

Age Sets, Accountability, and the Balance of Power: Evidence from Villages in Rural Congo

Sara Lowes
Eduardo Montero
Nathan Nunn
James A. Robinson

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Village governance in Africa

- In Africa, villages are typically governed by local chiefs.
 - Chiefs tend to be **male and older**, and consequently less educated.
 - Diverse set of mechanisms to appoint chiefs, often **without universal voting**.
 - Accountability and oversight of chief occurs through **informal mechanisms**.
- This political structure looks different from local governance in Western societies.
- Has resulted in attempts to **fix** what are perceived to be **institutional deficiencies**.

Interventions aimed at disrupting the political status quo

Two areas of research along these lines are:

- ① Improved accountability of chiefs by **creating village development committees** (Casey et al, 2012, 2023; Humphreys et al, 2019).
 - The concern is that chiefs are **despotic** with few checks on their power.
- ② Attempts to **shift power from older village chiefs to younger more-educated villagers** (Casey et al., 2023).
 - Power and authority is typically held by those in older cohorts.
 - This **gerontocratic** aspect of governance is believed to be problematic.
 - Argue that younger, more educated individuals are underutilized in governance.

Local conditions matter

- There is an increasing recognition of the need to align interventions/policies with the local context.
 - E.g., Ashraf et al. (2020); Le Rossignol et al. (2024); McGuirk and Nunn (2024); Bau et al. (forthcoming).
- The consequences of empowering young men likely depend on answers to the following questions:
 - What role do young men play?
 - Do young men traditionally have political legitimacy?
 - Relevant given the gerontocratic structure of society.
- **Do the consequences of these political interventions depend on whether there are age sets in a village?**

Age sets and age grades

- Age sets are organized groups consisting of persons of **approximately the same age**.
 - Gender segregated and most common among men.
- Those in an age set are **initiated together**.
 - Initiations are extended rituals, lasting up to a year.
 - Typically, participants are removed from the village, put through arduous training, and circumcised.
- Those initiated into an age set remain a member of that age set for their **entire life**.
- Age sets pass from one **age grade** to another as a group over their lifetime.
 - Older age grades typically hold political power.

Why age sets matter for governance

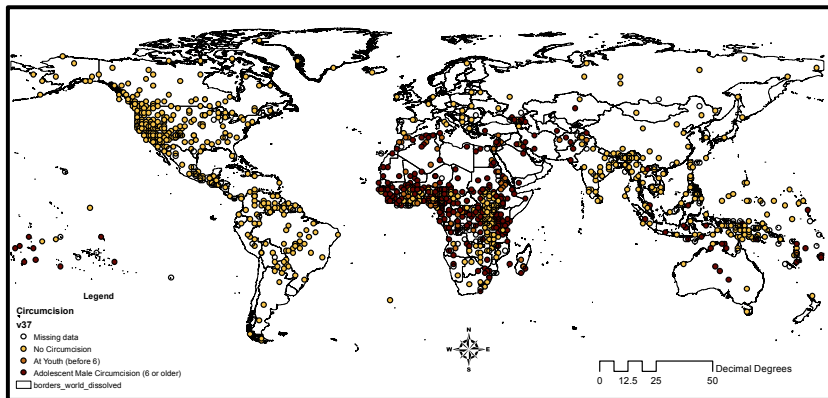
- Age sets build cohorts of men who are **cohesive and horizontally connected**.
 - These horizontal ties can be stronger than vertical or oblique ties, even lineage or family ties.
 - Financial consequences have been studied by Moscona and Seck (AER, 2023).
 - **Allegiances to age mates** are typically stronger than to elders, the chief, or even one's own family.
 - E.g., historical account among the Tiv in Bohannon (1964): Yaav, Chief Kako, his rival Yabo, and his son Illhugh.
- Younger age sets serve as a **check on the village elite** who are from older age sets.
 - Due, in part, to the cohesion of the group and their **weak allegiance** to older age sets.
 - Generates commonly held **norms about the role of youth** in ensuring political accountability.

Prevalence of age sets in Africa and globally

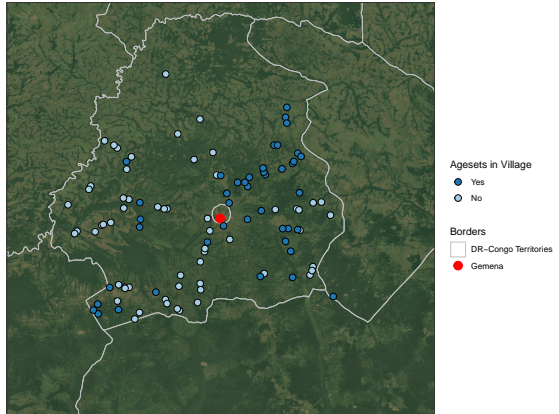
- No direct comprehensive measure, but can be proxied by:
 - ① Adolescent male segregation
 - ② Adolescent male circumcision (i.e., after age 6)
- Within Africa, the proportion of ethnic groups with:
 - Adolescent male segregation: 73%
 - Adolescent male circumcision: 57%
 - Both: 42%
 - At least one: 86%

Adolescent circumcision across pre-industrial ethnic groups

Source: *Ethnographic Atlas*



Age sets and initiation in northern DRC: Gazawili



Characteristics of Gazawili age set rituals, I

	Village Level Statistics:					Villages (6)	Respondents (7)
	Mean (1)	SD (2)	Min (3)	Median (4)	Max (5)		
Age generally do initiation	12.2	4.56	5	11	18	59	196
How many young men participate							
Specially selected boys of initiation age	.154	.281	0	0	1	59	196
A few boys of initiation age	.362	.389	0	.25	1	59	196
Some boys of initiation age	.445	.423	0	.5	1	59	196
All boys of initiation age	.0388	.184	0	0	1	59	196
Initiation done in group	1	0	1	1	1	59	196
During initiation do the young men leave the village	.966	.103	.5	1	1	59	196
Where is the initiation done							
Secret location in the forest	.809	.346	0	1	1	59	196
Open location in the forest	.184	.345	0	0	1	59	196
Secret location in the village	.00706	.0388	0	0	.25	59	196
Length of initiation							
More than one week and less than one month	.0503	.18	0	0	1	59	196
More than one month and less than three months	.618	.455	0	.91	1	59	196
More than three months and less than six months	.126	.274	0	0	1	59	196
More than six months and less than one year	.181	.356	0	0	1	59	196
More than one year	.0254	.145	0	0	1	59	196

Notes: Table presents village level means of responses from village leaders – chiefs, chief secretaries, notables, and sages – on initiation rituals in their village at baseline (2016).

