Clayton and Zetterberg (2021) "Gender and Party Discipline: Evidence from Africa's Emerging Party Systems" ***American Political Science Review.***

Supplementary Information

1 Characteristics of sample countries **2**

2 Further description of the African Legislatures Project **3**

3 Gender differences by discipline measure **6**

4 Testing social desirability bias with other survey questions **7**

5 Correlates of party discipline **8**

6 Evidence of candidate selection mechanisms **10**

7 Gender differences in legislative speech **12**

8 Legislative speech and reelection **16**

9 Cross-national variation in gender gaps **17**

10 Kinship and gender gaps **22**

11 Removing cases with few women MPs **24**

12 Women's rights regression tables **25**

13 Placebo issue regression tables **28**

14 Human subjects research **30**

1 Characteristics of sample countries

Country (2008)	GDPPC (2005$)	Effective # of Parties	% Ruling Party	Polity Score	% Women in Parl.	District Mag.	Elect. Sys.
Benin	618	3.9	42	7	10.8	3.5	PR
Botswana	6,291	1.6	71	8	7.9	1	SMD
Burkina Faso	447	2.9	66	0	15.3	2.5	PR
Ghana	563	2.1	50	8	8.3	1	SMD
Kenya	559	3.5	44	7	9.8	1	SMD
Lesotho	801	3.2	52	8	24.2	14	MMP
Malawi	240	2.5	59	6	20.8	1	SMD
Mali	445	1.6	34	7	10.2	1.2	SMD
Mozambique	313	1.6	76	5	34.8	22.7	PR
Namibia	4,022	1.7	71	6	26.9	72	PR
Nigeria	804	1.8	73	4	7	1	SMD
Senegal	773	1.3	87	7	22	4	Parallel
South Africa	5,186	2.1	66	9	33	111	PR
Tanzania	488	1.7	65	-1	30.7	1	SMD
Uganda	380	1.9	62	-1	31.5	1	SMD
Zambia	726	2.9	47	7	15.2	1	SMD
Zimbabwe	453	2.2	48	-4	15.2	1	SMD
Average, sample	1,499	2.3	62	4.9	19.1	14	-
Average, SSA	972	2.4	65	2.3	17.8	13.6	-

Notes: Data from World Bank Development Indicators, Polity IV Project, and the Inter-Parliamentary Union. All proportional representation (PR) systems used closed lists.

Table A1: Economic and Political Characteristics of Sample Countries

2 Further description of the African Legislatures Project

The African Legislatures Project (ALP) is an initiative founded by Robert Mattes (Strathclyde University), Shaheen Mozaffar (Bridgewater State University) and the late Joel Barkan. Field research for the ALP MP surveys was conducted between 2008 and 2011. During the duration of the MP surveys, ALP data collection was based at the Centre for Social Science Research (CSSR) at the University of Cape Town. Field research was carried out by teams of research associates based in each survey country.

MP surveys consisted of structured, personal interviews with a representative, random sample of legislators, done in the language of the respondents choice. A random sample of 50 lower house MPs was selected in most countries; 60 MPs were selected in Nigeria and 40 were selected in Benin and 39 in Botswana, because of legislature size. The random sample in each country was designed to be broadly representative of gender composition of the legislature. This ranged from 20 women surveyed in Mozambique (40 percent of the sample) to one woman surveyed in Botswana (3 percent of the sample), roughly equivalent to the percentage of women represented in their legislatures at the time of the survey (see Table A1).

The questionnaire covered topics related to the legislators background and recruitment, values and policy preferences, election campaign experience, constituency activities, evaluations of legislative effectiveness, and preferences toward legislative reform. Countries were selected to correspond with the with those included in Round 4 of the Afrobarometer: Benin, Botswana, Burkina Faso, Ghana, Kenya, Lesotho, Malawi, Mali, Mozambique, Namibia, Nigeria, South Africa, Senegal, Tanzania, Uganda, Zambia, and Zimbabwe to allow for analyses that draw on both data sources.

In each country, the ALP national research partner generated a roster of all current members of parliament with information about their age, gender, race, language, ethnicity (where possible), party affiliation, highest level of education, whether the MP was part of the executive or a back bencher, and the region or province in which the MP's constituency was located.

From that list, the ALP management team generated several samples of 60 names through systematic random selection. The sample whose parameters (in terms of the variables men-

tioned above) most closely resembles the population parameters was selected. The first 50 names were then given to the national team, and the last 10 were held by the management team as potential substitutes. An MP on the original sample could be substituted only if: s/he explicitly refused to participate, was suffering from a serious illness that would prevent participation for more than three consecutive weeks; was out of the country at least 50 per cent of the duration of the study; was not available to schedule an interview after three consecutive weeks of phone calls at least two times each week; the MP cancelled or failed to appear for a scheduled interviews three times; or the MP made the research associate or assistant feel threatened or physically insecure. The fieldwork team was selected and trained by the ALP management team.

When this situation arose, the ALP management team provided the Research Assistant with the first name on the list of alternate members, working their way down the list as was necessary. Fieldworkers were not allowed to include MPs who volunteered, but could conduct an interview if the MP insisted on participating, though the responses were not entered into the data set. In general, response rates were very high for elite surveys. Across, countries the response rate was 80% on average and ranged from 46% in South Africa to 96% in Malawi. There was no statistically significant difference in the likelihood that the men or women legislators interviewed were from the original sample or were substitutes. There are MPs from 109 parties included in the dataset, or 6.4 parties on average per country. On average, there are 1.3 women interviewed per party (with a standard deviation of 2.8 women). This ranges from 15 women per party (in Tanzania's ruling CCM party, which had 43 total MPs surveyed) to no women in 63 parties (often small opposition parties with no or very few women represented in parliament).

Fieldwork for the African Legislatures Project was supported by grants from the World Bank, the United Kingdom Department for International Development, the United States Agency for International Development, the Vice Chancellors Fund at University of Cape Town, the Heinrich Boll Stiftung, PACT/Zambia, and the Calouste Gulbenkian Foundation. Other research activities were supported by the Harry Oppenheimer Institute, the center for Higher Education Transformation, the South African National Research Foundation, the Andrew Mel-

lon Foundation, and the Center for Democratic Governance and Leadership at Bridgewater State University.

