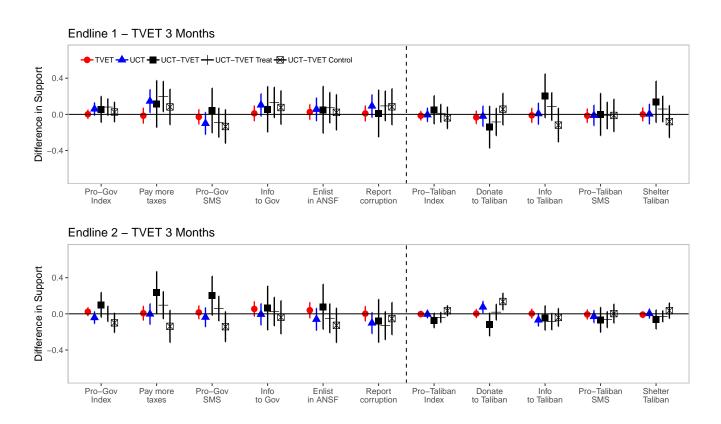


Figure S61: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for TVET 3 month participants, with 95% confidence intervals.

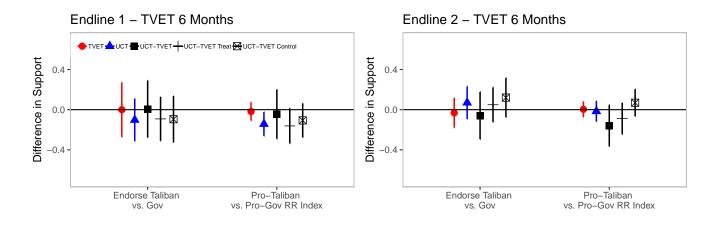


Figure S62: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of main combatant support outcomes for TVET 6 month participants, with 95% confidence intervals.

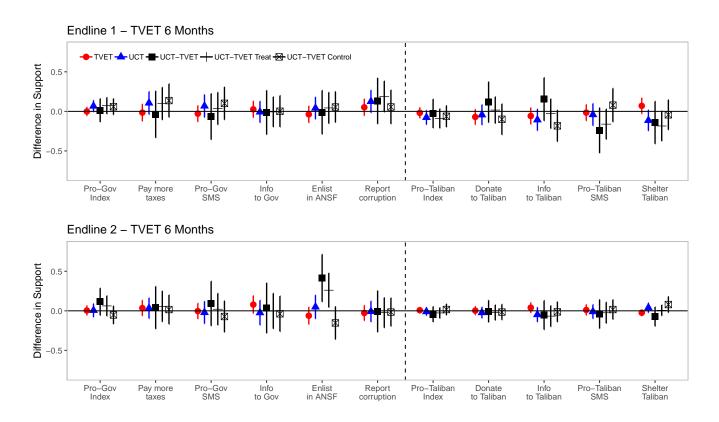


Figure S63: Intention-to-Treat Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for TVET 6 month participants, with 95% confidence intervals.

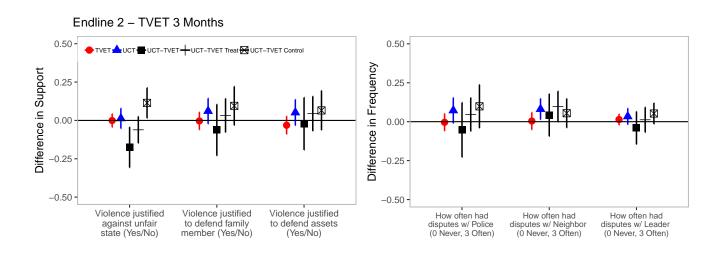


Figure S64: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for TVET 3 month participants, with 95% confidence intervals.

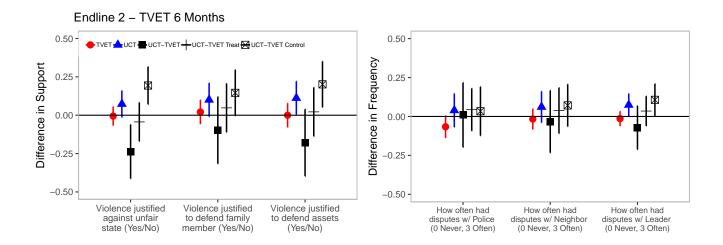


Figure S65: Intention-to-Treat analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for TVET 6 month participants, with 95% confidence intervals.

There are no substantive differences between comparing those assigned to the 3 month TVET courses versus the 6 month TVET courses.

# S15 ITT Analysis using Multiple Imputation

This section shows the intention-to-treat analysis using multiple imputation to address concerns about attrition.

