

“Clerics and Scriptures:
Experimentally Disentangling the Influence of Religious Authority in Afghanistan”
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ONLINE APPENDIX

Table A1. Session Averages and Wilcoxon rank-sum test

Variable	Civilian	Cleric	Cleric+Scripture	p-val (Civilian vs Cleric)	p-val (Cleric vs Cleric+Scripture)	p-val (Civilian vs Cleric+Scripture)
N	16	19	16			
Contribute	0.51	0.83	0.83	0.001	0.973	0.002
Amount Contribute	25.57	16.25	26.22	0.002	0.003	0.606
Average Contribution	13.40	13.45	22.21	0.931	0.006	0.017
Minimal Contribution (10 AFN)	11%	53%	26%	0.000	0.000	0.025
Large Contribution (>20 AFN)	17%	7%	30%	0.073	0.008	0.132

Table A2a. Full Results on Cleric and Cleric+Scripture Treatment Effects (Main and Heterogeneous)

VARIABLES	(1) Contribute	(2) Contribute	(3) Contribute	(4) Contribute	(5) Contribute
Cleric	0.33*** (0.07)	0.37*** (0.08)	0.42*** (0.10)	0.30*** (0.08)	0.46*** (0.09)
Cleric+Scripture	0.31*** (0.08)	0.26*** (0.08)	0.33*** (0.12)	0.25*** (0.08)	0.36*** (0.10)
More Income		-0.04 (0.06)	0.02 (0.12)	-0.04 (0.06)	-0.05 (0.06)
Formal Education		-0.04 (0.05)	-0.04 (0.05)	-0.11 (0.09)	-0.04 (0.05)
Does Not Feel Poor		0.19*** (0.06)	0.19*** (0.06)	0.19*** (0.06)	0.38*** (0.09)
Cleric * More Income			-0.08 (0.14)		
Cleric+Scripture * More Income			-0.11 (0.14)		
Cleric * Formal Education				0.17 (0.11)	
Cleric+Scripture * Formal Education				0.04 (0.11)	
Cleric * Does Not Feel Poor					-0.28** (0.11)
Cleric+Scripture * Does Not Feel Poor					-0.32*** (0.11)
Pashtun Ethnicity		-0.03 (0.11)	-0.04 (0.11)	-0.03 (0.11)	0.01 (0.11)
Age		0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Language Count		0.08 (0.05)	0.07 (0.05)	0.08* (0.05)	0.10** (0.05)
Married		0.01 (0.05)	0.01 (0.05)	0.01 (0.05)	-0.00 (0.05)
Qur'anic Education		-0.06 (0.12)	-0.05 (0.12)	-0.05 (0.11)	-0.05 (0.12)
Session Ethnic Mix		-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Time Taken (minutes)		0.06** (0.03)	0.06** (0.03)	0.06** (0.03)	0.05 (0.03)
Waiting Time		0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Constant	0.50*** (0.06)	0.30 (0.30)	0.26 (0.32)	0.28 (0.30)	0.27 (0.29)
Enumerator FE	No	Yes	Yes	Yes	Yes
N	305	299	299	299	299
R-squared	0.11	0.21	0.22	0.22	0.23

Robust standard errors clustered on sessions in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A2b. Full Results on Cleric and Cleric+Scripture Treatment Effects (Main and Heterogeneous)

VARIABLES	(6)	(7)	(8)	(9)	(10)
	Cond. Amt.	Cond. Amt.	Cond. Amt.	Cond. Amt.	Cond. Amt.
Cleric	-10.50*** (3.32)	-9.72** (3.66)	-11.65** (5.48)	-6.84 (4.93)	-11.54** (4.58)
Cleric+Scripture	0.83 (3.72)	1.90 (3.65)	-5.19 (5.35)	1.82 (5.39)	1.09 (5.10)
More Income		1.41 (2.92)	-3.85 (6.16)	1.45 (2.87)	1.38 (2.86)
Formal Education		-1.79 (3.02)	-1.44 (3.14)	1.12 (6.37)	-1.75 (3.04)
Does Not Feel Poor		0.69 (3.12)	1.13 (3.01)	0.70 (3.17)	-1.40 (4.73)
Cleric * More Income			1.63 (6.31)		
Cleric+Scripture * More Income			12.48 (8.13)		
Cleric * Formal Education				-6.79 (7.52)	
Cleric+Scripture * Formal Education				-0.43 (9.03)	
Cleric * Does Not Feel Poor					5.67 (5.51)
Cleric+Scripture * Does Not Feel Poor					-0.04 (7.96)
Pashtun Ethnicity		4.93 (6.52)	4.14 (6.24)	5.17 (6.70)	5.18 (6.86)
Age		-0.08 (0.11)	-0.08 (0.11)	-0.09 (0.11)	-0.07 (0.12)
Language Count		-2.81 (1.71)	-2.67 (1.64)	-3.17* (1.79)	-2.94* (1.75)
Married		-1.22 (3.25)	-1.19 (3.25)	-1.63 (3.30)	-1.01 (3.29)
Qur'anic Education		13.12 (12.65)	13.70 (12.29)	13.17 (12.70)	12.94 (12.72)
Session Ethnic Mix		0.09 (0.15)	0.08 (0.15)	0.08 (0.15)	0.07 (0.15)
Time Taken (minutes)		-1.78 (1.93)	-1.97 (2.10)	-1.70 (1.90)	-1.39 (1.95)
Waiting Time		-0.28 (0.22)	-0.23 (0.24)	-0.26 (0.22)	-0.23 (0.23)
Constant	26.63*** (3.01)	43.21** (18.66)	47.25** (19.08)	43.38** (18.37)	43.42** (18.61)
Enumerator FE	No	Yes	Yes	Yes	Yes
N	219	215	215	215	215
R-squared	0.08	0.16	0.18	0.17	0.17