Characteristics of Gazawili age set rituals, II

	Village Level Statistics:					Villages (6)	Respondents (7)
	Mean (1)	SD (2)	Min (3)	Median (4)	Max (5)		
Circumcision performed during initiation	.985	.0827	.5	1	1	59	196
Proportion of men who have participated in past (0: No Men - 3: All Men)	1.96	.527	.5	2	3	59	196
Proportion of men who participate now (0: No Men - 3: All Men)	.942	.682	0	1	2	59	196
Do men ever refuse to participate (1: Never - 4: Often)	2.57	.615	1	2.6	4	59	196
Proportion of men who participate because of pressure (0: Specific - 4: All)	1.87	.711	1	2	3	59	196
Frequency initiation is administered							
Once every five years or more	.0768	.175	0	0	1	59	196
Once every three years	.273	.371	0	0	1	59	196
Once a year	.485	.414	0	.5	1	59	196
Once every six months	.0312	.147	0	0	1	59	196
Every couple of months	.00154	.0118	0	0	.091	59	196
Never	.0373	.184	0	0	1	59	196
Other	.0875	.213	0	0	1	59	196
Taught history of tribe during initiation	.905	.168	.5	1	1	59	196
Teach history of clan during initiation	.909	.171	.5	1	1	59	196
Must a village chief complete the initiation	.326	.412	0	0	1	59	196
Do men from multiple clans participate	.621	.403	0	.71	1	59	196
Do men from multiple villages participate	.543	.4	0	.6	1	59	196
Do men from multiple tribes participate	.251	.371	0	0	1	59	196

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Skills acquired during Gazawili

Variable	Mean (1)	S.D. (2)	Min (3)	Median (4)	Max (5)	N (6)
Which skills are learned during Initiation (Select Multiple)						
Hunting (0/1)	0.840	0.260	0.00	1.00	1.00	59
Farming (0/1)	0.737	0.377	0.00	1.00	1.00	59
Communal Farming (0/1)	0.347	0.441	0.00	0.00	1.00	59
Public Good Maintenance (0/1)	0.332	0.436	0.00	0.00	1.00	59
Leadership skills (0/1)	0.316	0.446	0.00	0.00	1.00	59
Bokoko (0/1)	0.786	0.309	0.00	1.00	1.00	59
Fishing (0/1)	0.849	0.251	0.00	1.00	1.00	59
Sewing (0/1)	0.776	0.281	0.00	1.00	1.00	59
Fabrication of thatch (0/1)	0.781	0.323	0.00	1.00	1.00	59
Artisinal skills (0/1)	0.829	0.271	0.00	1.00	1.00	59
Fighting or soldiering (0/1)	0.299	0.395	0.00	0.00	1.00	59
Special means of communication (0/1)	0.838	0.262	0.00	1.00	1.00	59

Village-level differences by age set practice

Larger villages are more likely to have age sets

Variable	Age Sets		No Age Sets		P-value
	Obs.	Mean	Obs.	Mean	
Number of households (2017)	59	562.712	43	301.047	0.049
Number of households (2019)	59	369.881	43	242.767	0.105
Number of households (enum estimate) (2019)	59	281.390	43	204.837	0.115
Approx. years since village was created (2019)	57	93.386	43	81.977	0.012
Number of clans when founded (2019)	59	2.831	43	1.977	0.014
Number of clans now (2019)	59	3.949	43	3.163	0.041
More than one tribe (0/1)(2017)	59	0.831	43	0.581	0.004
Truck access by road (0/1) (2019)	59	0.915	43	0.884	0.600
Road material sand (0/1) (2019)	59	0.729	42	0.833	0.218
Has a well (0/1) (2017)	59	0.407	43	0.116	0.001
Number of wells (2017)	59	1.915	43	0.372	0.017
Land Titles (0/1) (2017)	59	0.678	43	0.698	0.834
Health center (0/1) (2017)	59	0.559	43	0.581	0.826
Primary School (0/1) (2017)	59	0.864	43	0.651	0.009
Number of primary schools (2017)	59	1.254	43	0.837	0.010
Secondary School (0/1) (2017)	59	0.559	43	0.326	0.017
Number of secondary schools (2017)	59	0.678	43	0.349	0.016
Market (0/1) (2017)	59	0.169	43	0.093	0.270
Generator (0/1) (2017)	59	0.169	43	0.140	0.684
Solar panels (0/1) (2017)	59	0.915	43	0.907	0.885
Mobile coverage (0/1) (2017)	59	0.525	43	0.302	0.023
How far have to go to get good mobile coverage (km) (2017)	59	18.644	43	24.512	0.152

Notes: All means are the average characteristics of the villages using variables from baseline data (2017) and round 1 implementation data (2019). All p-values are clustered at the village level and reflect the difference in means between the groups.

Backdrop: Overview of the health intervention



- Work with NGO, Congo Helping Hands.
- Supply of three typically inaccessible over-the-counter health products.
 - 1 Deworming pills.
 - 2 Aquatabs for water purification.
 - 3 Oral rehydration salts for dehydration.
- Provision occurs through:
 - 1 Cash grant (\$100) given to chief for the products.
 - 2 Village development committees created (young-male vs. diverse randomized).
 - 3 Project vendors bring products to village and provide them 50% below market price.
 - 4 The chief can return any unused funds.

Tailoring development policy to the local context

The general logic

- Create **village development committees (VDC)**.
 - Work with and monitor the chief, the primary decision maker for the project.
- Two types of VDCs are created:
 - 1 **Diverse** (standard implementation).
 - 2 Comprised of solely of **young men**.
- **Research question:** Are **young-male committees** relatively more successful in **villages with age sets**?

Hypotheses and outcomes of interest

- Hypothesize that young-male committees will perform better in villages with age sets:
 - ① Better functioning, more engaged.
 - Undertake more tasks.
 - ② Stronger oversight over the chief.
 - Less missing money.
 - ③ Better product distribution.
 - Less bias towards those connected to Chief.
 - Potentially more equitable.
 - ④ More cohesion within the village afterwards.
 - Less discontent between members of village.
- Effects due to young men in age set villages:
 - ① Having less allegiance and connections to the chief.
 - ② Traditional practice (norms) of youth providing political oversight.



Baseline visit (June-August, 2016)

- Initial visit to establish a relationship with the Chief and collect baseline data.
- Multiple surveys: Village chief, secretary, sage, groupement chief, notable of each clan, 12 randomly chosen villagers.