3 Gender differences by discipline measure

	Men MPs	Women MPs	Difference (SE)	t-test p-value
Vote differs from party	-0.032	0.149	-0.182 (0.080)	0.024
Take party position	-0.012	0.076	-0.068 (0.041)	0.099
Vote due to discipline	-0.016	0.166	0.092 (0.035)	0.036
Conflict with national interest	-0.077	0.355	0.432 (0.046)	< 0.001
Conflict with personal convictions	-0.044	0.204	0.248 (0.156)	< 0.001
Conflict with constituents	-0.064	0.297	0.361 (0.082)	< 0.001

Notes: Num. women MPs: 144, Num. men MPs: 669

Table A2: Gender differences in composite discipline questions

4 Testing social desirability bias with other survey questions

We examine whether our results might be driven by gender gaps in social desirability bias. If women are reporting higher levels of party discipline due to social desirability, we would expect to see similar gender gaps on other questions that might have similarly desirable responses. For example, if women generally want to appear more pleasant to the interviewer or more deferential to their institution, we would expect women to report higher satisfaction with parliamentary resources. This is not the case. We observe that men and women MPs are equally likely to report being satisfied with their salary and other allowances, with their constituency offices, and with their constituency development funds. Interviewers were also equally likely to rate the men and women MPs as having appeared to answer the survey honestly.

	Women MP	Men MP	Difference (SE)	t-test p-value
Satisfied with salary and allowances	2.305	2.191	0.114	0.129
			(0.073)	
Satisfied with funds for constituency offices	1.873	1.769	0.104	0.241
			(0.089)	
Satisfied with CDFs	1.843	1.848	-0.005	0.977
			(0.003)	
Interviewer rated MP as honest	0.810	0.777	0.033	0.394
			(0.038)	

Notes: Num. women MPs: 144, Num. men MPs: 669

Table A3: Responses are coded on a 4-point scale from "very dissatisfied" to "very satisfied."

5 Correlates of party discipline

We test whether our measure of party discipline behaves in expected ways according to well-established correlates in the literature. At the MP-level, we expect party discipline to be higher among members of the ruling party, as ruling parties on the continent tend to be more hierarchal and centralized than opposition parties (Riedl, 2014). We find this is the case; ruling party MPs report one-quarter of a standard deviation more discipline than members of opposition parties (two-tailed t-test significant at $p \leq 0.001$).

Also at the MP-level, we expect our measure of party discipline to be correlated with other survey questions that tap into similar phenomenon, but might be less susceptible to self-misperceptions on the part of men or women. Whereas women might overreport party discipline due to social desirability bias, men might underreport their discipline if they tend to see themselves as mavericks regardless of their actual behavior. One question in the ALP survey asks MPs to state their level of agreement with the statement: "Parliament has too much independence from the executive." Response options were coded as: 1=Far too little, 2=Too little, 3=About right, 4=Too much, 5=Far too much. This question is helpful because it does not ask MPs to reflect on their own behavior and the socially desirable outcome is less clear. We expect higher levels of agreement with this statement to be correlated with higher levels of party discipline for members of the ruling party (i.e. those who share the same party as the executive), but not for members of opposition parties. We find this is the case. Among ruling party MPs, those who report more party discipline are also more likely to report that Parliament has too much independence from the executive branch ($\rho = 0.21$, $p \leq 0.001$), whereas these variables are not correlated for opposition party members ($\rho =$ -0.04, $p = 0.46$). Notably, we also find gender differences in responses to this question: ruling party women are 0.3 standard deviations more likely to say that parliament has too much independence than ruling party men (two-tailed t-test, $p = 0.005$).

There are also several country-level variables that we believe should co-vary with party discipline. We expect MP discipline to be higher in proportional representation (PR) electoral systems as compared to single-member district (SMD) systems, and more generally to be pos-

itively correlated with district magnitude (see Carey & Shugart, 1995). We also expect party discipline to be higher in less democratic regimes if MPs are less able to dissent in more closed party systems. Again, we find evidence for both of these expectations. District magnitude is positively correlated with average MP party discipline at the country level ($\rho = 0.17$, $p \leq 0.001$), and average MP party discipline is also higher in less democratic regimes (correlation with country-level Polity IV score, $\rho =$ -24, $p \leq 0.001$).

	Correlation	p-value
SMD v. PR	0.152	≤ 0.001
log(dist. mag.)	0.163	≤ 0.001
Polity IV score	-0.239	≤ 0.001

Table A4: Country-level correlates with MP discipline score

6 Evidence of candidate selection mechanisms

To understand whether there is evidence consistent with one of our two causal mechanisms - gendered candidate selection patterns - we test whether previous political experience is a stronger predictor of party discipline for women than it is for men. We find some evidence that it is. Table A5 show that the interaction term between candidate gender (i.e. woman) and previous political experience is positive and significant at the $p = 0.06$ level. Figure A1 plots the predicted values.

	Model 1
(Intercept)	-0.653^{*}
	(0.347)
Woman	0.048
	(0.069)
Ruling party	1.155^{***}
	(0.353)
Years in office	-0.004
	(0.004)
Minister	0.179^{***}
	(0.061)
Party leader	0.015
	(0.055)
Education	-0.032^{**}
	(0.014)
Previous political position	-0.071
	(0.058)
I(Woman * Previous political position)	0.241^{*}
	(0.123)
Party fixed effects	✓
R^2	0.480
Num. obs.	805
Num. of parties	109
RMSE	0.573

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A5: OLS models. Dependent variable: level of party discipline, composite score.

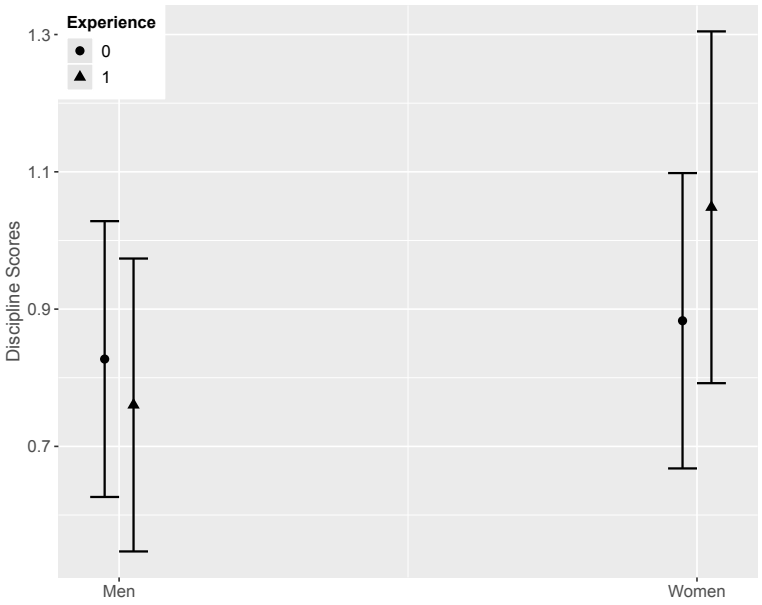

Figure A1: Predicted values of party discipline for both men and women MPs by previous political experience. Interaction between gender and previous political experience statistically significant at the $p \leq 0.10$ level.