Robust standard errors clustered on sessions in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A2c. Full Results on Cleric and Cleric+Scripture Treatment Effects (Main and Heterogeneous)

VARIABLES	(11) Average	(12) Average	(13) Average	(14) Average	(15) Average
Cleric	-0.05 (2.63)	1.38 (2.64)	1.40 (3.89)	2.14 (3.52)	2.29 (3.29)
Cleric+Scripture	8.93** (3.44)	9.04*** (3.19)	5.16 (4.78)	9.04** (3.79)	11.27** (4.27)
More Income		-0.55 (2.25)	-2.42 (4.69)	-0.54 (2.23)	-0.69 (2.20)
Formal Education		-2.56 (2.68)	-2.35 (2.80)	-1.93 (4.47)	-2.40 (2.69)
Does Not Feel Poor		6.09** (2.74)	6.24** (2.69)	6.10** (2.76)	9.28** (3.94)
Cleric * More Income			-0.72 (4.88)		
Cleric+Scripture * More Income			6.86 (6.25)		
Cleric * Formal Education				-1.73 (5.18)	
Cleric+Scripture * Formal Education				-0.04 (6.43)	
Cleric * Does Not Feel Poor					-2.67 (4.64)
Cleric+Scripture * Does Not Feel Poor					-8.25 (6.35)
Pashtun Ethnicity		1.46 (4.58)	1.38 (4.41)	1.43 (4.57)	2.56 (4.88)
Age		0.01 (0.09)	0.01 (0.09)	0.01 (0.09)	0.01 (0.09)
Language Count		-0.45 (1.56)	-0.30 (1.50)	-0.54 (1.53)	0.01 (1.63)
Married		-0.64 (2.81)	-0.54 (2.86)	-0.69 (2.83)	-0.76 (2.85)
Qur'anic Education		9.59 (10.27)	9.91 (10.23)	9.52 (10.36)	9.80 (10.23)
Session Ethnic Mix		0.02 (0.16)	0.01 (0.16)	0.01 (0.16)	0.01 (0.16)
Time Taken (minutes)		0.15 (1.50)	0.14 (1.59)	0.15 (1.49)	0.07 (1.50)
Waiting Time		-0.15 (0.20)	-0.13 (0.21)	-0.14 (0.20)	-0.14 (0.20)
Constant	13.45*** (2.34)	20.09 (16.31)	21.45 (16.81)	20.25 (16.54)	19.24 (16.22)
Enumerator FE	No	Yes	Yes	Yes	Yes
N	305	299	299	299	299
R-squared	0.05	0.13	0.14	0.13	0.14

Robust standard errors clustered on sessions in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A3. Full Results on Cleric Treatment Effects (Main and Heterogeneous)