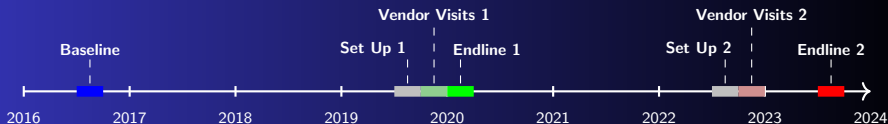
Set up visit, round 1 (Aug-Oct, 2019) and 2 (Jul-Sep, 2022)

- Village meeting is held to explain the project and the proper use of three health products.
- An additional meeting with interested volunteers is held.
 - Six members of the committee are chosen randomly among either: (1) all volunteers; (2) male volunteers 18-35 years old.
- Project logistics are explained in meetings with the committee, chief, and both.
 - Chief is given the 100 USD cash grant for the products and asked to organize distribution.
 - Committee asked to meet with the chief and are provided training on product use.



Vendor visits, round 1 (Sep-Dec, 2019) and 2 (Aug-Oct, 2022)

- Vendors visit the village 3-4 weeks after the grant is given.
 - Different vendor for each product.
 - Vendors visit once each and on different days.
- Price of each product is discounted by approximately 50%.
 - 1 Mebendazole, 500mg: 50CF (approx. 3 cents)
 - 2 Aquatab tablet: 50CF
 - 3 Oral rehydration salt packet: 50CF
- Receipts are signed by both the Chief and vendor.



Endline survey, round 1 (Feb-Mar, 2020) and 2 (Jul-Nov, 2023)

- Approximately 6 months after the last vendor visit, the village is visited by enumerators.
- Endline surveys are implemented.
- Chief is asked if there are any unused funds they want to return.

Village access



Typical water sources



Village chiefs



Chief characteristic by age set practice

Always gerontocratic (age set villages slightly more)

Variable	Age Sets	No Age Sets	P-value
Chiefs in 2017			
Age	51.860	48.977	0.161
Education Years	7.228	7.140	0.890
Not in the village often = 1	0.386	0.372	0.889
Start Age	40.474	40.349	0.952
Elected chief (elected by villagers)	0.772	0.767	0.958
Wealth based on appearance (1/5)	1.842	1.767	0.595
Wealth above villager's median wealth (0/1)	0.333	0.209	0.172
Chiefs in 2020			
Age	51.576	48.837	0.191
Education Years	7.271	7.884	0.309
Not in the village often = 1	0.322	0.256	0.472
Start Age	42.475	42.721	0.911
Replaced chief	0.339	0.302	0.699
Elected chief (elected by villagers)	0.712	0.814	0.238
Wealth based on appearance (1/5)	1.814	1.814	0.998
Chiefs in 2022			
Age	49.593	46.558	0.133
Education Years	7.508	8.233	0.234
Not in the village often = 1	0.356	0.419	0.523
Start Age	43.475	42.953	0.802
Replaced chief	0.407	0.535	0.201
Elected chief (elected by villagers)	0.695	0.744	0.589
Wealth based on appearance (1/5)	2.000	1.953	0.764

Notes: All means are the average characteristics of the village chiefs. All p-values are clustered at the village level and reflect the difference in means between the groups.

Initial village meetings



	All Villages					No Age Set Villages					Age Set Villages				
	N	Mean	SD	Min	Max	N	Mean	SD	Min	Max	N	Mean	SD	Min	Max
Village Meeting:															
Total Audience	102	96.7	45.2	36	343	43	110.3	56.4	36	343	59	86.8	31.9	36	160
Committee Selection:															
Total Audience	102	50.3	17.8	17	110	43	53.7	19.6	17	99	59	47.7	16.0	26	110
Young Men (<35)	102	13.3	5.6	3	30	43	14.5	6.3	4	30	59	12.4	4.9	3	29
Young Women (<35)	102	8.6	4.7	1	27	43	8.6	4.3	1	19	59	8.6	5.0	1	27
Old Men (≥ 35)	102	18.7	7.8	4	49	43	19.7	9.4	4	49	59	17.9	6.5	6	36
Old Women (≥ 35)	102	9.7	6.0	1	31	43	10.9	6.1	2	28	59	8.8	5.8	1	31

Notes: The table displays the number of participants in the first main meeting held by CHH in each village in the Gemena territory. Statistics are provided for the full sample (All Villages), villages where age set rituals are not practiced (No Age set Villages), and where age set rituals are practiced (Age set Villages). Village Meeting Total Audience is the total audience for the village's meetings held on the second day of implementation in 2019. In this meeting, villagers are given general information about the project, the formation of the committee explained, the health products and the correct usage of them presented. Committee Selection Total Audience is the total audience at the Committee Selection Meeting. In this meeting, the roles and responsibilities of the chief and committee are explained, and the selection of the committee is made. Committee Meeting - Surveyed and the attendance based on characteristics variables (Men and Women older or younger than 35 years old take information on the people who came to the Committee Meeting and completed the survey at the end of the meeting.