7 Gender differences in legislative speech

As an additional verification check of the validity of our dependent variable, we test for gender differences in MP speech patterns that we believe should be correlated with party discipline. One MP behavior that is regularly recorded across cases is MPs' participation in parliamentary debates. For this verification exercise, we searched the parliamentary websites of all seventeen of our cases for records of parliamentary debates for the year in which the ALP survey was conducted in that country. In addition, we had these data from Namibia obtained from the parliamentary clerk during a previous trip to the field. Unsurprisingly, the cases in which these data are available are predominately former British colonies that imported the tradition of keeping these records in the standard Hansard format. Table A6 lists the five cases, the ALP survey year, and the number of MPs per case.

Country	Year	Number of MPs
Ghana	2009	229
Namibia	2008	76
Uganda	2008	332
Zambia	2008	150
Zimbabwe	2011	205
Sample Total		992

Table A6: Countries with available Hansard data from ALP survey years

We first scrapped the parliamentary websites to download all the Hansards from each country for the year the ALP survey was taken. This resulted in 10,000 pages of text and over 29,000 unique contributions from 992 MPs across the five cases. To have a comparable measure across different Hansard formats, we counted the total number of words that each MP contributed to the debate over the course of all parliamentary sessions for that year. We excluded all official ministerial statements and statements made by the house speaker. To compare MP contributions across cases, we standardize the word count variable so that scores represent standard deviations from the mean in that country. In each of the five cases, women MPs speak less than men MPs. Figure A2 plots the standardized averages for men and women MPs

for all six cases, including the sample average. To parametrically estimate gender differences among co-partisans across the whole sample, we regress the standardized word count score on MP gender and party fixed effects. Table A7 shows these results. We observe that women speak significantly less than their men co-partisans across the five sample countries. The average gender gap among co-partisans is equivalent to 0.2 standard deviations, a very similar magnitude to the gender gap in our survey reported measure.

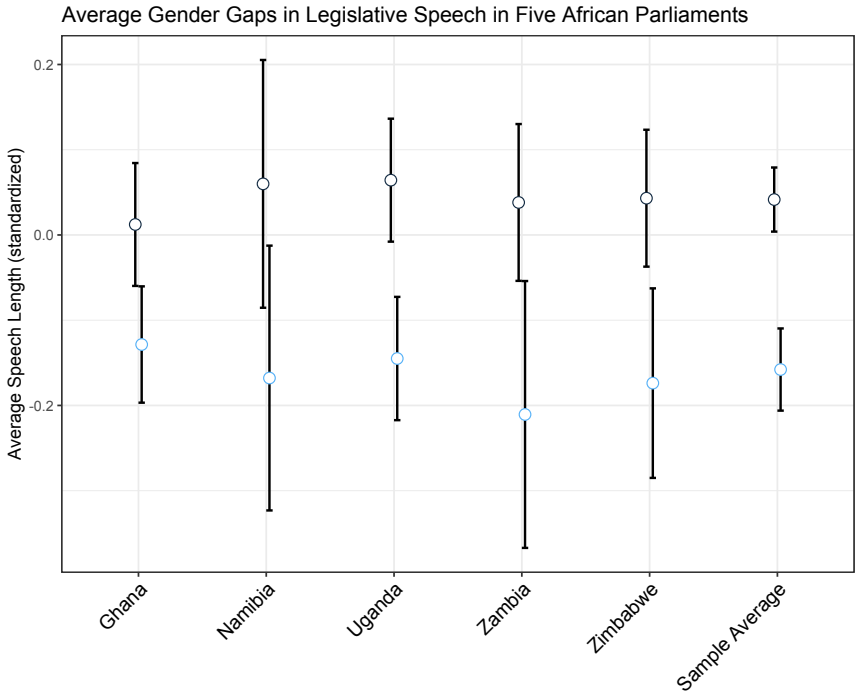

Figure A2: Mean debate contributions and confidence intervals for men (black) and women (blue) MPs in five African parliaments, as well as the sample average

In our second verification exercise with these data, we also count the number of times that an MP refers to his or her own party during a plenary speech. We then divide this number by the MPs' total word count in order to calculate the percentage of speech that an MP devotes to mentioning her party. This measure, then, is able to capture gender differences in party references taking into account differences in the total amount of speech. Parliamentarians who did not speak at all during the country-year's legislative session receive a value of NA and are removed from the model data.

	Model 1
(Intercept)	1.546^{***}
	(0.436)
Woman	-0.171^{**}
	(0.081)
Party fixed effects	✓
R^2	0.080
Adj. R^2	0.054
Num. obs.	992
RMSE	0.972

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A7: OLS regression model. Dependent variable: within-country standardized word count

To verify what this measure is capturing, we skimmed the Hansards in the five countries to get a sense of how MP refer to their own parties. The following statements provide typical examples of party references from ruling party members in Namibia (Swapo) and in Uganda (NRM) :

> The SWAPO Party Government has shown its steadfastness in fulfilling these expressed needs of our people. These needs and aspirations of our people are embodied in Vision 2030 and in our development plans and guided us in setting the priorities under this Medium Term Expenditure Framework. ... This Medium Term Expenditure Framework underpins the SWAPO Governments resolve to make Namibia a better place for all its citizens. (HON KUUGONGELWA-AMADHILA, 05 March 2008)

