

Appendix for *Seeing is Believing: Voluntary Gender Quotas Change Female Leadership Stereotypes*

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1 Summary Statistics (Appendix A)

Table A1: Summary Statistics I: Individual-Level Data

Statistic	N	Mean	St. Dev.	Min.	Median	Max.
Age	4,795	31.544	16.347	2	29	105
Age ²	4,795	1,262.173	1,299.943	4	841	11,025
Education	4,778	4.150	1.834	0	4	9
Employed	4,793	0.327	0.469	0	0	1
Female	4,800	0.502	0.500	0	1	1
Female leaders	4,756	2.967	1.018	1	3	4
Living conditions	4,703	3.161	1.102	1	3	5
News consumption	4,789	1.829	1.000	0	2	3
Religious group member	4,786	0.324	0.468	0	0	1
SWAPO	4,800	0.742	0.209	0.209	0.765	0.989
Urban	4,800	0.463	0.499	0	0	1
Voted in last election	4,784	0.706	0.456	0	1	1

Table A2: Summary Statistics II: Residualized and Aggregated Constituency-Level Data

Statistic	N	Mean	St. Dev.	Min.	Median	Max.
Round	363	5.292	1.469	3	6	7
Residualized female leaders	363	-0.001	0.357	-1.141	0.008	1.100
Residualized female leaders (men)	363	0.004	0.500	-1.407	0.014	1.213
Residualized female leaders (women)	363	-0.008	0.425	-1.597	0.019	1.030
SWAPO	363	0.739	0.226	0.209	0.777	0.989

2 Description of Variables (Appendix B)

- **Age:** Respondents' age (Q1 in AB rounds 3, 5, 6, and 7).
- **Age²:** Square of respondents' age.
- **Education:** Highest level of education attained by respondent. An ordinal measure of education levels that ranges from no formal education to post-graduate degree (AB round 7: Q97, AB round 6: Q97, AB round 5: Q97, AB round 3: Q90).
- **Employed:** Employment status of respondent. Coded as binary with part-time and full-time coded as 1, and no formal employment as 0 (AB round 7: Q94, AB round 6: Q95, AB round 5: Q96, AB round 3: Q94).
- **Female:** Interviewer-reported gender of respondent with 1 indicating females and 0 indicating males (AB round 7: Q101, AB round 6: Q101, AB round 5: Q101, AB round 3: Q101).
- **Female leaders:** Respondents' agreement with the statement that women should have the same chance of being elected to political office as men (AB round 7: Q16, AB round 6: Q18, AB round 5: Q22, AB round 3: Q24).
- **Living conditions:** Respondents' assessment of their living conditions compared to the rest of their countrymen (AB round 7: Q5, AB round 6: Q5, AB round 5: Q4, AB round 3: Q5).
- **News consumption:** An additive index composed of three components: respondents' self reported access to news from radio (AB round 7: Q12A, AB round 6: Q12A, AB round 5: Q13A, AB round 3: Q15A), television (AB round 7: Q12B, AB round 6: Q12B, AB round 5: Q13B, AB round 3: Q15B), and newspapers (AB round 7: Q12C, AB round 6: Q12C, AB round 5: Q13C, AB round 3: Q15C). Respondents are coded as receiving news from a given source when they report accessing it at least "a few times a month."
- **Religious group member:** Respondents' membership in a religious community (AB round 7: Q20A, AB round 6: Q19A, AB round 5: Q25A, AB round 3: Q28A).
- **Residualized female leaders:** Constituency-level measure of "female leaders," derived from survey responses and adjusted via regression analysis to remove the influence of key confounders.
- **Residualized female leaders (men):** Constituency-level measure of "female leaders," residualized to remove the influence of key confounders.
- **Residualized female leaders (women):** Constituency-level measure of "female leaders," computed after residualizing to remove the influence of key confounders.
- **Round:** Afrobarometer survey round.
- **SWAPO:** Constituency-level vote for SWAPO averaged across the 2004 and 2009 National Assembly elections. Data originates with the Electoral Commission of Namibia.