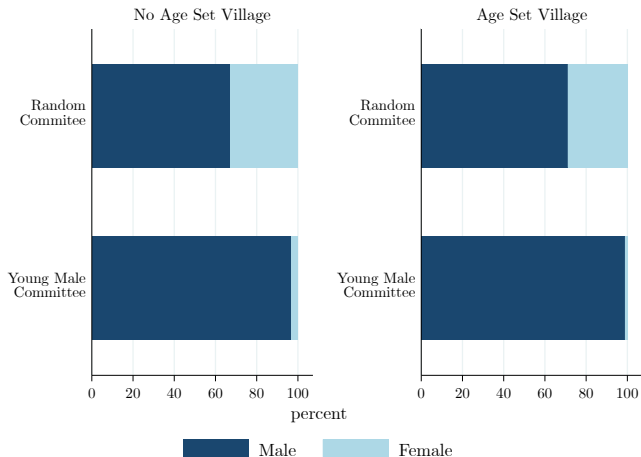
Committee-selection meetings



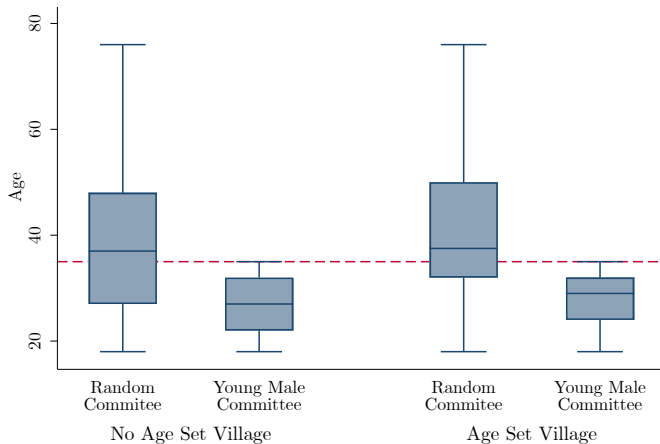
Committees



Committee gender by age set and committee type



Committee age by treatment status and age set



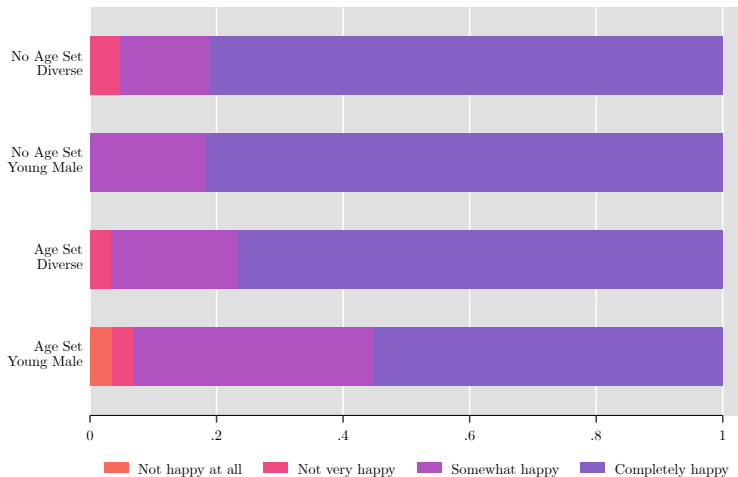
Chief's reaction to the committee



- The enumerator is instructed: “Pay attention to how the chief reacts to the list of selected volunteers.”
- The enumerator is then asked: “**How happy did the Chief seem?** Completely happy, somewhat happy, not very happy, not at all happy?”

Chief's reaction to the committee

"How happy did the Chief seem?"



Estimating differential effects of empowering young men

$$y_{i,v,t} = \beta_1 \mathbb{1}_v^{YoungMale} + \beta_2 \mathbb{1}_v^{AgeSet} + \beta_3 \mathbb{1}_v^{AgeSet} \times \mathbb{1}_v^{YoungMale} \\ + \mathbf{X}'_{i,t} \Omega + \mathbf{X}'_v \Phi + \delta_t + \varepsilon_{i,v,t}$$

- i indexes respondents, v villages (102 in all), and t project rounds (1, 2).
- $y_{i,v,t}$ denotes an outcome of interest:
 - Committee behavior (e.g., role and intensity of activities).
 - Chief behavior (e.g., organization, missing money).
 - Villager outcomes (e.g., receipt of products).
- $\mathbb{1}_v^{YoungMale}$: indicator for a young-male committee (half of villages).
- $\mathbb{1}_v^{AgeSet}$: indicator for the presence of age sets in the village.
- $\mathbf{X}'_{i,t}$: respondent-level controls (gender, age, age squared).
- \mathbf{X}'_v : village-level controls (initial population, distance to Gemena).
- Standard errors are clustered at the village level.
- **Primary question: Do young male committees perform better in age-set villages, $\beta_3 > 0$?**

Committee member task index, 0-6: OLS estimates

	Dependent Variable: <i>Oversight Task index [0-6]</i>			
	<i>Committee Members</i>		<i>Chiefs</i>	
	(1)	(2)	(3)	(4)
Age Set × Young Male Committee	0.772** (0.295)	0.696** (0.292)	0.261 (0.398)	0.316 (0.377)
Age Set	-0.028 (0.216)	0.002 (0.207)	0.109 (0.309)	0.205 (0.294)
Young Male Committee	-0.257 (0.257)	-0.150 (0.260)	-0.216 (0.310)	-0.328 (0.284)
Observations	1,110	1,110	202	202
Villages	102	102	102	102
Mean Dep. Var.	3.068	3.068	4.411	4.411
Total effect	0.488	0.548	0.154	0.193
SE	0.208	0.202	0.335	0.309
Village Controls	N	Y	N	Y

Notes: All analyses include a year fixed effect. *Committee Tasks Index* is the sum of indicators for each committee task's indicator (organize meeting, organize distribution, distribute products, meet peasants, meet committee and keep records) and it takes values [0-6]. *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Execution of tasks by committee members 1: Estimates

	Dependent Variable: Committee tasks:					
	Organize meeting [0/1]		Organize distribution [0/1]		Distribute products [0/1]	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	0.155** (0.061)	0.157** (0.062)	0.194* (0.103)	0.165 (0.102)	0.241** (0.110)	0.213* (0.110)
Age Set	0.013 (0.040)	0.022 (0.040)	0.019 (0.073)	0.048 (0.074)	0.028 (0.081)	0.049 (0.080)
Young Male Committee	-0.045 (0.041)	-0.049 (0.042)	-0.090 (0.086)	-0.055 (0.087)	-0.159 (0.097)	-0.123 (0.099)
Observations	1,110	1,110	1,110	1,110	1,110	1,110
Villages	102	102	102	102	102	102
Mean Dep. Var.	0.150	0.150	0.595	0.595	0.748	0.748
Total effect	0.123	0.129	0.123	0.158	0.110	0.139
SE	0.053	0.052	0.076	0.077	0.073	0.073
Village Controls	N	Y	N	Y	N	Y

Notes: All analyses include a year fixed effect. *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Execution of tasks by committee members 2: Estimates

	Dependent Variable: Committee tasks:					
	Meet peasants [0/1]		Meet chief [0/1]		Keep records [0/1]	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	0.114*	0.108*	0.036	0.025	0.032	0.028
	(0.062)	(0.062)	(0.070)	(0.070)	(0.093)	(0.094)
Age Set	-0.001	-0.010	0.001	-0.009	-0.087	-0.097
	(0.047)	(0.047)	(0.053)	(0.055)	(0.067)	(0.068)
Young Male Committee	-0.011	0.001	0.040	0.059	0.007	0.016
	(0.049)	(0.049)	(0.055)	(0.056)	(0.071)	(0.071)
Observations	1,110	1,110	1,110	1,110	1,110	1,110
Villages	102	102	102	102	102	102
Mean Dep. Var.	0.529	0.529	0.595	0.595	0.452	0.452
Total effect	0.103	0.099	0.077	0.075	-0.048	-0.053
SE	0.043	0.043	0.056	0.058	0.066	0.066
Village Controls	N	Y	N	Y	N	Y

Notes: All analyses include a year fixed effect. *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

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Mean Dep. Var.	3.068	3.068	4.411	4.411
Total effect	0.488	0.548	0.154	0.193
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Village Controls	N	Y	N	Y