> To start with, during this general Budget Debate, I would love to air my congratulations and best wishes to our visionary and mighty movement, SWAPO Party, for having conducted a resounding and successful Congress recently where the new national leadership was elected. Our conducts of maturity, vision and practice of upholding the principles of democracy, both in the Party and in the country, have not only consolidated the wishes and aspirations of the majority of the people in our country and the international community at large, but these have grounded the trust of people in the SWAPO Party to run this countrys affairs on a thunderous democratic course. (HON DR ANKAMA, 25 March 2008)

> When the NRM Government came to power, it took up a policy of declaring HIV/AIDS as a pandemic for the country. Hon. Pinto worked very hard to fight and mobilise communities and the district leadership in the fight against HIV/AIDS. (HON KASAMBA, 16 April 2008)

We regress this measure of party references (% of party references out of total MP word

	Model 1
(Intercept)	0.000168
	(0.000311)
Woman	0.000136^{**}
	(0.000067)
Party fixed effects	✓
R^2	0.105
Num. obs.	742
RMSE	0.000694

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A8: OLS regression model. Dependent variable: references to MP's party as a percent of total words spoken. MPs who did not speak are removed from the data.

count) on the MPs' gender and party fixed effects. We observe a significant gender gap among co-partisans (significant at the $p \leq 0.05$ level). Table A8 shows these results.

8 Legislative speech and reelection

As a test of our role congruity mechanism, we examine whether legislative speechmaking is differentially correlated with the chances of reelection for men and women MPs. Again, we turn to our Hansard data.[1] Table A9 regresses whether the MP is elected to the next parliamentary term on the within-country standardized word count measure, MP gender, an interaction of MP gender and word count, and party fixed effects. We find that generally legislative speechmaking is correlated with reelection; yet we find a negative interaction term with gender that is at the threshold of traditional statistical significance levels ($p = 0.11$). Figure 1 in the main text plots the predicted probabilities associated with this model.

	Model 1
(Intercept)	0.406^{*}
	(0.221)
Woman	-0.063
	(0.045)
Word count (standardized)	0.058^{***}
	(0.019)
I(Woman x word count)	-0.093
	(0.059)
Party fixed effects	✓
AIC	1113.314
BIC	1244.024
Log Likelihood	-528.657
Deviance	176.589
Num. obs.	787

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A9: Logistic regression model. Dependent variable: whether MP is elected to the next parliament.

[1]For this measure we exclude the case of Zimbabwe, which implemented a new electoral gender quota in the election subsequent to our data collection and, as such, has much higher reelection rates for women than the other cases.

9 Cross-national variation in gender gaps

While our focus is on whether there is a gender gap in party discipline among men and women MPs representing the same party, a relevant second order question is whether our finding is consistent across cases. Gender differences in party discipline may vary, for instance, depending on electoral features, such as the presence of a gender quota, or cultural factors, such as the degree of gender egalitarian views in society. However, our ability to measure country-level differences is limited given both the few number of countries in our sample ($n = 17$) and the generally low number of women surveyed in each country due to women's underrepresentation (from $n = 1$ to $n = 20$).[2] Yet, we offer a basic test here of cross-national variation that we hope future work can build on as more elite surveys become available. We run a basic linear model which includes an interaction term between gender and country. An ANOVA test on these results indicates that variation in gender gaps across countries is not significant ($p = 0.82$.) Moreover, when we test whether country-level variables might still predict any descriptive but non-significant variation that we observe, we find that they do not. The presence of an electoral gender quota, women's numeric representation, a country's Polity IV democracy score, logged district magnitude, the number of politically relevant ethnic groups, and average country-level attitudes towards gender equality all fail to explain country-level variation (see Tables A11 and A12). We take the lack of significant cross-national variation as tentative evidence that our core finding is largely generalizable across our cases: women consistently report higher party discipline than their men co-partisans across Africa's emerging party systems.

Below we plot average scores for men and women MPs in each of the 17 countries in our sample as well as the sample average (women in blue, men in black). The error bars represent the 95% confidence intervals around each mean.

To parametrically estimate predictors of variation in gender gaps *across* countries, we remove the country fixed effects and model MP discipline as a function of country-level characteristics (see Table A10). At the country level, we include the following variables which we

[2] In SI §11, we show women's higher reported levels of party discipline remain even when we exclude countries in which women's representation is very low.

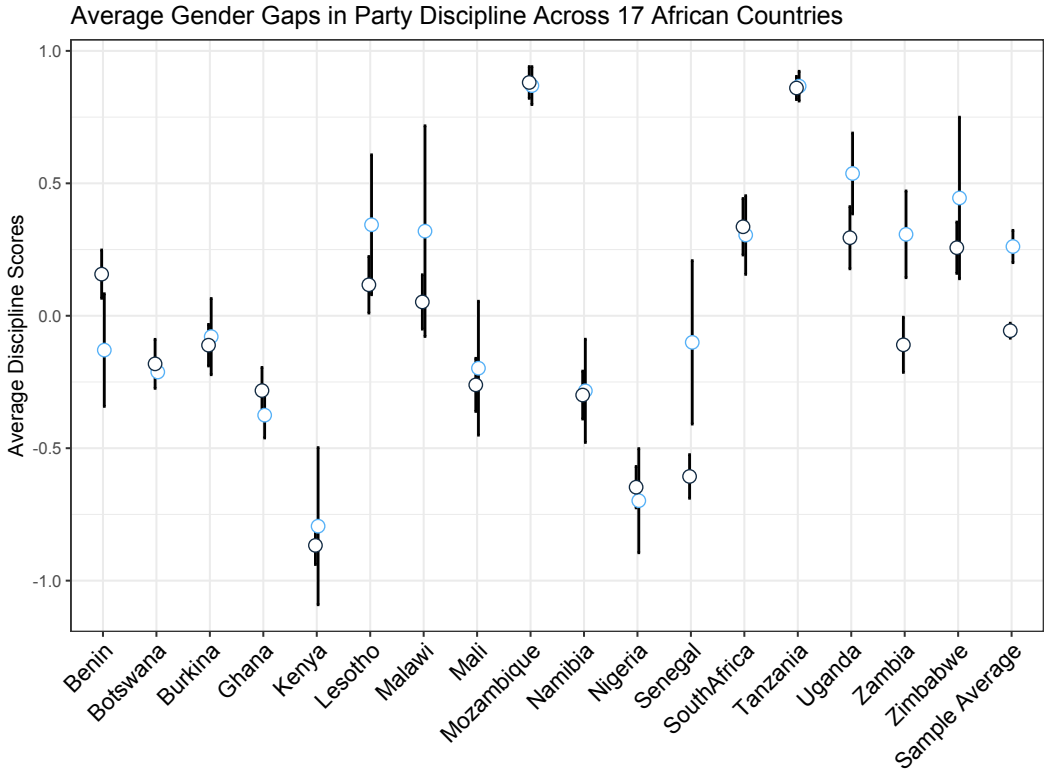

Figure A3: Mean discipline scores and confidence intervals for men (black) and women (blue) MPs in the 17 sample countries, as well as the sample average. Note: there is no confidence interval around the average from Botswanan women, as only one woman was interviewed.

