Polygynous Neighbors, Excess Men, and Intergroup Conflict in Rural Africa

– Online Appendix –

1 Data Validity and Persistence

Kanazawa (2009) utilizes the coding of polygyny by Kanazawa and Still (1999), which Gleditsch et al. (2011) replicate.[1] Both base their coding of polygyny on the Encyclopedia of World Cultures (EWC) (Levinson 1991–95), which has likely led to an underestimation of the number of polygynous ethnic groups. A closer look at the data of Gleditsch et al. (2011)[2] reveals that the independent variable polygyny is highly zero-inflated, which does not resonate with the extant sociological, economic, and anthropological literature (cf. Fenske 2015). The authors analyze 557 groups in 155 countries in the time period between 1946 and 2005.[3,4] In 2002, the year in which their number of groups peaks, only six out of 192 African ethnic groups are coded as "polygynous."[5]

We compare the data with other quantitative datasets measuring polygyny. One of the most comprehensive sources, which is also the one we rely on in our analysis, is Murdock's (1969) Ethnographic Atlas (EA) of more than 800 African ethnic groups. It reports that 80 percent of ethnic groups in Africa practiced general polygyny before European colonization. Dalton and Leung (2014, 613) test the persistence of polygyny as coded in Murdock's EA by using a pooled sample of 238,075 respondents from the Demographic and Health Survey (DHS) in Africa and find that polygyny rates are significantly higher in groups that were coded as polygynous by Murdock (1969) relative to those coded monogamous. In western Africa, Dalton and Leung (2014) find rates of female respondents living in polygynous marriages of up to 44 percent in Guinea, 21 percent in Togo, and 25 percent in Benin. These figures not only suggest that polygyny is a persistent or "sticky" institution, which remains

[1] As Kanazawa did not provide the data or coding rules to Gleditsch et al. (2011), or to the authors of this article, Gleditsch et al (2011) had to replicate the coding of Kanazawa as well. As only the data of Gleditsch et al. is available, we can only discuss their coding in more detail.

[2] Kanazawa (2009) uses polygyny scores originally coded for Kanazawa and Still (1999), who aggregate polygyny to the state level. Hence his figures may divert from those of Gelditsch et al. For a closer examination and discussion of Kanazawa's (2009) polygyny indicator, see Gleditsch et al. (2011).

[3] Gleditsch et al.'s (2011) replication dataset is available at: http://privatewww.essex.ac.uk/~ksg/publ.html

[4] Except for missing values, the dummy variably polygyny is time-invariant for all groups in Gleditsch et al.'s (2011) dataset.

[5] Of these, 173 are coded as non-polygynous and the rest are missing.

prevalent today, but also illustrate that polygyny can create severe competition among men.[6] Furthermore, in a representative socioeconomic survey in eastern DR Congo conducted by one of the authors of this article in April 2017, 13 percent of male respondents reported having more than one wife.

These different, independent sources suggest a much higher rate of polygyny than what Gleditsch et al.'s (2011) polygyny variable reflects. Random examples support our suspicion that the coding falsely led to an exaggerated zero-inflation of polygyny. For instance, the Zulu in South Africa, the Dinka in South Sudan, and the Tiv in Nigeria are coded as not practicing polygyny, although they are documented as doing so (cf. Pinaud 2014, Gwaza 2014, Møller and Welch 1990). This low number of polygynous groups in Gleditsch et al.'s (2011) analysis relative to the prevalence of polygyny across the African continent indicated by other data sources creates doubts about the reliability of the analysis.

2 Coding of Polygyny Variable

We rely on Nathan Nunn's dataset of the EA, but newly coded the polygyny variable. The reason for that is that in Nunn's dataset, Murdock's polygyny variable "Column 14: Family Organization" (p. 155, 156) misses some of Murdock's specifications. This applies for the three categories E, F, and G, which do not specify monogamy or polygyny, but rather the extent of the family:

Column 14: Family Organization. The prevailing form of domestic or familial organization is indicated by the following symbols:

E Large extended families, i.e., corporate aggregations of smaller family units occupying a single dwelling or a number of adjacent dwellings and normally embracing the families of procreation of at least two siblings or cousins in each of at least two adjacent generations.
F Small extended families, i.e., those normally embracing the families of procreation of only one individual in the senior generation but of at least two in the next generation. Such families usually dissolve on the death of the head.
G Minimal extended or "stem" families, i.e., those consisting of only two related families of procreation (disregarding polygamous unions), particularly of adjacent generations.
M Independent nuclear families with monogamy.
N Independent nuclear families with occasional or limited polygyny.
O Independent polyandrous families.
P Independent polygynous families, where polygyny is general and not reported to be preferentially sororal, and where co-wives are not reported to occupy separate dwellings or apartments.
Q The same as P except that co-wives typically occupy separate quarters.
R Independent polygynous families, where polygyny is common and preferentially sororal, and where co-wives are not reported to occupy separate quarters.
S The same as R except that co-wives typically occupy separate quarters.

[6] Their sample does not, however, cover all countries. Countries at war are not included.

For these three specifications (E, F, G) Murdock coded additional lower-case letters to indicate the monogamy/polygyny status which were not included in Nunn's dataset:

> Lower-case letters from m to s, following E, F, or G, indicate the marital composition of the component familial units in extended families, e.g., Gm for stem families with monogamy.

We therefore recoded the variable to capture the monogamy/polygyny status for groups coded as E, F, or G by looking up the lower-case indicators (p. 170-233). For instance, on page 186, the table below shows that column 14 frequently adds these lower-case specifiers to indicate the monogamy/polygyny status, which can be referenced from column 14 of the coding scheme. Below, the red-marked values resulted that groups with "q" and "s" were coded as "polygynous", but groups with an "m" as monogamous.

TABLE A. *Contin*

1	3	7	12	14
Aj2	119: Masai	01090	B	Q
Aj3	120: Nuer	00154	B	Fq
Aj4	219: Lango	01045	B	Gq
Aj5	220: Turkana	21034	B	Fq
Aj6	318: Luo	01126	B	Fs
Aj7	319: Nandi	00055	B	N
Aj8	354: Bari	01045	Bs	Q
Aj9	648: Kipsigis	01045	B	Q
Aj11	677: Dinka	01153	B	Eq
Aj12	678: Lotuko	02134	B	Q
Aj15	1065: Kuku	01036	Bs	Q
Aj16	1066: Mondari	01225	B	N
Aj17	1067: Alur	01225	B	Fq
Aj18	1068: Bodi	02053	B	Gq
Aj19	1069: Didinga	02044	Bs	Q
Aj20	1070: Suri	01135	B	Q
Aj21	1071: Jie	00046	B	Eq
Aj23	1073: Plains Suk	01063	B	Q
Aj24	1074: Topotha	11053	B	Q
Aj26	1076: Hill Suk	01036	B	Q
Ca1	18: Konso	00046	O	Gq
Ca2	19: Somali	00091	B	Fq
Ca3	121: Tigrinya	00037	D	M
Ca4	221: Iraqw	00055	B	N
Ca5	320: Bisharin	00082	B	N
Ca6	649: Afar	10180	B	Fq
Ca7	679: Amhara	00136	O	Em

3 Summary Statistics

Table A1. Summary Statistics

	mean	sd	min	max	count
ACLED	6.110559	23.74971	0	428	805
ACLED, 50km buffer	4.626087	16.17621	0	268	805
UCDP-GED	3.643478	38.79774	0	1060	805
UCDP-GED, 50km buffer	2.650932	23.44966	0	610	805
Polygynous neighbors	.8011141	.296843	0	1	805
Observed group: polygynous	.7987578	.4011779	0	1	805
Land area (log)	2.722613	1.27114	-1.44693	6.405068	805
Population (log)	11.56545	1.617259	4.069916	17.06716	805
Distance to coast	606.0628	432.8517	.216258	1721.298	805
Mean elevation	.6247487	.4302845	.0055083	2.029194	805
Agricultural suitability	.4095921	.2405186	.0013636	.9785454	805
Malaria stability index	.7515172	.359914	0	1	805
Precolonial kingdom	.3801242	.4857189	0	1	805
Distance to empires	.1723426	.2273959	0	1.23591	805
Major city in AD 1400	.0385093	.1925419	0	1	805
Precolonial conflict	.4028637	.3435089	0	2.241172	805
Slave exports by land (log)	1.600163	2.599606	0	10.62245	805
Muslims (%)	43.71484	33.30388	.4	100	805
Intense agriculture	.3167702	.4655062	0	1	805