Notes: All analyses include a year fixed effect. *Committee Tasks Index* is the sum of indicators for each committee task's indicator (organize meeting, organize distribution, distribute products, meet peasants, meet committee and keep records) and it takes values [0-6]. *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Task undertaken by chief 1: Estimates

	Dependent Variable: Chief tasks:					
	Organize meeting [0/1]		Organize distribution [0/1]		Distribute products [0/1]	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	0.307** (0.138)	0.317** (0.137)	-0.058* (0.034)	-0.051* (0.029)	-0.119 (0.134)	-0.079 (0.131)
Age Set	-0.046 (0.101)	-0.014 (0.096)	0.024 (0.024)	0.023 (0.021)	0.019 (0.102)	0.037 (0.105)
Young Male Committee	-0.146 (0.101)	-0.171* (0.100)	0.023 (0.023)	0.014 (0.019)	0.098 (0.100)	0.032 (0.099)
Observations	202	202	202	202	202	202
Villages	102	102	102	102	102	102
Mean Dep. Var.	0.322	0.322	0.985	0.985	0.787	0.787
Total effect	0.115	0.133	-0.011	-0.015	-0.003	-0.010
SE	0.107	0.100	0.034	0.031	0.103	0.103
Village Controls	N	Y	N	Y	N	Y

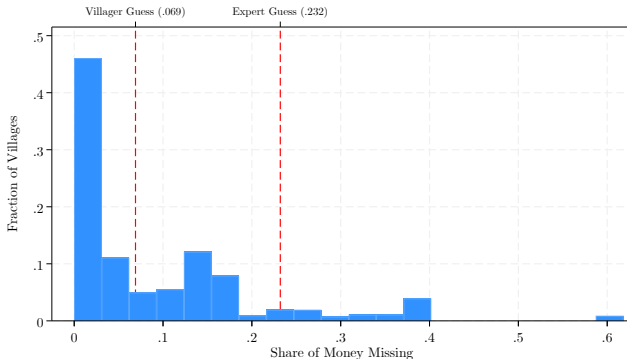
Notes: All analyses include a year fixed effect. *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Task undertaken by chief 2: Estimates

	Dependent Variable: Chief tasks:					
	Meet peasants [0/1]		Meet committee [0/1]		Keep records [0/1]	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	0.090 (0.142)	0.051 (0.140)	0.077 (0.136)	0.103 (0.132)	-0.036 (0.056)	-0.024 (0.053)
Age Set	0.024 (0.103)	0.056 (0.100)	0.058 (0.096)	0.072 (0.095)	0.031 (0.037)	0.031 (0.037)
Young Male Committee	-0.129 (0.112)	-0.081 (0.114)	-0.063 (0.109)	-0.106 (0.106)	0.001 (0.045)	-0.017 (0.040)
Observations	202	202	202	202	202	202
Villages	102	102	102	102	102	102
Mean Dep. Var.	0.594	0.594	0.762	0.762	0.960	0.960
Total effect	-0.016	0.025	0.072	0.069	-0.004	-0.010
SE	0.104	0.105	0.102	0.097	0.043	0.041
Village Controls	N	Y	N	Y	N	Y

Notes: All analyses include a year fixed effect. *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Distribution of share of money missing



- Very little money went missing – less than 9%.
 - Mean expert prediction was 23% ($N = 171$).
 - Mean villager prediction was 7% ($N = 1,625$).
 - Villagers' predictions strongly correlate with amount missing.
- Treatments of interest do not affect the guess.

Amount of missing money: Estimates

	Dependent Variable: Money missing (share and amount)			
	(1)	(2)	(3)	(4)
	Share money missing [0/1]		Money missing (CF) [0-165,000]	
Age Set × Young Male Committee	0.02 (0.05)	0.02 (0.05)	3278.47 (7984.88)	3303.90 (7941.84)
Age Set	-0.02 (0.03)	-0.03 (0.03)	-3376.43 (4759.54)	-4263.32 (4955.23)
Young Male Committee	0.01 (0.04)	0.02 (0.04)	2255.84 (6608.77)	2483.88 (6407.06)
Observations	204	204	204	204
Villages	102	102	102	102
Mean Dep. Var.	0.09	0.09	14578.43	14578.43
Total effect	0.01	0.01	2157.88	1524.46
SE	0.03	0.03	4931.43	4978.10
Village Controls	N	Y	N	Y

Notes: All analyses include a year fixed effect. *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets (baseline measure). *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Standard errors clustered at the village level. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) (* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$).

Product distribution: Any receipt of products

- We see near-universal distribution of (at least some) products.

	Dependent Variable: <i>Received Any Product [0/1]</i>			
	<i>Villagers</i>		<i>Committee Members</i>	
	(1)	(2)	(3)	(4)
Age Set × Young Male Committee	-0.053 (0.037)	-0.040 (0.035)	0.019 (0.017)	0.019 (0.018)
Age Set	0.004 (0.032)	0.003 (0.029)	-0.009 (0.012)	-0.007 (0.012)
Young Male Committee	0.043 (0.030)	0.024 (0.030)	-0.003 (0.015)	-0.005 (0.015)
Observations	3,121	3,121	1,112	1,112
Villages	102	102	102	102
Mean Dep. Var.	0.946	0.946	0.989	0.989
Total effect	-0.006	-0.013	0.006	0.007
Village Controls	N	Y	N	Y

Notes: All analyses include a year fixed effect. *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

No effects on health (6+ months later)

- Consistent with near-universal distribution, there are no differential health effects at endline.

	Dependent Variable:			
	<i>Diarrhea, Vomiting, or Stomach Pain (AES)</i>			
	Share HH Members		Share Children under 5	
	(1)	(2)	(3)	(4)
Age Set × Young Male Committee	0.029 (0.072)	0.050 (0.068)	-0.059 (0.048)	-0.055 (0.049)
Age Set	-0.030 (0.053)	-0.019 (0.050)	0.026 (0.035)	0.035 (0.039)
Young Male Committee	0.011 (0.059)	-0.022 (0.055)	0.049 (0.034)	0.043 (0.035)
Observations	3,133	3,133	2,955	2,955
Villages	102	102	102	102
Mean Dep. Var.	0.000	0.000	0.000	0.000
SD	1.000	1.000	1.000	1.000
Village and Individual Controls	N	Y	N	Y

Notes: Reports Average Effect Size (AES) estimates. All analyses include a year fixed effect. *Individual Controls* include: an indicator variable equal to 1 if villager is a male, age variable and *age*². *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Standard errors clustered at village level.) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Who receives more products? Estimates

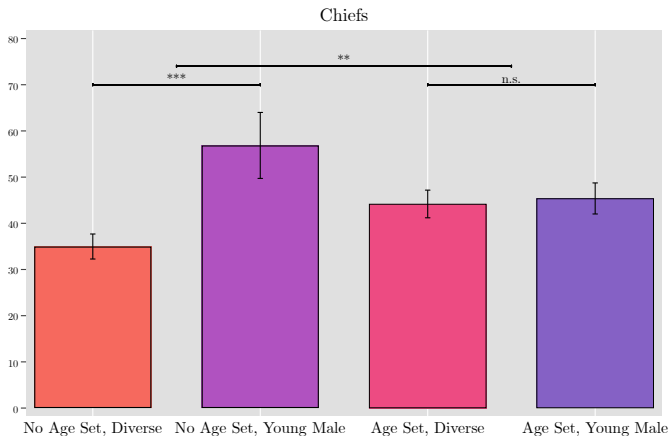
- Young-male committees result in chiefs getting less in villages with age sets.