theorize might explain cross-national differences: the presence of an electoral gender quota, women's numeric representation, Polity IV democracy score, the number of politically relevant ethnic groups (PREG score), and logged district magnitude. We also include a measure of gender attitudes: the percentage of respondents from the Afro-barometer survey in the country that either agreed or strongly agreed with the statement: "Women should have the same chance of being elected to political office as men."[3] We also include logged GDP per capita as a country-level control. To model how these country-level variables are associated with gender differences in party discipline, we run a series of hierarchical linear models that sequentially include cross-level interactions between each of the country-level variables and MP gender. None of these cross-level interactions are significant. As an alternative specification, we also

[3]As robustness checks, we also include women's labor force participation rates and the UNDP's Gender Inequality Index (GII). Neither alternative measure reaches statistical significance.

estimate variation in country level differences through models that take the average gender gap in scores at the country level as the dependent variable and country-level features as the explanatory variables. We get similarly null findings (see Table A11). In sum, likely due in part to the limited number of countries in our sample ($n = 17$), the country-level variables we include do not explain variation *between* countries in gender differences in party discipline.

As an additional test, we further explore one source of cross-national variation: the degree to which ethnicity is politicized in each of the countries in our sample. We theorize that one way in which women come to express higher levels of party loyalty is because they are excluded from ethnic-based patronage networks. Yet, we also theorize that even in countries in which ethnicity is not politicized, party gatekeeping practices tend to present different pathways to power for men and women. In short, our expectation is that women will be more party loyal both when ethnicity is politicized and when it is not. We test this expectation in two ways. Above we include the number of politically relevant ethnic groups (PREG score) as a country-level covariate (see **?**), Here, we also group countries into those that are above the sample average PREG score and those that are below the sample average and compare gender gaps between the two groups (see Table A12). In both tests, we see that PREG scores are not predictive of discipline gender gaps. The average gender gaps are of similar size and significance in countries that are both above and below the sample average PREG score. We take this as tentative evidence that women are similarly constrained in systems in which ethnicity is politicized and in which it is not.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
(Intercept)	−0.584	−0.570	−0.505	−0.584	0.024	−0.265	−0.658
	(0.997)	(0.997)	(0.973)	(1.022)	(0.902)	(0.801)	(0.975)
Woman	0.120**	0.110	0.179**	0.134	0.194	−0.295	0.106
	(0.055)	(0.075)	(0.071)	(0.083)	(0.125)	(0.596)	(0.127)
Ruling	0.110**	0.110**	0.111***	0.109**	0.111***	0.109**	0.110**
	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)	(0.043)
MP Years	−0.004	−0.004	−0.005	−0.004	−0.004	−0.005	−0.004
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
Minister	0.084	0.084	0.085	0.085	0.085	0.084	0.085
	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)	(0.054)
Party Leader	0.018	0.019	0.018	0.019	0.019	0.020	0.019
	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)	(0.050)
Education	−0.021*	−0.021*	−0.020	−0.021*	−0.020	−0.021*	−0.021*
	(0.012)	(0.013)	(0.013)	(0.013)	(0.013)	(0.012)	(0.013)
Political Experience	0.012	0.012	0.011	0.012	0.012	0.015	0.012
	(0.049)	(0.049)	(0.049)	(0.049)	(0.049)	(0.049)	(0.049)
Country-level variables:							
Quota	−0.315	−0.329	−0.312	−0.314	−0.228	−0.223	−0.339
	(0.309)	(0.309)	(0.307)	(0.312)	(0.306)	(0.267)	(0.305)
Polity score	−0.025	−0.025	−0.022	−0.025	−0.023	−0.021	−0.024
	(0.025)	(0.025)	(0.025)	(0.021)	(0.026)	(0.021)	(0.025)
log(GDPpc)	−0.086	−0.086	−0.108	−0.071	−0.097	−0.105	−0.088
	(0.119)	(0.119)	(0.118)	(0.125)	(0.122)	(0.120)	(0.116)
log(Dist. Mag.)	−0.105	−0.107	−0.095	−0.118	−0.123	−0.113	−0.106
	(0.112)	(0.112)	(0.110)	(0.115)	(0.117)	(0.109)	(0.109)
Gender Attitudes	0.011	0.010	0.011	0.009	0.002	0.007	0.012
	(0.014)	(0.014)	(0.015)	(0.014)	(0.017)	(0.009)	(0.015)
Women's Rep.	0.049***	0.050***	0.049***	0.051***	0.053***	0.050***	0.049***
	(0.018)	(0.018)	(0.018)	(0.019)	(0.019)	(0.017)	(0.018)
PREG	−0.410	−0.410	−0.412	−0.402	−0.494	−0.388	−0.390
	(0.384)	(0.387)	(0.374)	(0.397)	(0.404)	(0.305)	(0.372)
Cross-level interactions:							
Woman x Quota		0.022					
		(0.111)					
Woman x log(DistMag)			−0.042				
			(0.031)				
Woman x Polity				−0.003			
				(0.014)			
Woman x Women's Rep.					−0.003		
					(0.005)		
Woman x Gender Attitudes						0.006	
						(0.008)	
Woman x PREG							0.030
							(0.257)
AIC	1530.479	1539.007	1539.751	1542.739	1544.327	1541.703	1537.322
BIC	1610.371	1632.997	1633.741	1636.729	1638.317	1635.693	1631.312
Log Likelihood	-748.240	-749.504	-749.875	-751.370	-752.163	-750.852	-748.661
Num. obs.	812	812	812	812	812	812	812
Num. groups: Country	17	17	17	17	17	17	17
Var: Country (Intercept)	0.097	0.099	0.108	0.059	0.204	0.318	0.079
Var: Residual	0.327	0.328	0.327	0.328	0.328	0.328	0.328

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A10: OLS models measuring the association of MP characteristics, country-level variables, and cross-level interactions on MP party discipline.