#### S15.1 Economic Outcomes ITT Analysis using MI

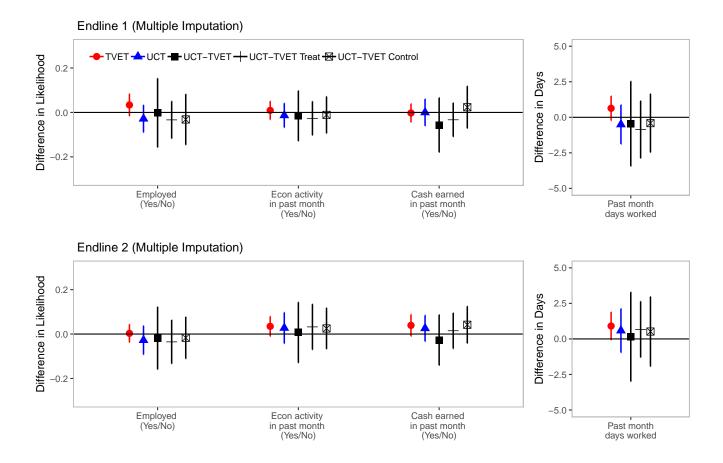


Figure S66: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis using multiple imputation of employment outcomes for all participants, with 95% confidence intervals.

#### S15.2 Asset Outcomes ITT Analysis using MI

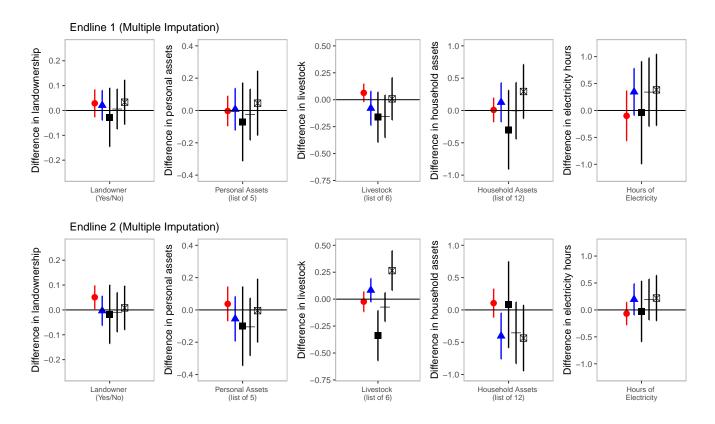


Figure S67: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis using multiple imputation of asset outcomes for all participants, with 95% confidence intervals.

#### S15.3 Combatant Support ITT Analysis using MI

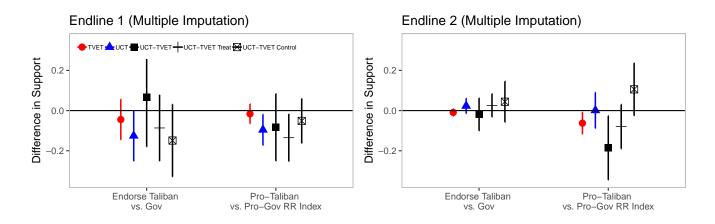


Figure S68: Intention-to-Treat Endline 1 (top panel) and 2 (bottom panel) analysis of combatant support outcomes using multiple imputation for all participants, with 95% confidence intervals.

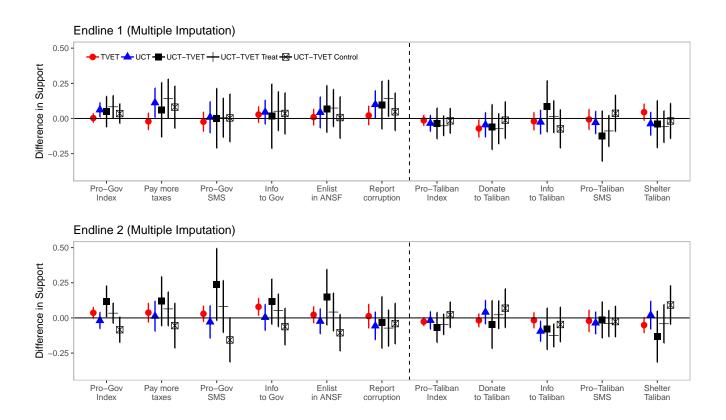


Figure S69: Intention-to-Treat Endline 1 and 2 Analysis using multiple imputation for Randomized Response questions measuring Combatant Support for all participants, with 95% confidence intervals.

#### S15.4 Violence Attitudes and Behaviors ITT Analysis using MI

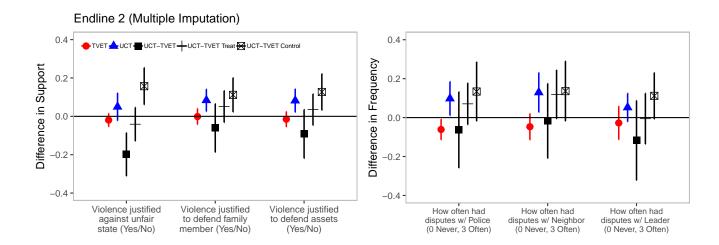


Figure S70: Intention-to-Treat analysis using multiple imputation at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for all participants, with 95% confidence intervals.

# S16 Instrumental Variables Analysis

This section shows the instrumental variables analysis for the complier average treatment effects (CATE) of TVET and UCT marginal. Given the re-randomization of UCT conditional on TVET status, we cannot calculate these effects for UCT-TVET, UCT-TVET treat, and UCT-TVET control.