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Contribute	Contribute	Contribute	Contribute	Cond. Amt.	Cond. Amt.	Cond. Amt.	Cond. Amt.	Average	Average	Average	Average
Cleric	0.38*** (0.08)	0.43*** (0.10)	0.32*** (0.09)	0.45*** (0.09)	-9.54** (3.54)	-9.70* (5.60)	-6.66 (4.93)	-10.89** (4.37)	1.89 (2.60)	1.73 (3.88)	3.32 (3.63)	3.07 (3.23)
More Income	-0.03 (0.07)	0.02 (0.12)	-0.03 (0.07)	-0.04 (0.07)	-3.12 (2.98)	-3.30 (6.74)	-3.39 (3.00)	-3.14 (2.96)	-3.05 (2.63)	-3.21 (4.98)	-3.09 (2.66)	-3.19 (2.61)
Treatment * More Income		-0.08 (0.13)				0.27 (6.67)				0.28 (4.88)		
Formal Education	-0.04 (0.06)	-0.04 (0.06)	-0.12 (0.09)	-0.04 (0.06)	-5.46 (3.99)	-5.46 (4.00)	-0.76 (6.57)	-5.60 (3.99)	-4.52 (3.47)	-4.53 (3.55)	-2.78 (4.80)	-4.47 (3.49)
Treatment* Formal Education			0.15 (0.12)				-7.48 (7.75)				-3.43 (5.37)	
Does Not Feel Poor	0.25*** (0.08)	0.24*** (0.08)	0.24*** (0.08)	0.37*** (0.10)	1.23 (3.50)	1.23 (3.52)	1.13 (3.47)	-0.93 (5.12)	8.37*** (2.81)	8.38*** (2.84)	8.38*** (2.81)	10.50** (4.03)
Treatment* Does Not Feel Poor				-0.27** (0.12)				4.05 (5.73)				-4.41 (4.58)
Pashtun Ethnicity	0.02 (0.20)	0.01 (0.21)	0.01 (0.21)	0.04 (0.21)	-1.51 (4.10)	-1.50 (4.18)	1.06 (5.27)	-2.70 (4.36)	-4.05 (6.83)	-4.02 (6.88)	-3.86 (6.70)	-3.64 (7.11)
Age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.09 (0.10)	-0.09 (0.10)	-0.11 (0.11)	-0.08 (0.10)	0.86 (1.45)	-0.03 (0.09)	-0.04 (0.09)	-0.03 (0.09)
Language Count	0.10* (0.06)	0.10* (0.06)	0.11* (0.06)	0.12** (0.06)	-1.80 (1.93)	-1.79 (1.87)	-2.12 (2.07)	-2.08 (2.00)	0.86 (3.25)	0.87 (1.43)	0.73 (1.49)	1.12 (1.50)
Married	0.02 (0.07)	0.02 (0.06)	0.02 (0.07)	0.01 (0.07)	0.34 (3.19)	0.33 (3.22)	-0.04 (3.23)	0.61 (3.30)	1.70 (5.69)	0.86 (3.28)	0.79 (3.22)	0.60 (3.26)
Qur'anic Education	-0.11 (0.18)	-0.10 (0.18)	-0.10 (0.17)	-0.11 (0.19)	3.80 (3.33)	3.78 (3.33)	3.92 (3.53)	3.32 (3.50)	-0.08 (0.20)	1.66 (5.51)	1.44 (5.95)	1.69 (5.83)
Session Ethnic Mix	-0.01 (0.00)	-0.01 (0.00)	-0.01 (0.00)	0.05 (0.05)	0.13 (0.20)	0.13 (0.21)	0.11 (0.20)	-4.19* (2.33)	-0.28 (0.22)	-0.08 (0.21)	-0.09 (0.21)	-1.41 (1.71)
Time Taken (minutes)	0.07 (0.04)	0.07 (0.04)	0.07 (0.04)	0.01 (0.01)	-4.56* (2.37)	-4.55* (2.35)	-4.63* (2.36)	-0.47** (0.22)	0.86 (1.45)	-0.99 (1.65)	-1.06 (1.68)	-0.30 (0.21)
Waiting Time	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.00 (0.00)	-0.51** (0.23)	-0.51** (0.23)	-0.46** (0.22)	-0.08 (0.10)	0.86 (3.25)	-0.28 (0.23)	-0.26 (0.22)	-0.03 (0.09)
Constant	0.41 (0.38)	0.41 (0.38)	0.38 (0.38)	0.44 (0.37)	60.08** (26.04)	60.09** (26.10)	61.18** (26.05)	60.53** (25.89)	33.36 (21.04)	33.38 (21.14)	34.09 (21.39)	33.70 (21.00)
N	210	210	210	210	142	142	142	142	210	210	210	210
R-squared	0.24	0.24	0.24	0.25	0.27	0.27	0.28	0.27	0.13	0.13	0.13	0.13