	Dependent Variable: Number of All Products Received by...							
	Villagers		Committee Members		Chiefs		Product Accounted For	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age Set × Young Male Committee	-6.756*	-4.658	-5.345	-3.151	-20.689**	-18.003**	-0.030	-0.005
	(3.752)	(3.103)	(5.073)	(4.506)	(9.633)	(8.996)	(0.051)	(0.046)
Age Set	1.265	1.164	1.597	2.023	9.217*	11.649**	0.040	0.035
	(2.812)	(2.315)	(3.149)	(2.752)	(4.788)	(4.523)	(0.030)	(0.026)
Young Male Committee	5.527*	2.401	7.837*	4.408	21.875***	17.139**	0.080***	0.043*
	(2.857)	(2.504)	(4.258)	(3.853)	(8.198)	(7.794)	(0.028)	(0.025)
Observations	3,121	3,121	1,112	1,112	202	202	204	204
Villages	102	102	102	102	102	102	102	102
Mean Dep. Var.	19.985	19.985	29.411	29.411	45.312	45.312	0.217	0.217
Total effect	0.036	-1.094	4.090	3.280	10.403	10.785	0.089	0.074
Village Controls	N	Y	N	Y	N	Y	N	Y

Notes: All analyses include a year fixed effect. Village Controls include: estimated number of households in village at baseline and distance to Gemena. Age Set is an indicator variable equal to 1 if a village has age sets, Young Male Committee is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

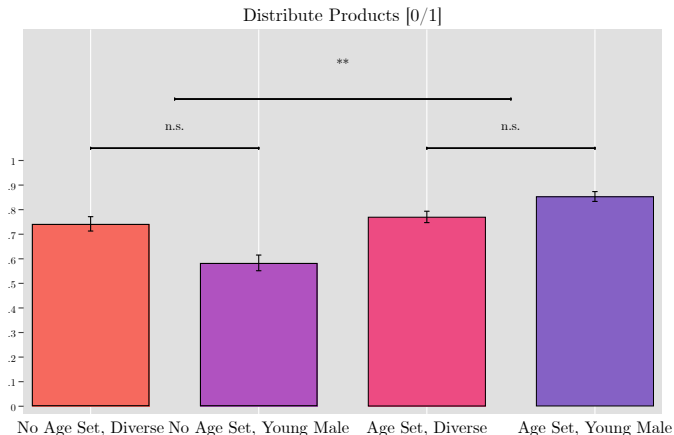
Number of products chief received: Raw data

- Due to young-male committees not having sufficient power in villages without age sets?



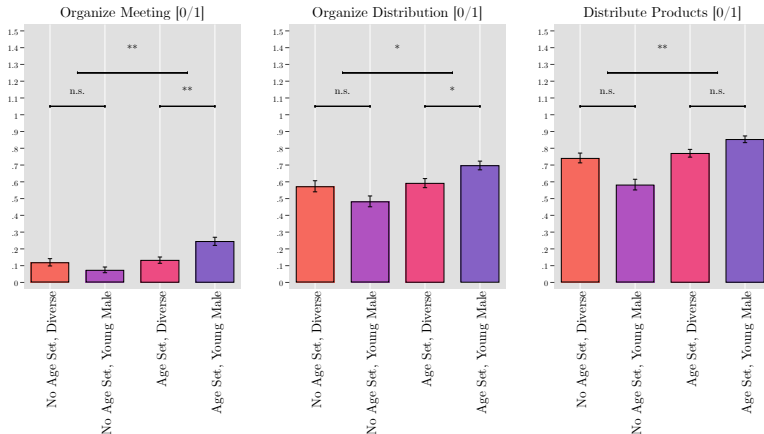
Notes: The figures display the means for the number of products received by the Chief. The vertical brackets show ± 1 standard errors of the mean. At the top of the figure, we report tests across treatment status (bottom row of brackets) and of the interaction (top row). Statistical significance levels are shown as n.s. for not statistically significant, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This mirrors the previous 'upstream' committee effects



Notes: The figures display the means for the committee's tasks indicators by treatment status and age set practices. The vertical brackets show ± 1 standard errors of the mean. At the top of the figure, we report tests across treatment status (bottom row of brackets) and of the interaction (top row). Statistical significance levels are shown as n.s. for not statistically significant, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

This mirrors the previous 'upstream' committee effects



Notes: The figures display the means for the committee's tasks indicators by treatment status and age set practices. The vertical brackets show ± 1 standard errors of the mean. At the top of the figure, we report tests across treatment status (bottom row of brackets) and of the interaction (top row). Statistical significance levels are shown as n.s. for not statistically significant, * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Which villagers get more products? Those closer to chief?

	Dependent Variable: Number of tablets (all products)					
	All Respondents		Respondents Not close to Chief		Respondents Close to Chief	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	-6.756*	-4.658	-4.381	-1.988	-9.740**	-7.739**
	(3.752)	(3.103)	(3.280)	(2.674)	(4.487)	(3.755)
Age Set	1.265	1.164	0.808	-0.014	2.088	2.473
	(2.812)	(2.315)	(2.510)	(2.154)	(3.427)	(2.766)
Young Male Committee	5.527*	2.401	3.406	-0.114	7.820**	5.187*
	(2.857)	(2.504)	(2.512)	(2.157)	(3.344)	(3.035)
P-value: Equality of Age Set x Young Male Committee coefficients	.	.	0.096	0.033	.	.
Observations	3,121	3,121	1,455	1,455	1,661	1,661
Villages	102	102	102	102	102	102
Mean Dep. Var.	19.985	19.985	17.489	17.489	22.188	22.188
Total effect	0.036	-1.094	-0.167	-2.116	0.168	-0.079
Village Controls	N	Y	N	Y	N	Y

Notes: All analyses include a year fixed effect. Villagers close to chief report being close in a level 3 or above from a [1-5] scale. *Individual Controls* include: an indicator variable equal to 1 if villager is a male, age variable, *age*². *Village Controls* include: estimated number of households in village at baseline and distance to Gemena. Age Set is an indicator variable equal to 1 if a village has age sets, *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Standard errors clustered at village level. Total effect is the sum of the three coefficients (Age Set × Young Male Committee, Age Set and Young Male Committee). The p-value is from a test of equality of the Age Set × Young Male Committee coefficients across sub-groups. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Which villagers get more products? Wealthier?