4 Robustness Checks

Table A2. Main Models including Spatial Lags and Region Fixed Effects

	(1) ACLED	(2) ACLED 50km buffer	(3) UCDP-GED	(4) UCDP-GED 50km buffer
Polygynous neighbors	1.84***	1.65***	2.20***	2.01***
	(0.50)	(0.46)	(0.60)	(0.51)
Observed group: polygynous	-0.39	-0.56*	0.19	-0.07
	(0.28)	(0.27)	(0.44)	(0.44)
Land area (log)	0.35***	0.21**	0.41***	0.31**
	(0.08)	(0.07)	(0.12)	(0.12)
Population (log)	0.59***	0.63***	0.71***	0.69***
	(0.05)	(0.05)	(0.14)	(0.13)
Precolonial conflict	0.79*	0.89*	1.47**	1.35***
	(0.36)	(0.36)	(0.46)	(0.40)
Distance to coast	0.00***	0.00***	0.00***	0.00***
	(0.00)	(0.00)	(0.00)	(0.00)
Mean elevation	-0.43	-0.83*	-0.55	-0.89
	(0.35)	(0.36)	(0.67)	(0.61)
Agricultural suitability	0.89+	1.08*	2.63***	2.68***
	(0.46)	(0.46)	(0.56)	(0.54)
Malaria stability index	-0.61	-0.60	-3.23**	-3.19***
	(0.46)	(0.42)	(1.16)	(0.89)
Precolonial kingdom	-0.40*	-0.35*	-0.80*	-0.58+
	(0.17)	(0.17)	(0.33)	(0.35)
Distance to empires	-0.24	-0.58	-0.12	0.04
	(0.50)	(0.59)	(1.05)	(0.83)
Major city in AD 1400	-0.30+	-0.09	-0.67	-0.58
	(0.18)	(0.19)	(0.46)	(0.43)
Slave exports by land (log)	-0.09*	-0.08*	-0.18+	-0.14
	(0.04)	(0.04)	(0.10)	(0.10)
Muslims (%)	-0.01**	-0.01**	-0.01*	-0.01*
	(0.00)	(0.00)	(0.01)	(0.01)
Intense agriculture	0.14	0.16	-0.16	-0.15
	(0.19)	(0.17)	(0.29)	(0.28)
Region FE	Yes	Yes	Yes	Yes
Spatial lags	Yes	Yes	Yes	Yes
Pseudo R^2	0.133	0.136	0.123	0.122
AIC	3037.55	2828.85	1897.83	1815.54
BIC	3140.75	2932.05	2001.03	1918.74
Observations	805	805	805	805

Outcome variable: number of conflict events per ethnic group territory. Robust standard errors clustered by country.
$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A3. Main Models with Outcome Variable cleaned of Conflicts between Ethnic Sub-Groups

	(1) UCDP-GED	(2) ACLED
Polygynous neighbors	2.07**	1.81***
	(0.79)	(0.41)
Observed group: polygynous	-0.42	-0.82**

	(0.41)	(0.30)
Land area (log)	0.70***	0.49***
	(0.16)	(0.08)
Population (log)	0.45*	0.51***
	(0.18)	(0.06)
Precolonial conflict	0.25	0.49
	(1.14)	(0.62)
Mean elevation	1.12	0.24
	(0.88)	(0.60)
Agricultural suitability	0.40	0.08
	(0.90)	(0.66)
Precolonial kingdom	-1.48***	-0.62**
	(0.28)	(0.22)
Distance to empires	-0.21	0.47
	(0.80)	(0.68)
Major city in AD 1400	-0.68	-0.68*
	(0.56)	(0.32)
Slave exports by land (log)	-0.15*	-0.13**
	(0.07)	(0.04)
Muslims (%)	0.02	0.21***
	(0.20)	(0.03)
Intense agriculture	-0.39	-0.29+
	(0.28)	(0.18)
Country FE	Yes	Yes
Pseudo R^2	0.179	0.158
AIC	1759.84	2833.09
BIC	1905.26	2917.53
Observations	805	805

Outcome variable: number of conflict events per ethnic group territory. Robust standard errors clustered by country.