Enumerator FE included. Robust standard errors clustered on sessions in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Table A4. Full Results on Cleric+Scripture Treatment Effects (Main and Heterogeneous)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
VARIABLES	Contribute	Contribute	Contribute	Contribute	Cond. Amt.	Cond. Amt.	Cond. Amt.	Cond. Amt.	Average	Average	Average	Average
Cleric+	-0.04	-0.01	0.01	-0.03	9.47***	5.21	6.92	11.03***	8.28***	4.97	7.68*	9.58***
Scripture	(0.09)	(0.10)	(0.09)	(0.09)	(2.73)	(4.02)	(5.06)	(3.12)	(2.99)	(3.70)	(4.21)	(3.33)
More Income	-0.06	-0.03	-0.06	-0.06	4.04	-0.43	4.19	4.03	1.41	-1.60	1.43	1.44
	(0.07)	(0.09)	(0.07)	(0.07)	(3.12)	(2.94)	(3.09)	(3.02)	(2.22)	(2.32)	(2.20)	(2.18)
Treatment*		-0.05				9.42				6.56		
More Income		(0.13)				(7.18)				(5.44)		
Formal	0.03	0.03	0.09	0.03	-1.24	-1.03	-3.95	-1.05	-1.13	-0.88	-1.83	-0.96
Education	(0.06)	(0.05)	(0.07)	(0.05)	(3.80)	(3.94)	(4.87)	(3.79)	(3.53)	(3.64)	(4.55)	(3.51)
Treatment*			-0.13				5.76				1.50	
Formal												
Education			(0.09)				(7.81)				(6.44)	
Does Not	0.07	0.07	0.06	0.09	3.08	3.62	3.35	7.20	4.58	4.72	4.62	7.58**
Feel Poor	(0.07)	(0.07)	(0.07)	(0.09)	(3.98)	(3.82)	(4.07)	(4.33)	(3.50)	(3.46)	(3.55)	(3.69)
Treatment*				-0.04				-8.92				-6.94
Does Not												
Feel Poor				(0.10)				(6.53)				(5.52)
Pashtun	0.06	0.07	0.07	0.07	12.54**	10.83*	12.62**	14.20**	10.72**	10.21**	10.63**	11.72**
Ethnicity	(0.14)	(0.14)	(0.14)	(0.15)	(5.84)	(5.97)	(5.89)	(6.20)	(4.51)	(4.49)	(4.42)	(4.80)
Age	0.00	0.00	0.00	0.00	0.05	0.05	0.04	0.05	0.11	0.11	0.11	0.11
	(0.00)	(0.00)	(0.00)	(0.00)	(0.11)	(0.11)	(0.11)	(0.12)	(0.09)	(0.09)	(0.09)	(0.09)
Language	0.06	0.06	0.07	0.06	-2.98	-2.84	-3.25	-2.90	-1.87	-1.75	-1.96	-1.68
Count	(0.05)	(0.05)	(0.05)	(0.05)	(2.15)	(2.11)	(2.18)	(2.10)	(2.16)	(2.10)	(2.11)	(2.17)
Married	-0.02	-0.02	-0.01	-0.02	-3.35	-3.00	-3.56	-3.24	-3.16	-2.97	-3.22	-3.07
	(0.05)	(0.06)	(0.06)	(0.05)	(3.33)	(3.37)	(3.38)	(3.41)	(3.13)	(3.20)	(3.19)	(3.16)
Qur'anic	-0.09	-0.10	-0.09	-0.09	15.53	16.02	15.60	15.73	10.27	10.81	10.25	10.44
Education	(0.12)	(0.12)	(0.11)	(0.12)	(16.21)	(15.84)	(16.33)	(16.01)	(13.29)	(13.30)	(13.39)	(13.17)
SessionEthnic	0.00	0.00	0.00	0.00	0.10	0.09	0.10	0.07	0.19	0.18	0.19	0.17
Mix	(0.00)	(0.00)	(0.00)	(0.00)	(0.13)	(0.12)	(0.13)	(0.14)	(0.14)	(0.14)	(0.14)	(0.15)
Time Taken	0.06*	0.06*	0.06	0.06	0.04	-0.29	0.13	0.58	0.92	0.87	0.93	1.23
(minutes)	(0.03)	(0.03)	(0.03)	(0.03)	(2.61)	(2.70)	(2.59)	(2.57)	(2.10)	(2.17)	(2.08)	(2.11)
Waiting Time	0.00	0.00	0.00	0.00	-0.20	-0.15	-0.20	-0.13	-0.14	-0.12	-0.14	-0.10
	(0.00)	(0.00)	(0.00)	(0.00)	(0.23)	(0.26)	(0.23)	(0.25)	(0.21)	(0.22)	(0.21)	(0.21)
Constant	0.36	0.34	0.32	0.35	18.63	21.05	20.19	16.17	4.89	6.66	5.32	3.53
	(0.29)	(0.29)	(0.30)	(0.30)	(18.64)	(18.94)	(18.63)	(17.99)	(16.97)	(16.81)	(17.35)	(16.52)
N	201	201	201	201	166	166	166	166	201	201	201	201
R-squared	0.13	0.13	0.13	0.13	0.18	0.20	0.19	0.19	0.16	0.17	0.16	0.17

Enumerator FE included. Robust standard errors clustered on sessions in parentheses. *** p<0.01, ** p<0.05, * p<0.1

Appendix: Counterfactual Simulation

A wide range of interventions to increase prosocial behavior, such as offering small rewards, making minimum contributions rules, or increasing social pressure to give, appears to have the unintended effect of discouraging prosocial behavior.¹ A substantial psychological and behavioral literature has attributed this to “motivational crowding out”, a phenomenon in which extrinsic incentives drive away intrinsic motivation.² The theory suggests that an intervention that crowds out intrinsic motivation will do two things. First, those who were not intrinsically motivated without the intervention would now “select in” to become contributors. Second, those who were initially motivated without the intervention would now no longer have much intrinsic motivation to contribute beyond getting the incentive, resulting in a decrease in their contributions.

Our discussion in the Data and Empirical Results section suggests that intrinsic motivation that is present in the *Civilian* treatment might be crowded out in *Cleric* due to the stronger self-image concerns around giving behavior when one is solicited by a cleric rather than a civilian. To show this more precisely, however, requires us to observe the intrinsic motivation of a subject in *Cleric* and then test if those with high intrinsic motivation are giving less than their generosity would allow. Intrinsic motivation is unobservable. However, if we take subjects’ contributions in *Civilian* as a measure of their intrinsic motivation, we can generate an estimate of the intrinsic motivation of subjects placed in the *Cleric* condition by predicting their contribution had they been in the *Civilian* condition. We can then use this estimate of intrinsic motivation to identify subjects with predicted

¹ See review in Frey and Jegen 2001.

