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What is This?
“Engendering” Politics: The Impact of Descriptive Representation on Women’s Political Engagement in Sub-Saharan Africa

Tiffany D. Barnes¹ and Stephanie M. Burchard²

Abstract
Globally, there is a significant gender gap in political engagement between men and women; however, this gender gap varies both across countries and within countries over time. Previous research has argued that the inclusion of women in elite political positions encourages women’s political engagement at the citizen level—by augmenting women’s symbolic representation—and can reduce this gender gap. Using Afrobarometer data from 20 African countries across four waves of surveys from 1999 to 2008, we employ an interactive multilevel model that controls for the sex of the respondent, the percentage of women in the legislature, and the interaction of these two variables. We find that as women’s descriptive representation increases, the political engagement gender gap diminishes. This finding is robust across several measures of political engagement. Our findings suggest that the incorporation of women into political institutions encourages the political engagement of women at the citizen level.

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sub-Saharan Africa, women, political engagement, descriptive representation, symbolic representation

Across the globe, women’s participation in the political arena lags behind that of their male counterparts. From elite levels including the holding of political office (Bauer & Tremblay, 2011; Inter-Parliamentary Union, 2010) to more fundamental activities such as talking about politics with friends and contacting elected officials (Burns, Schlozman, & Verba, 2001; Inglehart & Norris, 2003), women tend to engage the polity less frequently than do men. However, in recent decades, there has been an increasing presence of women in elite political positions worldwide. The purpose of this article is to contribute to the understanding of how the presence of women in elite positions of political power affects the political engagement of individual women. Our intuition is that women’s increased political participation at the elite level—by augmenting women’s symbolic representation—should encourage women’s political engagement at the mass or citizen level. To test this hypothesis, we examine how the political presence of women in 20 sub-Saharan African legislatures affects women’s individual-level political engagement in their respective countries.

This article makes two contributions to the literature on women in politics. First, it extends the study of descriptive representation and its relationship with women’s political engagement to the African subcontinent. Previous literature examining this question has largely focused on the United States, Western Europe, and Latin America. To the best of our knowledge, this is the first empirical investigation that examines how descriptive representation influences women’s political engagement across sub-Saharan Africa. For several reasons, sub-Saharan Africa is an ideal region to examine the relationship between women’s descriptive representation and women’s political engagement. First, in recent decades, this region has had the fastest and largest rate of change in women’s political representation (Tripp, Casimiro, Kwesiga, & Mungwa, 2009). In addition, there is significant variation across the region with regard to the level of women’s descriptive representation. Finally, although much work has been conducted on the factors that have led to increases in descriptive representation in sub-Saharan Africa (e.g., quotas, electoral institutions, transitions to democracy, women’s movements, etc.) and the impact of descriptive representation on substantive representation (in terms of policy outputs and legislator behavior, etc.), we know little about the relationship between women’s representation at the elite level and women’s political engagement at the citizen level. The reason we care about the impact
of women’s symbolic and descriptive representation on women’s political engagement at the citizen level has much to do with the reason why quotas and other institutional measures have been adopted to increase women’s political participation: to advance gender equality in the political arena.

Second, we build on previous literature by investigating the relationship between women’s descriptive representation and women’s political engagement with a time-series cross-national data set. Although previous research examining this relationship has utilized either a single case study over time or a cross-national analysis at a single point in time—and thus been limited in its ability to explain how changes in women’s representation affect women’s political participation—our data allow us to speak to this question not only across countries but also within individual countries over time. We can more precisely examine how changes in women’s representation within countries over time influence women’s political engagement. Using time-series data from 20 countries across sub-Saharan Africa, we demonstrate that increased representation of women in the political sphere is positively related the political engagement of women at the mass level. In addition, as the proportion of women in the legislature increases to somewhere between 25% and 35%—far less than true gender parity—the gender gap in women’s and men’s political engagement virtually disappears.