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A3. Main Models Using the *EA*'s 3-Level Indicator for Polygyny

	(1) ACLED	(2) UCDP-GED
Polygynous neighbors: Limited	0.99	0.89
	(0.69)	(1.73)
Polygynous neighbors: General	2.53***	2.75+
	(0.72)	(1.62)
Observed group: Limited Polygyny	0.10	0.99
	(0.76)	(1.57)
Observed group: General Polygyny	-0.66	0.45
	(0.75)	(1.51)
Land area (log)	0.50***	0.73***
	(0.08)	(0.15)
Population (log)	0.51***	0.43*
	(0.06)	(0.17)
Mean elevation	0.21	1.19
	(0.59)	(0.84)
Agricultural suitability	0.07	0.28
	(0.69)	(0.91)
Precolonial kingdom	-0.61**	-1.44***
	(0.20)	(0.25)
Distance to empires	0.37	-0.11
	(0.69)	(0.79)
Major city in AD 1400	-0.64*	-0.79
	(0.31)	(0.59)
Precolonial conflict	0.38	0.09
	(0.58)	(1.19)
Slave exports by land (log)	-0.13**	-0.15*
	(0.04)	(0.07)
Muslims (%)	0.21***	-0.24
	(0.03)	(0.20)
Intense agriculture	-0.34*	-0.41
	(0.17)	(0.27)
Country FE	Yes	Yes
Pseudo R^2	0.162	0.182
AIC	2931.96	1797.70
BIC	3021.08	1957.19
Observations	805	805

Outcome variable: number of conflict events per ethnic group territory. Robust standard errors clustered by country.

$^{+}$ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table A4. State-Based Conflict Events as Outcome Variable

	(1) ACLED, state-based conflict	(2) UCDP-GED, state-based conflict
Observed group: polygynous	-0.31	-0.04
	(0.23)	(0.26)
Land area (log)	0.22*	0.15
	(0.10)	(0.13)
Population (log)	0.53***	0.73***
	(0.14)	(0.11)
Distance to coast	0.00*	0.00***
	(0.00)	(0.00)
Mean elevation	-0.56	-0.77
	(0.50)	(0.52)
Agricultural suitability	0.46	1.20
	(0.83)	(0.98)
Malaria stability index	-1.21*	-1.78**
	(0.48)	(0.69)
Precolonial kingdom	-0.14	0.44
	(0.25)	(0.35)
Distance to empires	-0.22	0.46
	(1.15)	(1.49)
Major city in AD 1400	0.40	-0.60
	(0.33)	(0.40)
Precolonial conflict	-0.38	-0.77
	(0.77)	(0.92)
Slave exports by land (log)	0.04	0.08
	(0.05)	(0.07)
Muslims (%)	0.22***	-0.37***
	(0.06)	(0.08)
Intense agriculture	0.02	0.13
	(0.29)	(0.29)
Country FE	Yes	Yes
Pseudo R^2	0.083	0.124
AIC	7426.51	4292.67
BIC	7492.18	4377.10
Observations	805	805

Outcome variable: number of conflict events per ethnic group territory. Robust standard errors clustered by country.
+ p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001

Polygynous Neighboring Groups and Intergroup Conflict Events using the Matched Sample

Since coarsened exact matching (CEM) does not work with ratio variables such as ours, we have to create a binary treatment variable. We acknowledge that coding a ratio variable into a binary one is a somewhat arbitrary exercise, because there is no self-evident cutoff point. To circumvent this problem, we only use observations with values in the lower half (0-50 percent shared borders) and the upper decile (90.1-100 percent) and we drop those in between. This leaves us with 622 observations (183 dropped) of which 137 are coded as untreated (0-50 percent) and 485 as treated (90.1-100 percent). We use a larger range for lower values for empirical reasons mainly, i.e., our variable is right-hand skewed, so we have to increase the number of control units. We believe this approach is theoretically justified, because the effect of polygynous neighbors accelerates at around 50 percent (see figure 5). We use the covariates of the parsimonious model land area (log), population (log), and precolonial conflict as well as the region dummies. We set the cutoff points for the continuous variables at the 25^{th}, 50^{th}, and the 75^{th} percentile. The L1 statistic as a measure for the joint balance between treatment and control group improves from 0.97 to 0.88. This is far from a perfect balance, but the improvement is significant. Due to the CEM procedure we lose 103 observations without common empirical support and remain with 519 observations (805 in the full sample). Next, we use the same regression set-up as in the main table, only that we use our matched sample and the binary treatment variable indicating that a group shares more than 90 percent of its borders with polygynous groups.