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
(Intercept)	0.141*	0.119*	0.069	0.070	−0.050	0.084	0.176
	(0.076)	(0.057)	(0.055)	(0.094)	(0.494)	(0.090)	(0.651)
Polity	−0.009						−0.001
	(0.012)						(0.017)
log(District Mag.)		−0.020					−0.044
		(0.030)					(0.066)
Quota			0.096				0.100
			(0.101)				(0.213)
Women's Rep.				0.001			0.003
				(0.004)			(0.012)
Gender Attitudes					0.002		−0.001
					(0.007)		(0.009)
PREG Score						0.034	−0.065
						(0.199)	(0.259)
R^2	0.036	0.030	0.056	0.007	0.006	0.002	0.135
Adj. R^2	-0.029	-0.034	-0.006	-0.059	-0.060	-0.065	-0.384
Num. obs.	17	17	17	17	17	17	17
RMSE	0.192	0.192	0.190	0.195	0.195	0.195	0.222

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A11: OLS models measuring the association of country-level variables on gender gaps in discipline at the country level

	Women	Men	Difference	p-value
High PREG	0.233	-0.080	0.314	≤ 0.001
Low PREG	0.359	-0.030	0.389	≤ 0.001

Table A12: Average party discipline by MP gender in high and low PREG countries. $n = 812$

10 Kinship and gender gaps

Here we examine one potentially salient MP-level characteristic that might provide evidence for one of our two proposed theoretical mechanisms: that women are expected to conform to gendered expectations about proper behavior while in office. Namely, we take advantage of variation in matrilineal versus patrilineal kinship practices across the African continent. Matrilineality is a kinship system in which descent is traced through the female line (matriline). It is practiced by 16 percent of all ethnic groups in Africa, and has been shown to reduce women's deference to male authority (Lowes, 2018) and attenuate gender gaps in political participation (Robinson & Gottlieb, 2019). Given this, the role congruity expectations we outline above may be less applicable to women MPs from matrilineal ethnic groups. In such an instance, gender gaps should be significantly smaller among matrilineal MPs.

To test this, following Robinson & Gottlieb (2019) we use information from the Murdock Ethnographic Atlas (Murdock, 1967), which provides details on kinship practices by ethnic group. We successfully code MP kinship based on the MPs' self-reported ethnicity for 694 of the 812 MPs in the sample. Of the MPs in our survey, 11.2 percent (n = 15 women, 63 men) belong to ethnic groups that practice matrilineal kinship. However, contrary to our expectations, we observe significant gender gaps among both patrilineal and matrilineal MPs. In a simple model that regresses party discipline on MP gender, kinship, and an interaction between the two, the interaction term is not significant. We take this as very tentative evidence that either the gendered pathways to power mechanism is the more powerful of the two that we propose, or that women MPs from matrilineal ethnic groups are still subject to expectations about proper gender roles in their legislative behavior (see Kayuni, 2016). This latter interpretation seems most likely, as Robinson & Gottlieb (2019) find that matrlineality reduces gender social norms only in communities in which there is a high density of matrilineal residents. Thus, it could be that in mixed-kinship settings (such as national parliaments), women from matrilineal kinship groups behave in ways consistent with more conservative gender norms. We hope that future work will undertake a more thorough examination of differences *among* women parliamentarians.

Kinship	Women	Men	Difference	p-value
Matrilineal	0.640	0.212	0.427	0.023
Patrilineal	0.180	-0.104	0.284	≤ 0.001

Table A13: Average party discipline by MP gender and kinship. $n = 694$ (78 matrilineal MPs and 616 patrilineal MPs)

	Model 1
(Intercept)	-0.104^{***}
	(0.031)
Female	0.284^{***}
	(0.078)
Matrilineal	0.317^{***}
	(0.094)
I(Female * Matrilineal)	0.143
	(0.217)
R^2	0.049
Adj. R^2	0.045
Num. obs.	694
RMSE	0.704

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

Table A14: Parametric estimates of party discipline by MP gender and kinship practices.

11 Removing cases with few women MPs

Our results are robust to removing the six cases in our data in which women's representation is below 10 percent of the sampled population of MPs, despite the reduction in sample size (from $n = 805$ to $n = 530$). These six countries are Botswana ($n = 1$ woman), Ghana ($n = 3$ women), Kenya ($n = 3$ women), Benin ($n = 4$ women), Burkina Faso ($n = 4$ women), and Mali ($n = 4$ women).

	Model 1	Model 2
(Intercept)	-0.916^{***}	-0.702^{**}
	(0.335)	(0.346)
Woman	0.143^{**}	0.134^{**}
	(0.063)	(0.063)
Ruling party		1.160^{***}
		(0.353)
Years in office		-0.005
		(0.004)
Minister		0.186^{***}
		(0.062)
Party leader		0.023
		(0.055)
Education		-0.031^{**}
		(0.014)
Previous political experience		-0.016
		(0.052)
Party fixed effects	✓	✓
R^2	0.465	0.481
Adj. R^2	0.402	0.396
Num. obs.	530	530
RMSE	0.579	0.573

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A15: Replication of main analysis, removing six cases in which less than 10% of MPs surveyed were women.

12 Women's rights regression tables

	Model 1	Model 2
(Intercept)	−0.045	−0.075
	(0.082)	(0.081)
Woman	0.078***	0.101***
	(0.014)	(0.015)
Ruling party	0.027	0.051
	(0.084)	(0.083)
Discipline score	−0.015*	−0.003
	(0.009)	(0.009)
I(Discipline score * Woman)		−0.083***
		(0.018)
Years in office	−0.000	−0.000
	(0.001)	(0.001)
Minister	−0.001	0.001
	(0.014)	(0.014)
Party leader	0.005	0.005
	(0.013)	(0.013)
Education	0.000	0.001
	(0.003)	(0.003)
Previous political position	0.004	0.008
	(0.012)	(0.012)
Party fixed effects	✓	✓
R^2	0.328	0.348
Adj. R^2	0.210	0.233
Num. obs.	806	806
RMSE	0.135	0.133

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A16: Linear probability OLS models measuring the association of MP characteristics on the likelihood of listing women's rights as a top government priority.