**Women’s Descriptive Representation and Women’s Political Engagement**

A growing body of literature hypothesizes that political institutions and environments exert a significant impact on individual-level political behavior. With respect to the study of women in politics, this body of literature argues that increases in the descriptive representation of women at the elite level increase the probability of women’s interest in politics and civic engagement at the citizen level. The logic behind this argument rests on the nature of the relationships between the different dimensions of representation as depicted in Hanna Pitkin’s (1967) seminal work *The Concept of Representation*. Pitkin describes four components of representation (formal, descriptive, symbolic, and substantive). Formal representation refers to the rules and procedures used to select representatives. Descriptive representation refers to the similarity (e.g., in terms of race, ethnicity, or, in this case, gender) between representatives and the represented. Symbolic representation refers to “feelings of being fairly or effectively represented” (Schwindt-Bayer & Mishler, 2005, p. 407). Finally, substantive representation refers to legislators acting on behalf of their constituents to represent policy concerns.
Although each of the aforementioned components of Pitkin’s model is important for broadly understanding what we mean by representation, the hypothesis that descriptive representation of women results in increases in women’s political engagement among the masses rests on the nature of the relationship between descriptive representation and symbolic representation. Specifically, descriptive representation actuates symbolic representation by sending a signal to the so-called “described” that the political arena represents them and is receptive to their part. Just as the exclusion of women from politics at an elite level sends the implicit message that politics is a “man’s game” (Verba, Burns, & Schlozman, 1997), the inclusion of women in politics at an elite level sends messages to women that politics is a woman’s game too (Burns et al., 2001; Carroll, 1994; Reingold, 2000). In addition, symbolic representation is believed to provide gender-specific incentives that engage women in political affairs.

It is argued that descriptive representation affects substantive representation through increased attention to “women’s issues” such as education, health care, and social welfare. Several studies have demonstrated that female legislators are more likely to promote legislation that serves women’s interest and spend more time debating and addressing women’s issues (Bauer, 2004, 2006; Bauer & Britton, 2006a; Bratton, 2005; Britton, 2002, 2005; Devlin & Elgie, 2008; Longman, 2006; Schwindt-Bayer, 2006; Tamale, 1999; Taylor-Robinson & Heath, 2003; Thomas, 1991; Tripp, Morna, & Konaté, 2006; Yoon, 2011). Although descriptive representation may also increase political engagement among women in the masses through increased attention to women’s issues, it has been demonstrated that increases in substantive representation are not necessary for the above relationship to hold (Schwindt-Bayer & Mishler, 2005).

Taken together, many scholars argue that increases in women’s descriptive representation will lead to increases in women’s political engagement. In a synthesis of several case studies on women’s representation in Africa, Bauer and Britton (2006a) maintain that “the presence of a large number of women MPs has changed cultural and societal perceptions about the nature of political leadership and governance” (pp. 18-19). These changes in perception are believed to facilitate increased political engagement of female constituents (Krook, 2006).

Results from empirical studies testing the relationship between descriptive representation and political engagement are mixed. Some scholars have found strong support for this hypothesis (Atkeson, 2003; Atkeson & Carrillo, 2007; Desposato & Norrander, 2009; Hansen, 1997; High-Pippert & Comer, 1998; Wolbrecht & Campbell, 2007). Others, however, have found little or
inconsistent support (Dolan, 2006; Karp & Banducci, 2008; Kittilson & Schwindt-Bayer, 2010; Lawless, 2004; Zetterberg, 2009). Multiple studies of women’s political behavior in the United States have found evidence that women’s descriptive representation can have a positive effect on women’s political engagement. Hansen (1997) argued that women candidates have an impact if and only if they are competitive, qualified candidates and not simply nominal candidates. In a later study, Atkeson (2003) found empirical support for this same relationship: that the presence of a competitive candidate significantly increases women’s political engagement. High-Pippert and Comer (1998) found that women who are represented by women in U.S. Congress have higher levels of political participation, interest, and efficacy. In a more comprehensive study, however, Lawless (2004) found little evidence that descriptive representation affects women’s feelings of political efficacy, trust in government, probability of registering to vote, probability of voting, or probability of engaging in political activities.