² Deci and Ryan 1985, Frey and Oberholzer-Gee 1997, Bénabou and Tirole 2006.

high intrinsic motivation and check their response to the *Cleric* treatment. This is what the counterfactual exercise below attempts to do.

To generate a model of the relationship between individual characteristics and intrinsic motivation, we use data from subjects in the *Civilian* condition and regress the amount contributed on subject and session variables. The coefficients generated from this regression model allow us to estimate what *Cleric* subjects would have given in the *Civilian* condition (see *Expected Contribution* in Table A5), which we take as an estimate of subjects' intrinsic motivation. Since 10 AFN is the lowest contribution level, we identify subjects as Low Motivation Subjects if they are predicted to give less than 10, and High Motivation Subjects otherwise.

We see that Low Motivation Subjects who participated in the *Cleric* sessions are expected to give around 3.49 AFN ($p < 0.01$)³ if they had been in the *Civilian* condition, while those with High Motivation are expected to give around 17.34 AFN ($p < 0.01$) in the same counterfactual. However, the *Cleric* treatment induces both groups to give around 13 AFN (see *Actual Contribution*); this is a 9.85 AFN increase for Low Motivation Subjects and a 3.9 AFN decrease for High Motivation Subjects (see *Heterogeneous Treatment Effects* below). This is highly suggestive that intrinsic motivation may have been crowded out in the *Cleric* treatment.

While the effect on Low Motivation Subjects is remarkably similar in magnitude and significance across all the demographic variables that we explore in *Appendix: Heterogeneous Treatment Effects* which follows this section, the negative effect on High Motivation Subjects appears

³ The p -values are from two sided t -tests, where the null hypothesis is that the mean Expected Contribution for the 54 subjects in *Cleric* that we have identified as Low Motivation Subjects is not equal to zero. All following p -values report results of similarly two sided t -tests.

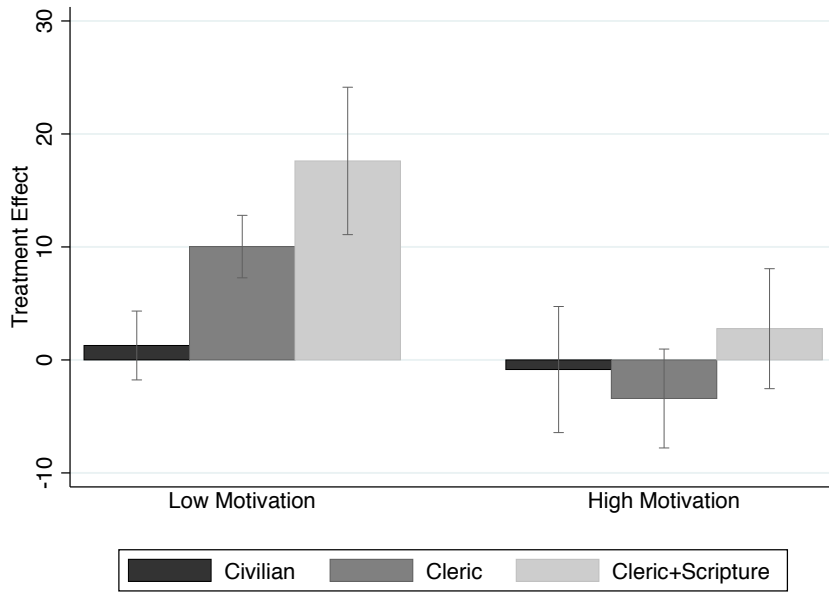
larger and only significant for those with less income (-4.99, $p < 0.10$), those who feel poor (-5.57, $p < 0.01$), and those who are formally educated (-6.05, $p < 0.01$). This indicates that people who find contributing more costly and those who are educated may pose a particular challenge for religious authority.

Looking at the effect of *Cleric+Scripture*, we see that while all Low Motivation Subjects give 18 AFN more than they would have in the *Civilian* treatment, the contributions of High Motivation Subjects are not significantly different than they are expected to give. This may suggest that for High Motivation Subjects, scripture merely restores the intrinsic motivation that was crowded out by *Cleric*. On the other hand, for Low Motivation Subjects, who appear to begin to give out of compliance to *Cleric*, scripture pushes their contribution above the minimum, possibly through reminders of the divine benefits of giving. Figure A1 illustrates the results of this analysis, showing how the treatments affect Low Motivation and High Motivation subjects quite differently. Figure A2 breaks down the results further, dividing Low and High Motivation Subjects into those who are formally educated and those who are not.