#### S16.1 Economic Outcomes IV Analysis

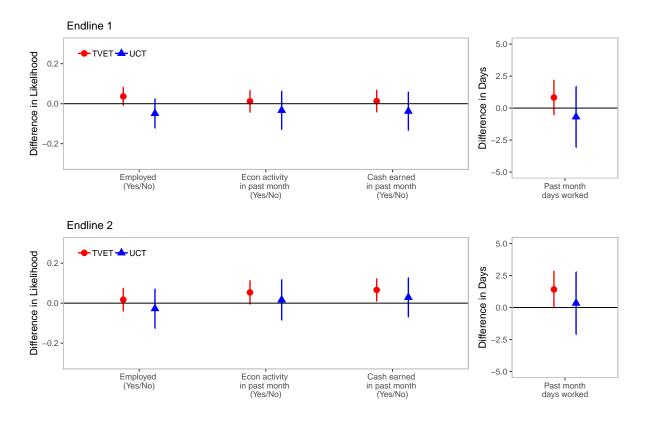


Figure S71: Instrumental Variables Endline 1 (top panel) and 2 (bottom panel) analysis of employment outcomes for all participants, with 95% confidence intervals.

### S16.2 Asset Outcomes IV Analysis

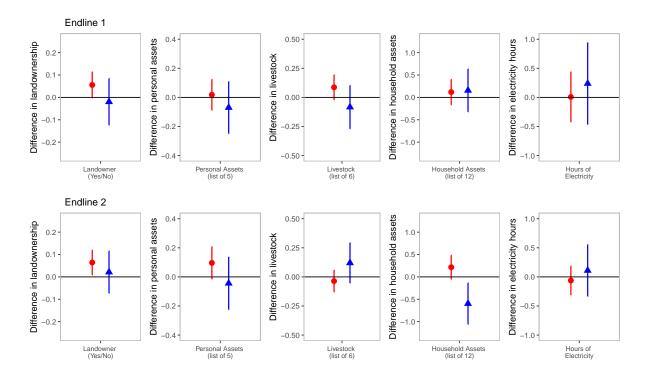


Figure S72: Instrumental Variables Endline 1 (top panel) and 2 (bottom panel) analysis of asset outcomes for all participants, with 95% confidence intervals.

# S16.3 Combatant Support IV Analysis

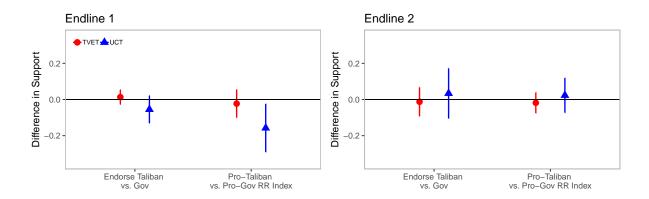


Figure S73: Instrumental Variables Endline 1 and 2 Analysis for all participants, with 95% confidence intervals

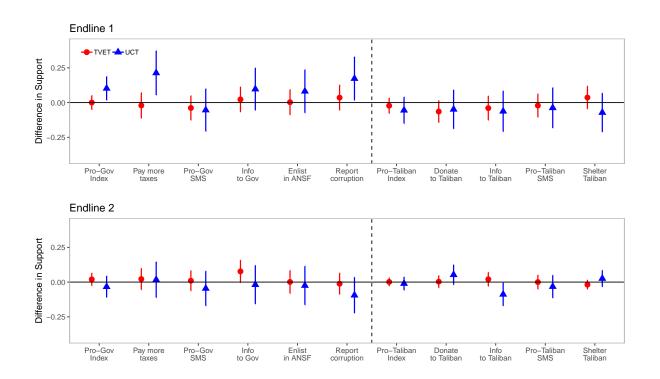


Figure S74: Instrumental Variables Endline 1 and 2 Analysis for Randomized Response questions measuring combatant support for all participants, with 95% confidence intervals.

### S16.4 Violence Attitudes and Behaviors IV Analysis

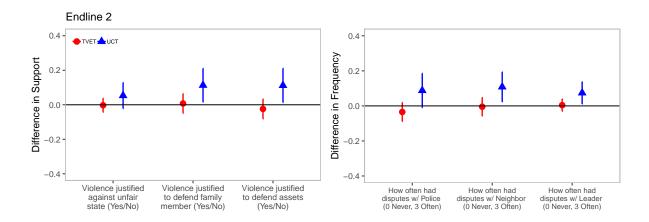


Figure S75: Instrumental Variables analysis at Endline 2 on attitudes towards violence (left) and reported behavioral outcomes of violence in the past year (right) for all participants, with 95% confidence intervals.

# S17 INVEST vocational training graduation certificate

Below is the graduation certificate for the INVEST vocational training courses, including the logo of the government Ministry of Labour, Social Affairs, Martyrs and Disabled (MoLSAMD) and the signature of its director.



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