- **Urban:** A binary variable indicating urban enumeration area in Afrobarometer (AB round 7: "URBRUR," AB round 6: "urbrur," AB round 5: "urbrur," AB round 3: "urbrur").
- **Voted in last election:** Self-reported measure of whether respondents voted in the most recent national election (AB round 7: Q22, AB round 6: Q21, AB round 5: Q27, AB round 3: Q30).

3 SWAPO's 50/50 Quotas - Additional Background (Appendix C)

Following Namibia's independence in 1990, the country's first president, Sam Nujoma, took steps to institutionalize gender-related issues within the structures of government. One of his first notable actions in this regard was the establishment of a women's desk within his office. The primary purpose of this initiative was to address the unique needs of women and girls in Namibia, recognizing that they faced distinct social, economic, and political challenges that could not be fully addressed through general policy measures alone (Amupanda & Thomas, 2019, p. 10). While this step was widely acknowledged as an effort to highlight women's issues at the highest level of government, there was debate regarding the extent to which it represented a genuine political commitment on Nujoma's part. Some observers saw it as a meaningful attempt to promote women's interests, whereas others questioned whether it had the political weight necessary to produce tangible and lasting change. Be that as it may, this initiative was followed by another more concrete institutional reform when, in the year 2000, Nujoma's administration established a new Ministry of Women's Affairs and Child Welfare (ibid.).

The creation of this ministry represented an important milestone, as it provided an institutional home for policy efforts focused on gender equality and women's empowerment. Over time, the ministry became a central point of engagement for non-governmental organizations (NGOs) working in the field of gender advocacy, providing them with a government partner through which they could channel their demands. Among the most prominent organizations involved in these efforts was Sister Namibia, a feminist, nonpartisan NGO that became a vocal advocate for gender parity in political representation. One of Sister Namibia's major policy goals was the adoption of a 50/50 system that would ensure equal representation of men and women in key government positions, including within the National Assembly. The organization's advocacy efforts brought considerable attention to the issue and helped shape the public debate on gender quotas in Namibia.

Another key actor in the discussion was the Legal Assistance Centre (LAC), a well-established non-governmental organization committed to law reform and the provision of legal aid to disadvantaged Namibians. The LAC played an important role in conceptualizing legal frameworks that could support gender equality in governance. In 2001, Dianne Hubbard, a legal expert associated with the LAC, wrote a paper in which she laid out a detailed proposal for a possible 50/50 policy in the National Assembly. Her proposal included a recommendation that all political parties or associations participating in elections be required to put forward candidate lists that included equal numbers of men and women. Furthermore, she suggested that these lists follow a zebra-list pattern, alternating male and female candidates in a structured manner to ensure genuine parity rather than token representation (Hubbard, 2001, p. 16). Notably, when SWAPO eventually adopted its own version of the 50/50 policy, its structure closely resembled the proposals that had been advocated by figures such as Hubbard. The policy proposals advanced by the non-governmental sector did not go unnoticed by the country's leadership. They gained the support of President Sam Nujoma, who took active steps to integrate gender parity into the internal structures of SWAPO.

Nujoma's support for female leaders within SWAPO had a long history. His commitment began during the liberation struggle, when he supported the establishment of the SWAPO Women's

Council in 1969 to mobilize women in the fight for independence (Ikosa, 2025). After Namibia gained sovereignty, he supported enshrining gender equality in the Namibian Constitution and appointed women to key government positions. During his presidency, the country passed landmark laws, including the Married Persons Equality Act (1996), which abolished the legal authority of husbands over their wives, and the Combating of Rape Act (2000) and Domestic Violence Act (2003), which enhanced safeguards against gender-based violence (ibid.). Nujoma also encouraged Namibia's alignment with international frameworks such as the SADC Gender Protocol.