	Dependent Variable: Number of tablets (all products)					
	All Respondents		Respondents Wealth ≤ 2		Respondents Wealth > 2	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set \times Young Male Committee	-6.756*	-4.658	-4.813	-3.235	-18.648***	-12.655**
	(3.752)	(3.103)	(3.418)	(2.915)	(6.330)	(5.306)
Age Set	1.265	1.164	-0.038	0.112	7.769	5.819
	(2.812)	(2.315)	(2.534)	(2.220)	(4.701)	(3.528)
Young Male Committee	5.527*	2.401	4.324	1.643	12.884***	7.049
	(2.857)	(2.504)	(2.745)	(2.439)	(4.512)	(4.382)
 P-value: Equality of Age Set \times Young Male Committee coefficients	.	.	0.012	0.049	.	.
 Observations	3,121	3,121	2,596	2,596	525	525
Villages	102	102	102	102	97	97
Mean Dep. Var.	19.985	19.985	18.780	18.780	25.939	25.939
Total effect	0.036	-1.094	-0.527	-1.480	2.005	0.213
Village Controls	N	Y	N	Y	N	Y

Notes: All analyses include a year fixed effect. Individual Controls include: an indicator variable equal to 1 if villager is a male, age variable and age². Village Controls include: estimated number of households in village at baseline and distance to Gemena. Age Set is an indicator variable equal to 1 if a village has age sets, Young Male Committee is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Standard errors clustered at village level. Wealth is measured on a scale from [1-5] based on respondents appearance. Total effect is the sum of the three coefficients (Age Set \times Young Male Committee, Age Set and Young Male Committee). The p-value is from a test of equality of the Age Set \times Young Male Committee coefficients across sub-groups. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

A final measure of success

- As an aggregate measure of success, we ask how close groups feel to each other after the experiment is completed.
 - 1 Committee members' closeness to:
 - Villagers
 - Other committee members
 - Chief
 - 2 Villagers' closeness to:
 - Other villagers
 - Committee members
 - Chief
 - 3 Chief's closeness to:
 - Villagers
 - Committee members

Committee members' closeness to others

- At endline, in age-set villages, young-male committee members feel closer to each other, villagers, but not the chief.

	Dependent Variable: Committee member closeness to [...]:					
	Other committee members [0-5]		Chief [0-5]		Villagers [0-5]	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	0.234** (0.099)	0.245** (0.096)	0.037 (0.150)	0.046 (0.152)	0.178* (0.105)	0.202** (0.102)
Age Set	-0.123 (0.076)	-0.101 (0.072)	0.300*** (0.096)	0.292*** (0.101)	-0.055 (0.081)	-0.053 (0.078)
Young Male Committee	-0.012 (0.077)	-0.035 (0.074)	0.058 (0.127)	0.045 (0.128)	-0.067 (0.081)	-0.104 (0.078)
Observations	1,108	1,108	1,111	1,111	1,111	1,111
Villages	102	102	102	102	102	102
Mean Dep. Var.	3.918	3.918	3.680	3.680	3.701	3.701
Total Effect	.099	.109	.394	.383	.055	.046
SE	.075	.074	.09	.093	.079	.075
Village Controls	N	Y	N	Y	N	Y

Notes: All analyses include a year fixed effect. Village Controls include: Estimated number of households in village at baseline and distance to Gemena. Age Set is an indicator variable equal to 1 if a village has age sets (baseline measure). Young Male Committee is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Standard errors are clustered at the village level. Total effect is the sum of the three coefficients (Age Set × Young Male Committee, Age Set and Young Male Committee) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Villagers' closeness to others

- At endline, in age-set villages with young-male committees, villagers feel closer to everyone, especially the chief.

	Dependent Variable:					
	Closeness to Villagers		Closeness to Committee Members		Closeness to Chief	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	0.188 (0.125)	0.218* (0.119)	0.079 (0.138)	0.125 (0.128)	0.220 (0.140)	0.254* (0.133)
Age Set	-0.066 (0.088)	-0.052 (0.083)	-0.106 (0.099)	-0.094 (0.091)	-0.082 (0.105)	-0.073 (0.100)
Young Male Committee	-0.085 (0.107)	-0.134 (0.099)	0.001 (0.106)	-0.072 (0.100)	-0.129 (0.107)	-0.181* (0.099)
Observations	3,128	3,128	3,097	3,097	3,129	3,129
Villages	102	102	102	102	102	102
Mean Dep. Var.	3.719	3.719	3.309	3.309	3.437	3.437
Village Controls	N	Y	N	Y	N	Y

Notes: Standard errors clustered at the village level. Age set is an indicator variable equal to 1 if the respondent originates from a village that has age sets according to village notables and the village sage. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Chief closeness to others

- At endline, in age-set villages with young-male committees, chiefs feel (slightly) closer to villagers but not at all to committee members.

	Dependent Variable: Chief closeness to ... (0-5):			
	Villagers		Committee members	
	(1)	(2)	(3)	(4)
Age Set × Young Male Committee	0.173 (0.177)	0.200 (0.183)	-0.030 (0.221)	-0.051 (0.221)
Age Set	-0.019 (0.104)	-0.051 (0.106)	0.159 (0.141)	0.214 (0.135)
Young Male Committee	-0.356** (0.138)	-0.387*** (0.145)	-0.208 (0.167)	-0.194 (0.172)
Observations	202	202	202	202
Villages	102	102	102	102
Mean Dep. Var.	4.218	4.218	3.955	3.955
Total Effect	-.202	-.237	-.08	-.031
SE	.116	.117	.159	.162
Village Controls	N	Y	N	Y

Notes: All analyses include a year fixed effect. *Village Controls* include: Estimated number of households in village at baseline and distance to Gemena. *Age Set* is an indicator variable equal to 1 if a village has age sets (baseline measure). *Young Male Committee* is an indicator equal to 1 if the village was randomly assigned to have a committee of young men. Standard errors are clustered at the village level. Total effect is the sum of the three coefficients (*Age Set × Young Male Committee*, *Age Set* and *Young Male Committee*) * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Potential mechanisms

Possible reasons for the differential effects of young-male committees in age-set villages:

- 1 **Political norms:** Age-set villages have stronger norms of younger men checking the power of the older political elite. (yes)
- 2 **Committee's connection to the chief:** In age-set villages (because ties are horizontal), young-male committee members are less connected to the chief. (yes)
- 3 **Initiated members:** In age-set villages, young-male committees have more members who have been initiated, potentially together. (no)
- 4 **Misc. characteristics of the committee:** In age-set villages, young-male committees might be different in other ways. (no)

Mechanisms 1: Political norms

Sample: 12 villagers per village at baseline

- Age-set villagers are more likely to believe that elders should be in charge (and they are).
- But they are less trusted and are supported less by the young.