Although most of the research in this area has focused on American politics, some scholars have begun to look beyond the United States. For example, Karp and Banducci (2008) examine how the presence of women in national legislatures influences women’s political engagement and political efficacy in 35 countries. They find evidence that women’s attitudes about politics are strongly correlated with women’s representation, corroborating earlier findings by Schwindt-Bayer and Mishler (2005). Of interest, Karp and Banducci (2008) do not find support for the hypothesis that women’s descriptive representation induces higher levels of political behavior among women. On the other hand, Desposato and Norrander (2009) find strong support that women’s descriptive representation increases women’s political engagement. In their study of 17 Latin American countries, they find that women’s representation in national legislatures significantly reduces the gender gap between women and men’s conventional political participation. Moreover, their model predicts that the gap will disappear entirely with the distribution of legislative seats reaches gender parity. This is of particular interest given that some countries in Latin America are moving toward gender parity in national legislatures. For example, Costa Rica recently adopted a law stating that all parties competing in elections after 2010 must use the zipper-list system (i.e., alternating male–female or female–male candidates). Similarly, Ecuador employs a 50% gender quota, and the Argentine quota—when it is optimally implemented—results in close to 40% women in the legislature (Jones, 2009). In a third study, Zetterberg (2009) looks systematically at how the implementation of gender quotas affects women’s political attitudes and political participation. He finds no evidence that the adoption of quotas alone
influences women’s political engagement and, at best, weak evidence that properly implemented quotas influence women’s political participation. Zetterberg’s null findings are likely a result of the fact that he focuses on the adoption of gender quotas, which may or may not result in more women in parliament. He concludes that the adoption of a quota law alone is not sufficient to influence women’s political behavior.

In sum, the findings in the literature are mixed, with some authors concluding that women’s descriptive representation has a significant impact on women’s political engagement whereas others argue that it does not. Part of the reason for these inconsistent findings, in the U.S. literature specifically, may have to do with how (little) women’s representation varies across the United States over time. With regard to the literature that examines this question across countries, no researchers have conducted a longitudinal analysis that allows for variation over time. Furthermore, previous researchers have operationalized women’s political engagement in different ways. Desposato and Norrander (2009), for example, explicitly modeled the gender gap between men and women’s political engagement in Latin America, whereas Zetterberg (2009) focused solely on women’s political engagement. He omitted men from his sample, thus, isolating his analysis to women in Latin America.

We contribute to the understanding of this relationship by extending this body of literature to sub-Saharan Africa—a region that has experienced significant changes in women’s descriptive representation over the past two decades. We are explicitly interested in examining women’s political engagement in relation to men’s political engagement—the political engagement gender gap—so that we may gain leverage on understanding how women behave in relation to their male counterparts. Using data from 20 African countries from 1999 to 2008, we test the following hypothesis: Increases in women’s descriptive representation will be associated with decreases in the gender gap between men and women’s political engagement.

**Women’s Representation in Sub-Saharan Africa**

Sub-Saharan Africa provides us with an ideal environment to test the above hypothesis. There has been a dramatic increase in women’s political representation since the 1960s. In fact, the region is noted for having the fastest and largest rate of change in women’s political representation over the past five decades (Tripp et al., 2009). During the 1960s, less than 1% (0.6%) of legislators were women; in 2007, 17.8% of legislators in the lower chambers of parliament were women (Tripp et al., 2009, p. 152). By 2008, six sub-Saharan African legislatures were composed of 25% women or more, and with the 2008 election Rwanda became the first country in the world to have
more women than men in its lower chamber (56%). This increase is largely attributed to the introduction of gender quotas (Bauer & Britton, 2006a; Hughes, 2009; Tripp et al., 2009; Tripp & Hughes, 2010).

Three factors have been identified as being instrumental in the adoption of gender quotas in sub-Saharan Africa: the political opportunity offered to women by political transitions, pressures from elite women’s movements, and the spread of international and regional norms regarding the incorporation of women into the political sphere (Bauer & Britton, 2006a; Tripp et al., 2006). First, and foremost, in recent decades many countries in sub-Saharan Africa have undergone significant political transitions, oftentimes preceded by periods of prolonged conflict. In an edited volume by Bauer and Britton (2006a), several authors illustrate how women, utilizing the experience and training they gained during the course of struggle, seized the opportunities presented to them by political transitions (many times to democracy) to insert themselves into the political process and demand more representation (e.g., Bauer, 2006; Bauer & Britton, 2006b; Disney, 2006). During the transition period, women influenced the development of new constitutions and electoral rules, designing institutional mechanisms to incorporate more women into office (Bauer, 2006, 2008; Britton, 2002, 2005; Hassim, 2006).