Table A5. Treatment Effect (p-values are from 2 sided t-test of difference from 0)

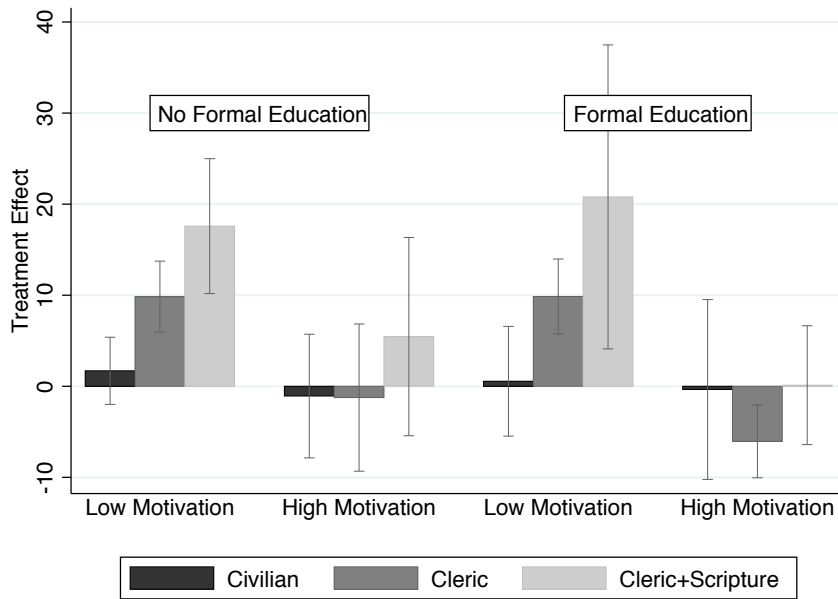
	CIVILIAN (Baseline)			CLERIC			CLERIC + SCRIPTURE		
	N	Mean	p-value	N	Mean	p-value	N	Mean	p-value
Expected Contribution									
All Subjects	98	13.14	0.00	112	10.66	0.00	89	13.17	0.00
Low Motivation Subjects	38	5.04	0.00	54	3.49	0.00	33	3.96	0.00
High Motivation Subjects	60	18.28	0.00	58	17.34	0.00	56	18.60	0.00
Actual Contribution									
All Subjects	101	13.45	0.00	112	13.39	0.00	92	22.38	0.00
Low Motivation Subjects	38	6.32	0.00	54	13.33	0.00	33	22.42	0.00
High Motivation Subjects	63	17.75	0.00	58	13.45	0.00	59	22.36	0.00
Treatment Effect (Actual-Expected)									
All Subjects	98	0	1.00	112	2.73	0.06	89	8.84	0.00
Low Motivation Subjects	38	1.28	0.40	54	9.85	0.00	33	18.46	0.00
High Motivation Subjects	60	-0.81	0.77	58	-3.90	0.06	56	3.17	0.35
Low Motivation Subjects:									
Less Income	15	-1.98	0.29	32	10.97	0.00	13	19.23	0.00
More Income	23	3.40	0.12	22	8.21	0.00	20	17.97	0.00
Feel Poor	31	1.56	0.35	49	9.96	0.00	31	18.22	0.00
Do Not Feel Poor	7	0.020	1.00	5	8.78	0.38	2	22.29	0.49
No Formal Education	24	1.70	0.35	29	9.84	0.00	24	17.59	0.00
Formal Education	14	0.55	0.85	25	9.86	0.00	9	20.80	0.02
High Motivation Subjects:									
Less Income	19	1.56	0.79	29	-4.99	0.05	29	-1.42	0.61
More Income	41	-1.91	0.53	29	-2.80	0.42	27	8.09	0.20
Feel Poor	35	-1.38	0.74	34	-5.57	0.00	34	5.55	0.27
Do Not Feel Poor	25	-0.006	1.00	24	-1.53	0.73	22	-0.51	0.89
No Formal Education	38	-1.07	0.75	26	-1.24	0.75	32	5.46	0.31
Formal Education	22	-0.35	0.94	32	-6.05	0.00	24	0.12	0.97

Figure A1. Treatment Effects on Amount Given (All Subjects)



Capped lines represent the 95% confidence interval.

Figure A2. Treatment Effects on Amount Given (by Education Level)



Capped lines represent the 95% confidence interval.

Appendix: Heterogeneous Treatment Effects

Finally, we analyze the characteristics of those in our sample who are most affected by the cleric and scripture. Following suggestions in the literature that poverty, subjective deprivation, and lack of education increase one's susceptibility to religious appeals,⁴ we will explore three variables from Table 1: *More Income*, which takes on the value 1 if the individual earns at least the median income (4000 AFN), *Do Not Feel Poor*, which takes on 1 if the individual does not feel poor relative to people around him, and *Formal Education*, which takes on the value 1 if the individual has formal education (i.e., a science-based curriculum) and zero if he does not (this includes those educated in Qur'anic school).⁵ Appendix Tables A2a-c analyze the interaction of these demographic dummies with both treatment dummies at the same time using the pooled sample. As before, our discussion will focus instead on the regressions in Table A6, which splits the sample to isolate each treatment effect separately and utilizes identical specifications to those in Table 3 (Panel B) with the exception of the addition of interaction terms.⁶

⁴ More extreme religious appeals draw in the uneducated (Iannaccone 1988, Montgomery 1996, Iannaccone 1998) and the poor (Bueno de Mesquita 2005). However, Rees 2009 and Delamontagne 2010 argue that the cross-national correlation between religious devotion and poverty can be better explained by dissatisfaction with opportunities, proxied by inequality, rather than absolute wealth (e.g., GDP).