Table A6. Polygynous Neighboring Groups and Intergroup Conflict Events using the Matched Sample

	(1) ACLED	(2) UCDP-GED†
Polygynous neighbors (>90%)	1.37***	2.81***
	(0.26)	(0.44)
Observed group: polygynous	-0.47	0.04
	(0.49)	(0.41)
Land area (log)	0.34***	0.36+
	(0.10)	(0.20)
Population (log)	0.54***	0.79***
	(0.11)	(0.17)
Precolonial conflict	0.32	1.97**
	(0.76)	(0.71)
Distance to coast	0.00	0.00**
	(0.00)	(0.00)
Mean elevation	-0.63	-0.64
	(0.69)	(1.00)
Agricultural suitability	0.24	2.19**
	(0.77)	(0.82)
Malaria stability index	-0.36	-2.85***
	(1.03)	(0.70)
Precolonial kingdom	0.02	-0.21
	(0.31)	(0.38)
Distance to empires	1.52+	1.88+
	(0.80)	(1.05)
Major city in AD 1400	-0.56	-0.36
	(0.38)	(0.59)
Slave exports by land (log)	-0.11**	-0.25**
	(0.04)	(0.08)
Muslims (%)	0.39***	-0.01
	(0.04)	(0.01)
Intense agriculture	-0.37	-0.20
	(0.34)	(0.45)
Country FE	Yes	No
Region FE	No	Yes
Pseudo R^2	0.186	0.141
AIC	1856.62	1186.26
BIC	1945.91	1275.55
Observations	519	519

Outcome variable: number of conflict events per ethnic group territory. Robust standard errors clustered by country.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

† Note that we had to change country FE to region FE in model 2 to allow the model to converge with the reduced sample size.

Table A5. Polygynous Neighboring Groups and Intergroup Conflict Events including Post-Treatment Variables[†]

	(1) ACLED	(2) ACLED	(3) ACLED
Polygynous neighbors	1.71***	1.67***	1.71***
	(0.34)	(0.34)	(0.34)
Observed group: polygynous	-0.77**	-0.72**	-0.77**
	(0.26)	(0.26)	(0.26)
Polity (1990-95) avg.	0.01		0.16***
	(0.04)		(0.05)
Polity up >2 (1990-95)	-1.92+		-3.18**
	(0.99)		(1.00)
GDPpc (1990/95) %change	0.03***		0.12***
	(0.01)		(0.02)
Legal polygamy		-2.33**	-0.14
		(0.84)	(0.49)
Customary law polygamy		0.56	-1.86***
		(0.47)	(0.17)
Women stats scale		1.12*	
		(0.44)	
Muslims (%)	0.11***	-0.15+	0.17***
	(0.03)	(0.08)	(0.03)
Intense agriculture	-0.42**	-0.42**	-0.42**
	(0.16)	(0.15)	(0.16)
Country FE	Yes	Yes	Yes
Geographic controls	Yes	Yes	Yes
Historical controls	Yes	Yes	Yes
Pseudo R^2	0.152	0.163	0.152
AIC	2715.32	2876.89	2715.32
BIC	2794.11	2961.03	2794.11
Observations	761	792	761

Outcome variable: number of conflict events per ethnic group territory. Robust standard errors clustered by country.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Note: Since we use a cross-section, we calculate 5-year-averages for time-varying variables prior to our outcome variable *intergroup conflict* events. In particular, we calculate the average of the polity score for the period 1990 to 1995 (*polity (1990-95) avg.*), a dummy which indicates three or more polity-point increases (*polity up > 2*) and decreases (*polity down > 2*). We also add the percentage change of GDP per capita between 1990 and 1995 (*GDPpc (1990/95) %change*). The variables for legal polygamy, customary law polygamy and the WomanStats scale are static and do not require any transformation.