At the same time, prominent women’s movements—domestic, regional, and international—agitated for the equal representation of women in Africa’s governments (Bauer, 2008; Bauer & Britton, 2006a; Disney, 2008; Tripp, 2000; Tripp et al., 2009). For example, in South Africa, the Women’s National Coalition was instrumental in encouraging the African National Congress to reserve 30% of the parliamentary seats on its list for women for the 1994 election (Humaraau, 1996). In Uganda, the National Council of Women along with other NGOs were instrumental in convincing President Yoweri Museveni to appoint women to leadership positions in his administration and to implement reserved seats for women in the Ugandan parliament (Goetz, 1998; Tripp, 2006). Finally, many authors note the emergence of international norms in support of women’s equal representation in government as a significant factor in explaining the adoption of gender quotas in sub-Saharan Africa. Particularly, the 1995 UN Conference on Women in Beijing was a major catalyst for implementing gender quotas, not only in Africa but also across the world (Dahlerup & Freidenvall, 2005; Tripp et al., 2009).

In sum, the adoption of gender quotas in sub-Saharan Africa was the product of opportunities created by political transitions, agitation by women’s organizations, and both international and regional pressures. Quotas were not a result of increased participation of women in the electorate or based on changing attitudes at the mass level. In fact, Bauer (2008) argues that absent the intervention of gender quotas, it would have taken decades to “bring about the changes in
cultural attitudes and the socioeconomic developments” (p. 349) necessary to organically produce such large numbers of women in African legislatures.

Given that sub-Saharan Africa has seen such dramatic changes in levels of women’s representation over the past 20 years—and that these increases are largely the result of the adoption of gender quotas and, hence, exogenous to the electorate—this region is ideal for investigating the relationship between descriptive representation and women’s political engagement. In addition, there is some anecdotal evidence that women’s political participation at the elite level has had an impact on the political engagement of women at the mass level in some countries such as Rwanda (Burnet, 2008). However, this relationship has not been systematically examined across multiple countries over time.

We are particularly interested in the ways in which women’s representation is related to women’s willingness to participate in several important components of political behavior—namely, protesting, interacting with elected officials, and discussing politics with friends. We also examine attitudinal components such as individual interest in politics. We do this by examining women’s political engagement in comparison to men’s political engagement—the political engagement gender gap—across time and across countries.

Sample Section

We test our hypothesis using survey data from Afrobarometer surveys. Our sample includes data from almost 90,000 respondents from 20 African countries from 1999 to 2008.1 As stated before, previous analyses on the effects of women’s descriptive representation on women’s political engagement have focused almost exclusively on the United States; however, there are some notable exceptions of cross-national research on women’s political engagement. Karp and Banducci (2008) examine women’s political participation and political efficacy using survey data from 35 countries. Schwindt-Bayer and Mishler (2005) examine women’s political efficacy in a cross-national sample of 31 countries. Desposato and Norrander (2009) and Zetterberg (2009) analyze women’s political engagement in 17 Latin American countries.

To the best of our knowledge, no other comparative study offers a cross-sectional longitudinal analysis of how women’s descriptive representation is associated with women’s political engagement.2 Our analysis not only extends the study of how women’s descriptive representation affects women’s political engagement to sub-Saharan Africa, but also incorporates four
waves of survey data over a 10-year period. This is necessary to detect how changes in women’s representation over time influence women’s political engagement. Cross-national analyses that examine a single point in time in a given country provide us with an understanding of how women’s political engagement in countries with more women in the national legislature compare to women’s political engagement in countries with fewer women in the national legislature; however, these studies are unable to provide us with an understanding of how changes in descriptive representation within countries over time are associated with changes in women’s political engagement over time.

Increases in women’s representation in the national legislature may cause women to engage in higher levels of political behaviors, or there may be something systematically different about the countries that have a larger percentage of women in office that also causes women to engage more frequently with politics. We cannot infer this from previous studies. It is not possible to uncover this relationship using cross-national analysis that provides variation only between countries and not within countries. To better understand the relationship between women’s descriptive representation and women’s political engagement, it is necessary to have information about women’s political engagement in a given country at both $t_1$ and $t_2$. We can then obtain within-country effects. Thus, in addition to allowing us to evaluate if the gender gap in political engagement is smaller in countries with more women in the national legislature, our data also allow us to evaluate if the gender gap in political engagement changes within countries as the percentage of women in the national legislature changes over time.