⁵ Results reported below on education are unaffected if we change the value of *Formal Education* from zero to missing for subjects who attended Qur'anic school.

⁶ Full results for Table A6 are in Tables A3 and A4. Note that these three demographic variables are included as control variables in all regressions.

In Table A6 (Panel A) we include the interaction of *More Income* with either *Cleric* (columns 1-3) or *Cleric+Scripture* (columns 4-6) in the specification producing the results in Table 3 (Panel B). Income does not appear to affect either how likely one is to give or how much one gives. The interaction terms are not significant and the linear combination of the demographic variable and interaction terms reveals that the effect of *Cleric* on both margins is significant regardless of earnings (columns 1-2). However, the effect of *Cleric+Scripture* on increasing contributions appears significant only on those who earn above the median (column 5, 14.63, $p < 0.01$), suggesting that even among this poor subject pool, there is still meaningful variation in income that affects one's ability to increase giving. Overall, there is no evidence among our subjects that those with lower incomes are more susceptible to religious appeal.

Panel B contrasts the effect of the treatment on objective wealth (Panel A) with subjective feelings of poverty by interacting the treatment with *Do Not Feel Poor*. Note that these two measures are very weakly correlated, with a Pearson correlation coefficient of 0.09 ($p = 0.12$), suggesting this question is capturing something different from income. Unlike those who earn above the median, those who do not feel poor are 37% more likely to give than those who do (column 1, 0.37, $p < 0.01$); this is possibly why the effect of *Cleric* on the extensive margin for this group is dampened (-0.27, $p < 0.05$), though the effect is still positive (0.19, $p < 0.10$). Subjective feelings of poverty do not affect the size of the contribution, however, the linear combination of the demographic variable and interaction terms reveals that the negative effect of *Cleric* (column 2, -10.89, $p < 0.01$) and its reversal by *Cleric+Scripture* (column 5, 11.03, $p < 0.01$) is large and significant only for those who feel poor.

We move next to the effect of *Formal Education* in Panel C. Having studied under a formal, science-based curriculum does not affect one's willingness to contribute or the size of the contribution. It also does not determine whether the treatments significantly impact the extensive

margin: for those with and without formal education, the effect of *Cleric* is positive and significant (column 1) and the effect of *Cleric+Scripture* is insignificant (column 4). However, echoing the patterns in Panel B, the opposing effect of *Cleric* and *Cleric+Scripture* in the intensive margin (column 2, -14.14 AFN, $p < 0.05$; column 5, 12.68, $p < 0.01$) is only significant among those who have received a formal education.

In summary, while the effect of the treatments on the extensive margin (columns 1 and 4) appears consistent across demographic variables, the opposing changes in the intensive margin appear larger and more precisely estimated only for certain demographic variables (columns 2 and 5). Splitting the results of the counterfactual simulation (see above) by demographics provides a richer picture: while the treatments induce everyone who is predicted not to contribute to contribute regardless of demographics, *Cleric* appears to drive a reduction in contribution size only among those for whom the opportunity cost of giving is large or who have experienced formal, science-based schooling.