	Dependent Variable:			
	<i>Elders Should be Responsible for Decisions</i>	<i>Relative Power Elders vs. Young</i>	<i>Trust in Elders</i>	<i>Chief Support from Young vs. Elders</i>
	(1)	(2)	(3)	(4)
Ageset	0.484*** (0.147)	0.411** (0.168)	-0.174*** (0.064)	-0.105** (0.048)
Observations	1,222	1,201	1,205	1,207
Villages	102	102	102	102
Mean Dep. Var.	2.98	3.09	2.95	-0.11

Notes: Standard errors clustered at the village level. Regressions control for respondents age, age squared, and sex. *Ageset* is an indicator variable equal to 1 if the respondent originates from a village that has agesets according to village notables and the village sage. The dependent variables are defined as follows. *Elders Should be Responsible for Decisions* measures whether respondents believe that older persons should be responsible for making decisions in the village on a scale from 1 to 5, ranging from strongly disagree to strongly agree. *Relative Power Elders vs. Young* is an index of the perceived power differential between older and younger members on a scale from 1 to 5, ranging from young men have a lot more political power to elder men have a lot more political power. *Trust in Elders* measures the level of trust in older individuals on a 1 to 4 scale, ranging from no trust to complete trust. *Chief Support from Young vs. Elders* is a categorical measure assessing whether village chiefs receive relatively more support from older persons relative to younger ones and it ranges from -4 to 4, where -4 denotes only support from young villagers and 4 denotes support only from elders. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Mechanisms 2: Committee's connection to the chief

- In age-set villages, young-male committees are less likely to have members who are friends with the chief.

	Dependent Variable: <i>Has Committee Member as Friend [0/1]</i>					
	Villagers		Committee Members		Village Chiefs	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	-0.065 (0.055)	-0.054 (0.053)	0.004 (0.102)	0.041 (0.100)	-0.297 (0.195)	-0.243 (0.191)
Age Set	-0.032 (0.037)	-0.020 (0.040)	-0.019 (0.071)	-0.016 (0.076)	0.148 (0.134)	0.168 (0.126)
Young Male Committee	0.103** (0.044)	0.083* (0.044)	0.086 (0.067)	0.030 (0.067)	0.048 (0.151)	-0.039 (0.150)
Observations	3,374	3,374	465	465	101	101
Villages	102	102	102	102	101	101
Mean Dep. Var.	0.249	0.249	0.378	0.378	0.644	0.644
Individual Controls	Y	Y	N	N	N	N
Village Controls	N	Y	N	Y	N	Y

Mechanisms 3: Initiated members

- In age-set villages, young male committees (relative to diverse committees) do not have more initiated members.

	Dependent Variable:					
	Age Set Initiation (0/1)		Initiation with Committee Member (0/1)		Initiation with Chief (0/1)	
	(1)	(2)	(3)	(4)	(5)	(6)
Age Set × Young Male Committee	0.003 (0.093)	0.009 (0.090)	0.028 (0.040)	0.034 (0.041)	-0.005 (0.030)	0.004 (0.029)
Age Set	0.210*** (0.061)	0.176*** (0.062)	0.047*** (0.015)	0.044** (0.018)	0.065*** (0.019)	0.056*** (0.020)
Young Male Committee	-0.059 (0.066)	-0.059 (0.066)	0.033 (0.023)	0.025 (0.022)	0.023 (0.015)	0.012 (0.016)
Observations	1,114	1,114	1,114	1,114	1,165	1,165
Villages	102	102	102	102	102	102
Mean Dep. Var.	0.338	0.338	0.056	0.056	0.058	0.058
Village Controls	N	Y	N	Y	N	Y

Notes: Standard errors clustered at the village level. Regressions control for round fixed effects. Age set is an indicator variable equal to 1 if the respondent originates from a village that has age sets according to village notables and the village sage. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Mechanism 4: Misc. characteristics of the committee

- No evidence of different characteristics of young-male committees (relative to diverse) in age-set villages.

	Dependent Variable:							
	Male		Age		Secondary or more (0/1)		Years of Education	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Age Set × Young Male Committee	-0.044 (0.062)	-0.049 (0.060)	0.707 (1.751)	0.577 (1.817)	0.095 (0.091)	0.091 (0.092)	0.740 (0.672)	0.655 (0.667)
Age Set	0.042 (0.059)	0.039 (0.058)	1.142 (1.521)	1.158 (1.567)	0.037 (0.059)	0.026 (0.063)	0.143 (0.508)	0.021 (0.546)
Young Male Committee	0.308*** (0.051)	0.318*** (0.049)	-11.744*** (1.356)	-11.552*** (1.396)	0.147** (0.074)	0.156** (0.077)	1.596*** (0.526)	1.774*** (0.551)
Observations	1,112	1,112	1,112	1,112	1,112	1,112	1,104	1,104
Villages	102	102	102	102	102	102	102	102
Mean Dep. Var.	0.837	0.837	37.444	37.444	0.562	0.562	7.703	7.703
Village Controls	N	Y	N	Y	N	Y	N	Y

Notes: Standard errors clustered at the village level. Age set is an indicator variable equal to 1 if the respondent originates from a village that has age sets according to village notables and the village sage. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Conclusions

- Have provided evidence that the local cultural context matters for the efficacy of a fairly standard program.
 - For many outcomes, the effects of committee composition depend on whether or not age sets are present.
- Age sets mattered for the effects of young-male committees on:
 - Participation and activities of the committee.
 - More equal distribution of product delivery.
 - Cohesion (closeness) within the village after intervention.
- It did not matter for:
 - Minimal delivery of products (nearly all received some).
 - Missing money (little missing).
 - Health outcomes (6+ months later).
- Empowering young men, the aim of other recent efforts, is ineffective (at best) or harmful (at worst) in villages without age sets.
 - The presence of age sets is critical for the potential success of this strategy.