During the 2002 SWAPO Party Congress, Nujoma put forward a bold proposal to nominate an unprecedented number of women—21 in total—to the party's Central Committee. This move was significant because it sought to substantially increase women's representation within the party's highest decision-making body. However, despite Nujoma's standing as the founding president of SWAPO and his considerable influence within the party, the proposal faced resistance and ultimately had to be abandoned. The reason for this failure was that, had Nujoma's proposal been accepted, only 36 seats in the Central Committee would have been open for competition during the electoral portion of the congress (Mongudhi, 2013). This would have significantly altered the dynamics of party leadership selection and was met with opposition from within the party. Though the proposal did not succeed in its original form, it nonetheless led to an important development. Together with his allies (most notably the SWAPO Women's Council), Nujoma pushed for a vote on a future 50/50 policy. This proposal was carefully framed to avoid immediate controversy by not specifying an implementation timeline. With this level of ambiguity, the proposal ultimately passed, marking a formal commitment by SWAPO to ensuring that 50 percent of leadership positions within the party, as well as parliamentary seats, government positions, and even appointments to state-owned enterprises, would one day be occupied by women (O'Riordan, 2014).

Despite this formal resolution, implementation did not follow immediately. For more than a decade after 2002, the policy remained inactive, as no concrete steps were taken to integrate it into SWAPO's decision-making structures. The first significant step toward implementing the 50/50 resolution came in 2007 when SWAPO's congress, typically held every five years, acknowledged that a constitutional amendment would be required. Delegates resolved that without such changes, the resolution could not be fully enacted (Amupanda & Thomas, 2019, p. 12). However, rather than making these changes immediately, party leaders postponed the amendment process until the next congress, which was scheduled for 2012. At that congress, a decision was reached to convene an extraordinary congress dedicated specifically to constitutional amendments, with the 50/50 policy being among the key issues under consideration. Finally, in June 2013, more than a decade after the original resolution, SWAPO officially implemented the policy.

The lengthy delay in implementing the 50/50 policy raises important questions about the internal dynamics of the party and the sources of resistance to gender parity. While it is difficult to determine the exact reasons why the policy remained stalled for so long, one possible explanation is that it faced strong opposition from influential male figures within the party, who may have seen it as a threat to their own political influence. Notably, the decision to implement the 50/50 policy in 2013 coincided with SWAPO's broader push to expand the National Assembly from 78 to 104

seats, a reform that required amending the Namibian Constitution. This timing suggests that resistance to gender quotas may have been linked to concerns about power distribution within the party, with some male leaders only agreeing to the reform once it became possible to accommodate more political actors without forcing incumbents to vacate their seats. Clayton (2014) credits the lobbying efforts of NGOs such as Sister Namibia and Women Action for Development as crucial in ensuring that the 50/50 policy was ultimately adopted. Given that SWAPO's electoral base is largely drawn from rural and culturally conservative regions of northern Namibia, it is unlikely that bottom-up electoral pressure played a decisive role in shaping the party's decision. The evidence suggests that gender equality reform in Namibia was driven not only by sustained advocacy from the non-governmental sector and internal maneuvering within SWAPO's leadership but also by Sam Nujoma's strong support for female leadership. Rather than emerging as a spontaneous demand from the electorate, these efforts reflected a combination of top-down political will and persistent pressure from civil society.

4 Main Results in Table Form (Appendix D)

Table D1: Main Results

Model:	Both Genders	Men	Women
SWAPO \times 2012 survey round	0.30 (0.21)	0.13 (0.32)	0.48 (0.28)
SWAPO \times 2014 survey round	-0.31 (0.27)	-0.69 (0.39)	0.08 (0.28)
SWAPO \times 2017 survey round	0.22 (0.25)	-0.31 (0.36)	0.74* (0.32)
<i>Fixed effects</i>			
Constituency	✓	✓	✓
Round	✓	✓	✓
Within R ²	0.03	0.03	0.04

*Clustered (constituency) standard errors in parentheses. The dependent variables are residualized, constituency-level measures of female leaders. Signif. code: *: 0.05.*