	Model 1 DV: Women's Rights	Model 2 DV: Discipline Scores
(Intercept)	−0.042	−0.719**
	(0.082)	(0.347)
Woman	0.051**	0.176*
	(0.023)	(0.099)
Years in office	−0.001	−0.004
	(0.001)	(0.005)
I(Woman x Years in office)	0.004	−0.007
	(0.003)	(0.011)
Minister	0.004	0.187***
	(0.015)	(0.062)
Party leader	0.014	0.024
	(0.013)	(0.056)
Ruling party	0.024	0.171
	(0.124)	(0.525)
Education	−0.000	−0.030**
	(0.003)	(0.014)
Previous political position	0.007	−0.017
	(0.012)	(0.052)
Discipline score	−0.016*	
	(0.009)	
Party fixed effects	✓	✓
R^2	0.317	0.481
Adj. R^2	0.203	0.396
Num. obs.	805	805
RMSE	0.136	0.573

***$p < 0.01$, **$p < 0.05$, *$p < 0.1$

Table A17: Linear probability OLS models measuring the association of MP characteristics on the likelihood of listing women's rights as a top government priority (Model 1) and on party discipline scores (Model 2). The key variable of interest is the interaction term between MP gender and years in office.

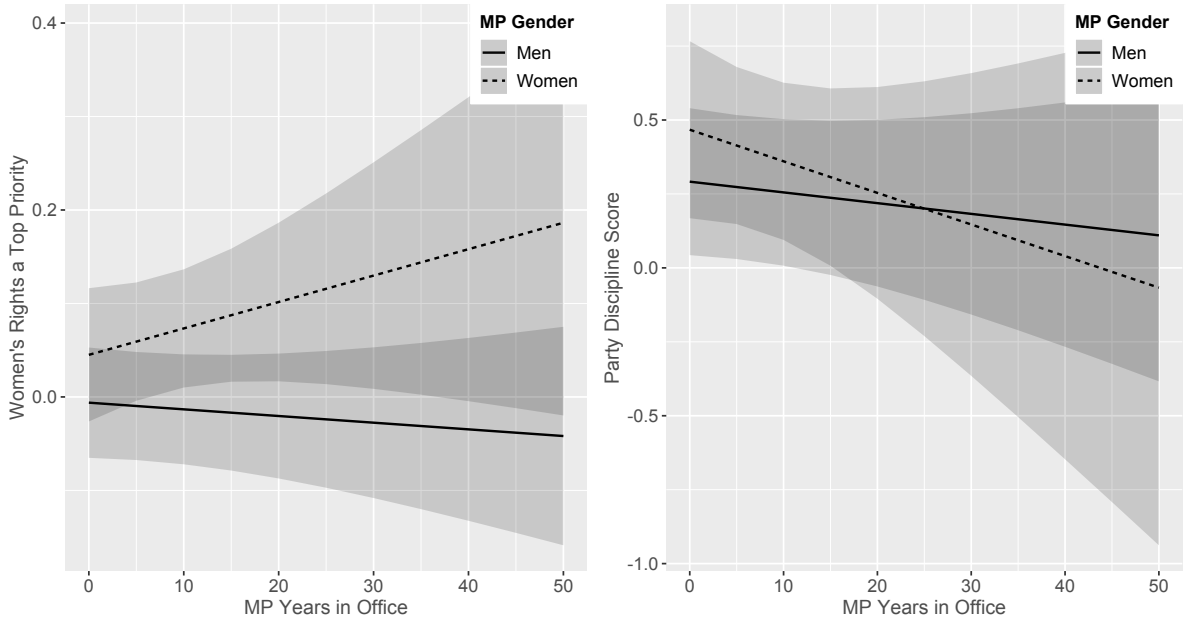

Figure A4: Left panel: Predicted values of the prioritization of women's rights for both men and women MPs by number of years in office. Right panel: Predicted values of party discipline scores for both men and women MPs by number of years in office.

	DV: Women's Rights	DV: Discipline Scores
	Model 1	Model 2
(Intercept)	−0.182	−0.685
	(0.223)	(0.576)
Years in office	0.001	−0.008
	(0.004)	(0.011)
Minister	−0.004	0.282*
	(0.062)	(0.161)
Party leader	0.140**	0.045
	(0.054)	(0.138)
Ruling party	0.818***	0.789
	(0.214)	(0.553)
Education	0.006	−0.037
	(0.014)	(0.036)
Previous political position	−0.041	0.096
	(0.044)	(0.113)
Party fixed effects	✓	✓
R^2	0.683	0.663
Adj. R^2	0.520	0.489
Num. obs.	142	142
RMSE	0.201	0.518

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A18: Linear probability OLS models measuring the association of MP characteristics on the likelihood of listing women's rights as a top government priority (Model 1) and on party discipline scores (Model 2). Only women respondents are included.

13 Placebo issue regression tables

	Model 1 Health	Model 2 Health	Model 3 Poverty	Model 4 Poverty
(Intercept)	0.289	0.276	0.249	0.251
	(0.254)	(0.255)	(0.289)	(0.290)
Women	0.087^{**}	0.098^{**}	0.084^{*}	0.083
	(0.043)	(0.045)	(0.049)	(0.052)
Discipline index	−0.007	−0.001	0.022	0.022
	(0.028)	(0.029)	(0.031)	(0.033)
I(Discipline index * Women)		−0.040		0.005
		(0.057)		(0.065)
Years in office	0.001	0.002	−0.001	−0.001
	(0.003)	(0.003)	(0.004)	(0.004)
Minister	−0.055	−0.054	−0.016	−0.016
	(0.043)	(0.043)	(0.049)	(0.049)
Party leader	−0.005	−0.005	0.002	0.002
	(0.040)	(0.040)	(0.045)	(0.045)
Ruling party	−0.197	−0.186	0.053	0.051
	(0.260)	(0.261)	(0.296)	(0.297)
Education	0.001	0.001	0.012	0.012
	(0.010)	(0.010)	(0.012)	(0.012)
Previous political position	-0.069^{*}	-0.067^{*}	0.032	0.032
	(0.038)	(0.038)	(0.043)	(0.043)
Party fixed effects	✓	✓		
R^2	0.205	0.205	0.229	0.229
Adj. R^2	0.074	0.073	0.102	0.101
Num. obs.	806	806	806	806
RMSE	0.419	0.419	0.476	0.477

$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$

Table A19: Linear probability OLS models measuring the association of MP characteristics on the likelihood of listing healthcare (Model 1 and Model 2) and poverty (Model 3 and Model 4) as a top government priority.