[†] Note that when using UCDP-GED as outcome variable, the model did not converge.

Table A6. Polygynous Neighboring Groups and Intergroup Conflict Events using the Number of Polygynous Neighbors (instead of the Percentage of Shared Border)[†]

	All conflicts		Conflicts near border	
	(1)	(2)	(3)	(4)
	ACLED	ACLED	ACLED 50km buffer	ACLED 50km buffer
Polygynous neighbors (number)	0.11**	0.07*	0.12**	0.08**
	(0.04)	(0.03)	(0.04)	(0.03)
Observed group: polygynous	-0.52	-0.28	-0.58	-0.37
	(0.38)	(0.26)	(0.36)	(0.25)
Land area (log)	0.20+	0.27***	0.01	0.08
	(0.11)	(0.07)	(0.12)	(0.08)
Population (log)	0.44***	0.53***	0.49***	0.59***
	(0.08)	(0.06)	(0.09)	(0.08)
Precolonial conflict	0.83	0.23	0.85	0.22
	(0.56)	(0.50)	(0.53)	(0.52)
Distance to coast		0.00		0.00
		(0.00)		(0.00)
Lake indicator		0.58+		0.58+
		(0.35)		(0.35)
River indicator		-0.22		-0.24
		(0.21)		(0.21)
Mean elevation		-0.48		-0.57
		(0.64)		(0.66)
Agricultural suitability		0.25		0.21
		(0.65)		(0.61)
Malaria stability index		-0.42		-0.28
		(0.69)		(0.68)
Precolonial kingdom		-0.47*		-0.47*
		(0.21)		(0.20)
Distance to empires		0.60		0.74
		(0.59)		(0.69)
Major city in AD 1400		-0.62*		-0.46
		(0.29)		(0.28)
Slave exports by land (log)		-0.10*		-0.10*
		(0.04)		(0.05)
Muslims (%)		0.25***		0.12***
		(0.04)		(0.03)
Intense agriculture		-0.45**		-0.42**
		(0.16)		(0.15)
Country FE	Yes	Yes	Yes	Yes
Pseudo R^2	0.147	0.163	0.141	0.157
AIC	2969.36	2933.84	2789.41	2760.12
BIC	3020.96	3032.35	2841.01	2858.63
Observations	805	805	805	805

Outcome variable: number of conflict events per ethnic group territory. Robust standard errors clustered by country.

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

[†] Note that when using UCDP-GED as outcome variable, the model did not converge.

5 Mechanism

Table A7. Effect of Polygyny on Individual-Level Attitudes

	Men below 40 years without children		*Men above 40 years*		*Women*	
	(1) Perceived inequality	(2) Violence justified	(3) Perceived inequality	(4) Violence justified	(5) Perceived inequality	(6) Violence justified
Member of polygynous group	0.28*	0.10*	-0.02	-0.01	0.10*	-0.00
	(0.12)	(0.04)	(0.07)	(0.02)	(0.04)	(0.02)
Age	0.07	-0.02	-0.00	-0.01	-0.00	-0.00+
	(0.05)	(0.02)	(0.01)	(0.00)	(0.00)	(0.00)
Age^2	-0.00	0.00	0.00	0.00	-0.00	0.00
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Education level	0.01	0.02*	-0.04***	0.01+	-0.01+	0.01***
	(0.02)	(0.01)	(0.01)	(0.00)	(0.01)	(0.00)
Assets	0.00	-0.00	0.03+	0.00	0.01	0.01+
	(0.03)	(0.01)	(0.02)	(0.01)	(0.01)	(0.00)
Urban	0.18**	-0.01	0.16***	-0.01	0.09***	-0.01
	(0.06)	(0.02)	(0.04)	(0.01)	(0.02)	(0.01)
Observations	1406	1481	3615	3842	9484	10217
AIC	4103.25	1743.59	10802.97	3738.81	28058.57	10443.26
BIC	4139.99	1780.69	10846.32	3782.58	28108.67	10493.88

Linear model with robust standard errors in parentheses.
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Figure A1. Effect of Polygyny on Individual-Level Attitudes (First Differences)