5 Placebo Tests (Appendix E)

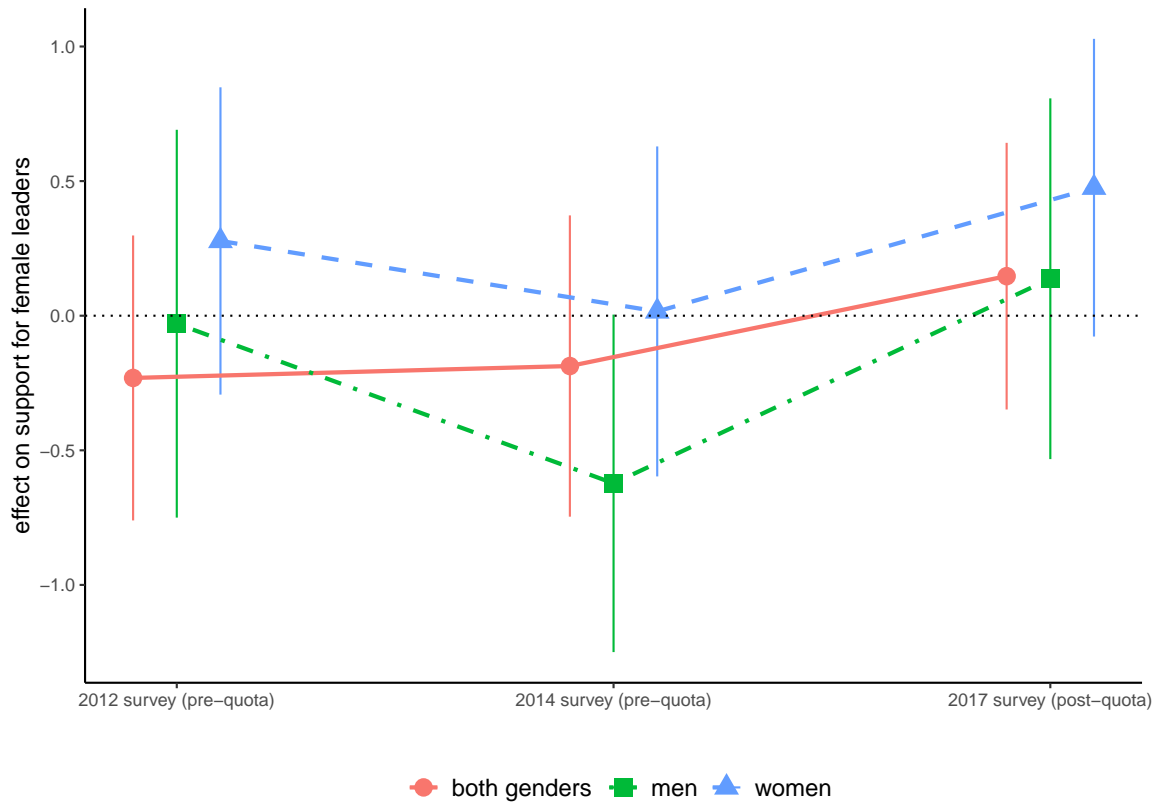


Figure 1: **Placebo Test: Randomized Dependent Variable.** This figure presents the event study estimates for the effect of SWAPO's gender quota on support for female leaders, with the dependent variable randomly reassigned across constituencies. Results are shown for the full sample, men, and women. Whiskers represent 95% confidence intervals. The absence of statistically significant effects suggests that the relationship observed in the main analysis is not due to random variation.