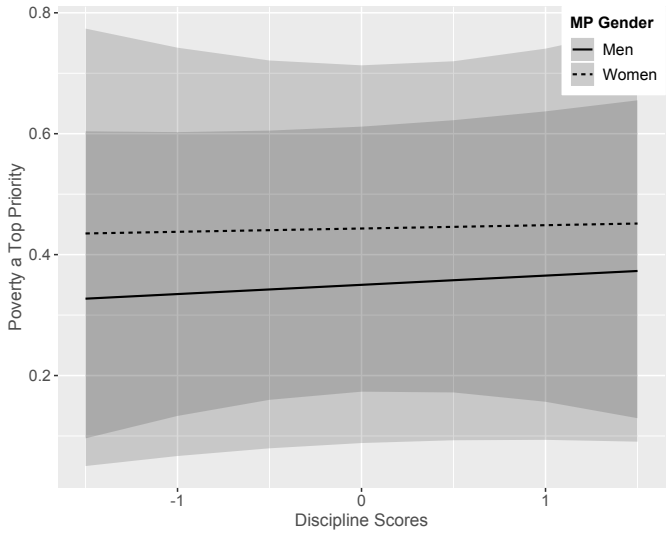

Figure A5: Predicted values of the prioritization of poverty for both men and women MPs by party discipline score. Interaction between gender and party discipline is not statistically significant.

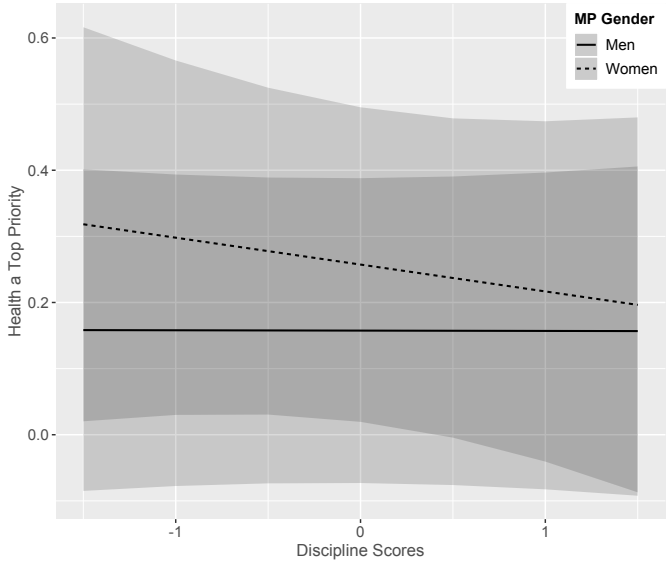

Figure A6: Predicted values of the prioritization of health for both men and women MPs by party discipline score. Interaction between gender and party discipline is not statistically significant.

14 Human subjects research

This research employs a quantitative analysis of a parliamentarian survey dataset that the researchers were not involved in collecting. The research also employs qualitative interviews with political elites and prominent members of civil society in Namibia and Uganda. This appendix details how precaution was taken to adhere to the APSA Councils Principles and Guidance for Human Subjects Research regarding the qualitative interview data.

General principles: The procedures used to obtain the interviews featured in this study respect the autonomy and wellbeing of the interview participants and of other people affected by the research, as detailed in the following sections.

Power: Interview respondents are all well-regarded public figures in both politics and civil society, and as such there were few power differentials between the researcher and researched. In some instances in which the interview subject was a prominent political figure, the interviewee had more power than the researcher. Interview participants generally seemed eager to share their experiences for the purpose of scientific study. No low-power of vulnerable participants were interviewed. No covert or descriptive research practices were used.

Consent: All interviewees voluntarily gave verbal informed consent to be interviewed. Every interviewee also voluntarily consented to allow the interview to be recorded. This research employed standard interview techniques and involved minimal risk and harm to participants.

Deception: No deception of any sort was used in this study. The researcher accurately described the nature of the research before each interview.

Harm and trauma: The topic of the interviews evaluating the impact of women in parliament did not entail any harm or trauma to participants. This is a topic that is frequently debated by media outlets in both Namibia and Uganda, as well as openly in other public fora

by the public figures that were interviewed for this project.

Confidentiality: All interviewee statements are anonymous. The descriptors used in the text (e.g. "womens rights activist," "parliamentary clerk," "former opposition MP," etc.) are broad enough such that participants will not be able to be identified.

Impact: The interviews conducted for this study do not compromise the integrity of political processes in any way.

Laws, Regulations, and Prospective Review: The procedures used to conduct the interviews for this study fully comply with the law both in the respective countries in which they were conducted and in the home countries of the researchers. This research was approved by the Human Subjects Internal Review Board of the corresponding PI's university at the time the study was initiated, the University of Washington (IRB # 45698). Further, the researchers attest to the ethics of the research beyond institutional approvals.

Shared Responsibility: The researchers strive to adhere to the principle of shared responsibility as described in the APSA Council's guidelines.

References

Carey, John, & Shugart, Matthew. 1995. Incentives to cultivate a personal vote: A rank ordering of electoral formulas. *Electoral Studies*, **14**(4), 417–439.

Kayuni, Happy. 2016. *The Gatekeepers: Women Political Participation in Phalombe and Chiradzulu Districts*. Chr. Michelsen Institute. Pages 81 – 92.

Lowes, Sara. 2018. Matrilineal kinship and spousal cooperation: Evidence from the matrilineal belt. *Unpublished manuscript. URL: https://scholar. harvard. edu/files/slowes/-files/lowes_matrilineal. pdf.*

Murdock, George Peter. 1967. Ethnographic Atlas.

Riedl, Rachel Beatty. 2014. *Authoritarian origins of democratic party systems in Africa*. Cambridge University Press.

Robinson, Amanda Lea, & Gottlieb, Jessica. 2019. How to close the gender gap in political participation: Lessons from matrilineal societies in Africa. *British Journal of Political Science*, 1–25.