Table A6. Heterogeneity in Treatment Effects

	Effect of Cleric on Civilian			Effect of Scripture on Cleric		
	(1) Contr.	(2) Cond. Amt.	(3) Avg. Contr.	(4) Contr.	(5) Cond. Amt.	(6) Avg. Contr.
PANEL A						
Treatment	0.43*** (0.10)	-9.70* (5.60)	1.73 (3.88)	-0.01 (0.10)	5.21 (4.02)	4.97 (3.70)
More Income	0.02 (0.12)	-3.30 (6.74)	-3.21 (4.98)	-0.03 (0.09)	-0.43 (2.94)	-1.60 (2.32)
Treatment*More Income	-0.08 (0.13)	0.27 (6.67)	0.28 (4.88)	-0.05 (0.13)	9.42 (7.18)	6.56 (5.44)
N	210	142	210	201	166	201
R-squared	0.24	0.27	0.13	0.13	0.2	0.17
Less Income (Treatment)	0.43*** (0.10)	-9.70* (5.60)	1.73 (3.88)	-0.01 (0.10)	5.21 (4.02)	4.97 (3.70)
More Income (Treat. + Treat.*More Income)	0.35*** (0.10)	-9.43** (4.23)	2.01 (3.28)	-0.067 (0.12)	14.63*** (5.07)	11.53*** (4.40)
PANEL B						
Treatment	0.45*** (0.09)	-10.89** (4.37)	3.07 (3.23)	-0.03 (0.09)	11.03*** (3.12)	9.58*** (3.33)
Do not feel poor	0.37*** (0.10)	-0.93 (5.12)	10.50** (4.03)	0.09 (0.09)	7.20 (4.33)	7.58** (3.69)
Treatment*Do not feel poor	-0.27** (0.12)	4.05 (5.73)	-4.41 (4.58)	-0.04 (0.10)	-8.92 (6.53)	-6.94 (5.52)
R-squared	0.25	0.27	0.13	0.13	0.19	0.17
Feel Poor (Treatment)	0.45*** (0.09)	-10.89** (4.37)	3.07 (3.23)	-0.03 (0.09)	11.03*** (3.12)	9.58*** (3.33)
Do not feel poor (Treat. + Treat.* Do not feel poor)	0.19* (0.11)	-6.83 (4.46)	-1.34 (3.51)	-0.075 (0.12)	2.11 (5.78)	2.64 (5.00)
PANEL C						
Treatment	0.32*** (0.09)	-6.66 (4.93)	3.32 (3.63)	0.01 (0.09)	6.92 (5.06)	7.68* (4.21)
Formal Education	-0.12 (0.09)	-0.76 (6.57)	-2.78 (4.80)	0.09 (0.07)	-3.95 (4.87)	-1.83 (4.55)
Treatment*Formal Education	0.15 (0.12)	-7.48 (7.75)	-3.43 (5.37)	-0.13 (0.09)	5.76 (7.81)	1.50 (6.44)
R-squared	0.24	0.28	0.13	0.13	0.19	0.16
No Formal Education (Treatment)	0.32*** (0.09)	-6.66 (4.93)	3.32 (3.63)	0.01 (0.09)	6.92 (5.06)	7.68* (4.21)
Formal Education (Treat. + Treat.* Formal Education)	0.47*** (0.11)	-14.14** (5.27)	-0.11 (3.84)	-0.12 (0.11)	12.68*** (4.11)	9.18** (4.52)

Note: Robust standard errors clustered on sessions in parentheses. Extensive controls and enumerator FE included. See Tables A3 and A4 for full results. *** p<0.01, ** p<0.05, * p<0.10

1	Primary Survey No	_ _ _ _ _ _ _
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2	Interviewer Code	_ _ _ _ _ _ _
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3	Interview Date	_ _ _ _ _ _ _	_ _ _ _ _ _ _	_ _ _ _ _ _ _
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4	Interview Start Time	[USE 24 HOUR CLOCK]	_ _ _ _ _ _ _	_ _ _ _ _ _ _
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5	Interview End Time	[USE 24 HOUR CLOCK]	_ _ _ _ _ _ _	_ _ _ _ _ _ _
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6	How old are you	_ _ _ _ _ _ _	88	Don't Know
			99	Refuse to Answer

7	What is your native language? [Do NOT prompt.]	1	Pashto	3	Uzbeki	5	Pashayi	7	Turkmani
		2	Dari	4	Balochi	6	Nuristani	8	Other

8	What other languages do you speak?	1	Pashto	3	Uzbeki	5	Pashayi	7	Turkmani
		2	Dari	4	Balochi	6	Nuristani	8	Other

9	What is your Marital Status?	1	Married	3	Widowed
		2	Married	4	Divorced

10	What type of school did you attend?	1	Koranic school	3	Both	88	Don't Know
		2	Western or modern Islamic school	4	Didn't attend school	99	Refuse to Answer

11	[If Western or modern Islamic school:] what is the highest grade-level of education you completed?												
1	G1	4	G4	7	G7	10	G10	13	1 year university	16	4 years university	77	NA
2	G2	5	G5	8	G8	11	G11	14	2 years university	88	Don't Know		
3	G3	6	G6	9	G9	12	G12	15	3 years university	99	Refuse to Answer		

What is your current occupation?											
[Do NOT prompt]											
Self-employed				Private sector				Other			
1	Farmer			5	Professional			8	Civil Servant		
2	Trader/hawker			6	Unskilled labor			9	Unemployed		
3	Professional			7	Other [specify]:				10	Pensioner	
4	Other [specify]:								11	Student	
					12	Other [specify]:					

13	How long have you been working in your current occupation in Kabul?	_ _ _ _ Months _ _ _ _ Years
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14	How many days did you find work last week?	_ _ _ _ Days
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15	How many afghanis do you earn in a typical month?	_ _ _ _ _ _ _			
		88	Don't Know	99	Refuse to Answer

16 What is the most challenging problem that you face in your work as a construction worker?			
1	Low wages	5	competition with Pakistani workers
2	Cannot find work every day	6	No support from government
3	Work is too hard	7	working days too long
4	Being away form family		

17 Which province are you from?	
Province Name:	

18 Which province are you from?	
Province Code: <input type="text"/> <input type="text"/>	

19 Which ethnic group do you belong to?	
1	Pushton
2	Tajik
3	Hazara
4	Uzbek
5	Turkmen
6	Aimagh
7	Baluch
8	Other:

20 How wealthy is your household comparedto other households in your neighborhood?					
1	Poor	3	Above Average	88	Don't Know
2	Below Average	4	Rich	99	Refuse to Answer