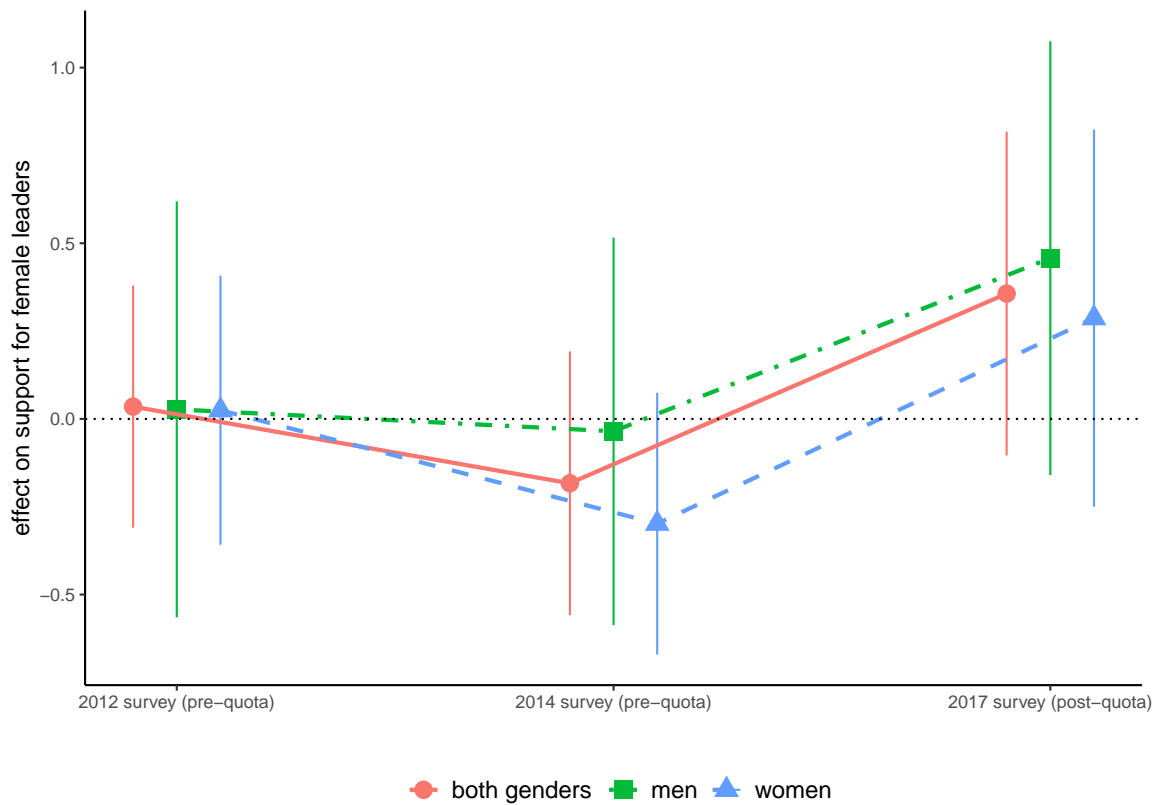


Figure 2: **Placebo Test: Randomized Independent Variable.** This figure presents the event study estimates for the effect of SWAPO's gender quota on support for female leaders, with the independent variable (SWAPO electoral dominance) randomly reassigned across constituencies. Results are shown for the full sample, men, and women. Whiskers represent 95% confidence intervals. The absence of statistically significant effects suggests that the relationship observed in the main analysis is not driven by random correlations or unobserved confounders.

6 List of Female Members of the National Assembly (Appendix F)

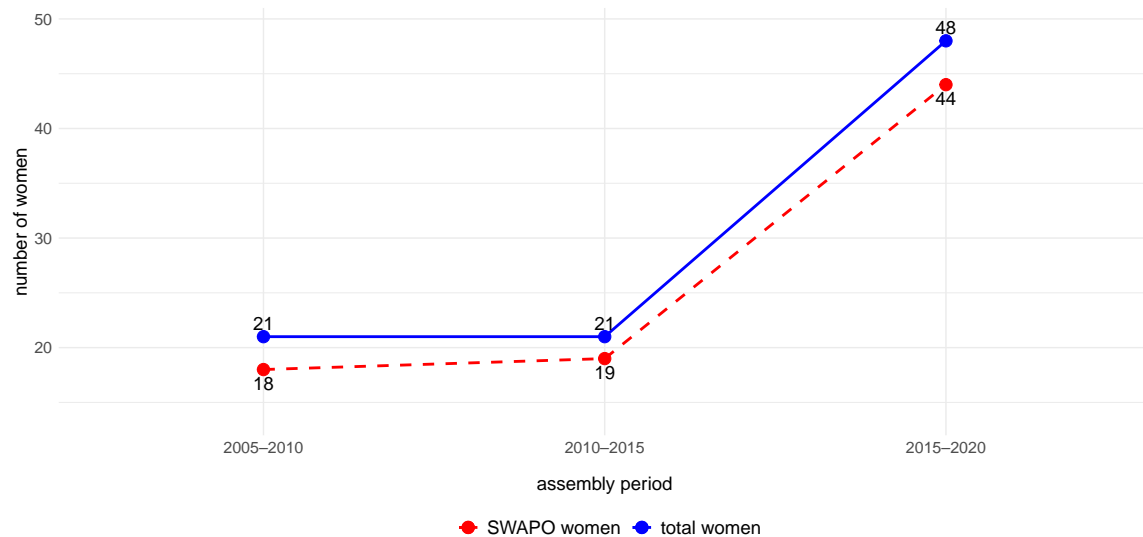


Figure 3: **The Number of Women in the National Assembly of Namibia (2005-2020).** Note that the numbers include members of parliament who entered the National Assembly after its inaugural session, e.g. as replacements.