**Dependent Variables**

Our dependent variable is political engagement. Because our study is cross-national, it is especially important to take into account both men and women’s political engagement as the factors that compel or encourage political engagement vary across countries. Although it is instructive to look at women’s political engagement in isolation—and these figures can be compared across countries—this approach does not tell us anything about overall citizen engagement in a country and ignores the fact that engagement may be systematically higher for both men and women in some countries than in others. Although we consider several types of political engagement, we operationalize the gender gap in the same manner for all measures.

We code engagement as 1 if the individual reports engaging in a given political activity and 0 otherwise. Building on previous research, we operationalize political engagement using the following indicators: (a) discussed politics with friends or neighbors, (b) attended a demonstration or
protest march, (c) interested in public affairs, (d) contacted parliamentary representative, and (e) contacted political party official (Desposato & Norrander, 2009; Kittilson & Schwindt-Bayer, 2010; Verba et al., 1997; Zetterberg, 2009). The average difference between male and female engagement varies significantly in our data set, both within and between countries.

**Independent Variables**

Our first independent variable is the gender of the survey respondent. Each respondent is coded either 1 for woman or 0 for man. We label this variable \( \text{woman} \). If there is a gender gap in political engagement, the coefficient on \( \text{woman} \) will be negative and significant, indicating that, ceteris paribus, women are less likely to participate than men. Then, following previous research, we use interaction terms between the independent variables of interest and the gender of the individual respondent to analyze which factors affect the gender gap (Desposato & Norrander, 2009; Lawless, 2004).

Our main independent variable of interest is women’s descriptive representation. We measure this as the percentage of women in the national legislative chamber in the year prior to the survey year. These data were taken from the Inter-Parliamentary Union (2010) statistical archives. We do not have any reason to believe that there will be a significant relationship between the overall (men and women) level of political engagement in a given country and the percentage of women in the legislature. Rather, our hypothesis speaks only to how increases in women’s numeric representation will be associated with women’s reported levels of political engagement. Therefore, we include an interaction between the percentage of women in the national legislature and the gender of the respondent. The interaction term allows us to evaluate if women’s descriptive representation has a different relationship with women’s political engagement than it does with men’s political engagement. We hypothesize that this relationship will be positive and significant, indicating that increases in women’s descriptive representation are associated with a narrowing in the political engagement gender gap.

Our time-series cross-national data set—with a 10-year temporal domain—provides us with significant variation in the percentage of women in the national legislature. For example, our sample includes some legislatures where women occupy 4% or fewer seats (i.e., Nigeria in 2002 and Lesotho in 1999) and others where women occupy 30% or more seats (i.e., South Africa in 1999, 2003, 2005, and 2007; Mozambique in 2001, 2004, and 2007; Tanzania in 2007; and Uganda in 2007). In addition, during our period eight countries in our sample adopted or modified some form of gender
quota, often resulting in significant increases in women’s representation. For example, in 2000 a constitutional reform raised the number of reserved seats for women in Tanzania to 20% (up from 15% as mandated by the 1997 constitutional reform; Tripp & Kang, 2008; Yoon, 2008). As a result, women’s representation went from 16%, prior to the 2000 election, to 22% with the October 2000 election. In addition, Lesotho saw a dramatic increase in women’s representation during the period included in our study. In 1999, women occupied only 3.8% of the seats in the national legislature; by 2007 women composed 25% of the legislature. Changes over time within individual countries are necessary for us to estimate within-country effects.

Second, we control for social inequalities between men and women. It is possible that women report higher levels of political engagement in countries with higher levels of gender equality; therefore, we include the Gender-related Development Index (GDI) in our analysis. The GDI was developed by the United Nations Development Programme to measure inequalities between men and women. Similar to the Human Development Index, it takes into account life expectancy rates, adult literacy rates, and estimated earned income at purchasing power parity of the U.S. dollar, which is included as a measure of standard of living. It also takes into account the disparities between men and women for each of these measures; therefore, the greater the gender disparity, the lower the country’s GDI score. We include an interaction term between the respondent’s gender and the GDI given that gender disparities may affect women’s engagement differently than men’s engagement.