4th National Assembly (2005–2010)

- **SWAPO:**

1. Libertina Amathila
2. Lucia Basson
3. Hansina Christiaan
4. Petrina Haingura
5. Ida Hoffmann
6. Pendukeni Iivula-Ithana
7. Loide Kasingo
8. Saara Kuugongelwa-Amadhila
9. Lempy Lucas
10. Alexia Manombe-Ncube
11. Angelika Muharukua
12. Marlene Mungunda
13. Teopolina Mushelenga
14. Netumbo Nandi-Ndaitwah

15. Evelyn !Nawases-Taeyele
16. Becky Ndjoze-Ojo
17. Rosalia Nghidinwa
18. Doreen Sioka

- **Congress of Democrats (CoD):**

1. Elma Dienda
2. Nora Schimming-Chase

- **United Democratic Front (UDF):**

1. Gustaphine Tjombe

5th National Assembly (2010–2015)

- **SWAPO:**

1. Priscilla Beukes
2. Petrina Haingura
3. Maureen Jankowski
4. Loide Kasingo
5. Juliet Kavetuna
6. Saara Kuugongelwa-Amadhila
7. Lempy Lucas
8. Sylvia Makgone
9. Alexia Manombe-Ncube
10. Angelika Muharukua
11. Teopolina Mushelenga
12. Netumbo Nandi-Ndaitwah
13. Evelyn !Nawases-Taeyele
14. Becky Ndjoze-Ojo
15. Rosalia Nghidinwa
16. Doreen Sioka
17. Sophia Swartz
18. Agnes Tjongarero
19. Lucia Witbooi

- **Rally for Democracy and Progress (RDP):**

1. Agnes Limbo

- **Republican Party (RP):**

1. Clara //Gowases

6th National Assembly (2015–2020)

- **SWAPO:**

1. Priscilla Beukes
2. Faustina Namutenya Caley
3. Petrina Haingura
4. Katrina Hanse-Himarwa
5. Christine //Hoebes
6. Ida Hoffmann
7. Lucia Iipumbu
8. Eunice Iipinga
9. Rebekka Iipinga
10. Pendukeni Iivula-Ithana
11. Bernadette Jagger
12. Priscilla Kavita
13. Juliet Kavetuna
14. Aino Kapewangolo
15. Marina Kandumbu
16. Johana Kandjimi
17. Agnes Mpingana Kafula
18. Loide Kasingo
19. Alberthine Paula Kooper
20. Saara Kuugongelwa-Amadhila
21. Laura McLeod-Katjirua
22. Margaret Mahoto
23. Sylvia Makgone
24. Alexia Manombe-Ncube
25. Martha Namundjebo-Tilahun
26. Lina Namupala
27. Evelyn !Nawases-Taeyele
28. Becky Ndjoze-Ojo
29. Lidwina Ndeshimona Shapwa

30. Netumbo Nandi-Ndaitwah
31. Lucia Nghaamwa
32. Ester-Anna-Liisa Shiwomwenyo Nghipondoka
33. Emilia Nuyoma-Amupewa
34. Norah Lute Munsu
35. Agnes Tjongarero
36. Sophia Shaningwa
37. Loide Shinavene
38. Kornelia Shilunga
39. Anna Shiweda
40. Heather Sibungo
41. Annakletha Sikerete
42. Doreen Sioka
43. Sophia Swartz
44. Lucia Witbooi

- **Democratic Turnhalle Alliance (DTA):**

1. Elma Dienda
2. Jennifer van den Heever

- **Republican Party (RP):**

1. Clara //Gowases

- **Rally for Democracy and Progress (RDP):**

1. Agnes Limbo

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