Third, we control for level of political rights and civil liberties as reported by Freedom House for each country-year. Political rights and civil liberties are often associated with higher levels of political engagement, but this is not always the case, especially in postconflict societies (Desposato & Norrander, 2009). For example, previous research in Africa demonstrates that women are often more involved in politics in war-torn and postconflict countries (Bauer & Britton, 2006a; Fuest, 2008; Hughes, 2009; Pankhurst, 2002; Tripp & Hughes, 2010).

Fourth, we control for the number of years each country has been democratic. Yoon (2004) argues that democracy is positively related to women’s inclusion in politics. However, in a sample of sub-Saharan African countries, she finds evidence to suggest that it may take a few cycles of elections before women’s inclusion in politics is fully realized. Thus, we include a measure of the duration of democracy for each country-year in our sample. We consider a country to be democratic if it has a Polity IV score of 6 or higher (Marshall & Jaggers, 2010). We also control for a country’s economic development. We measure this using the gross national income (GNI) per capita (current U.S.
dollars) as reported by the World Bank. Similar to democratic development, economic development is often believed to be positively related to political engagement (Inglehart & Norris, 2003).

Fifth, we control for the influence of left-leaning political parties. Previous research argues that left-leaning political parties espouse egalitarian ideologies and are more likely to extend representation to historically marginalized groups (Matland & Studlar, 1996). Moreover, research demonstrates that they are more likely to advance gender equality (Bauer, 2008; Bauer & Britton, 2006a; Caul, 1999). As such, the presence of left-leaning political parties may foster more political engagement among women. Following Tripp and Hughes (2010), we consult the Socialist International membership list to identify which parties in Africa are left leaning. We code a country as having a left-leaning political party if either of the parties that occupy the largest or second largest number of seats in the national legislature is included in the Socialist International membership list.

Finally, following previous research on political engagement, we control for several individual-level factors. We include controls for respondent’s age, religiosity, income, and level of education (Almond & Verba, 1963; Huntington & Nelson, 1976; Logan & Bratton, 2006; Rosenstone & Hansen, 1993; Verba, Nie, & Kim, 1978; Wolfinger & Rosenstone, 1980). Previous research demonstrates that these variables are correlated to political engagement.

**Data Analysis and Findings**

We are testing whether increases in women’s descriptive representation will be associated with decreases in the gender gap between men and women’s political engagement by examining data from 20 sub-Saharan African countries over a 10-year period. To answer this question, we need an estimator that will provide within-country estimates. We can get within-country estimates by using a multilevel model (Gelman & Hill, 2007; Rabe-Hesketh & Skrondal, 2005). Given the binary structure of our dependent variable, and the dependencies that exist within our data structure (i.e., individual respondents nested within surveys and surveys nested within countries), we estimate a mixed logistic regression.

The mixed logistic regression provides accurate estimates of time-series effects while accounting for the dependencies in our data (i.e., dependence between respondents in the same survey and dependence between surveys in the same country; Gelman & Hill, 2007; Shor, Bafumi, Keele, & Park, 2007). This model allows us to examine if the relationship holds within countries and not just between countries, which is important for understanding how
increases in women’s descriptive representation affect women’s political engagement. This model also accounts for other unmeasured country-level or survey-level variation that may affect the dependent variable. Examples of unmeasured variation by survey or year would be increased mobilization around a specific issue or some form of civil conflict.

In the multilevel model, we include a random intercept for each survey to relax the assumption of independence of errors between the respondents in the same survey (i.e., one survey in one country). We also include a random intercept for each country to relax the assumption of independence of errors between waves in a given country. The random intercepts represent the combined effect of all omitted country-specific and survey-specific covariates that cause respondents in some countries or surveys to be more prone to engaging in politics than others. In other words, our model accounts for the dependencies between respondents in a given survey year and the dependencies between surveys in a given country.

In addition to relaxing the assumptions of independence, including a random intercept for each country in the sample allows us to obtain a within-country estimate. This simply means that the survey responses and all of the covariates are centered on their respective country means. All time-invariant country-specific effects are accounted for by the random intercepts, leaving only within-country effects to be explained by the covariates (Rabe-Hesketh & Skrondal, 2005). Therefore, the coefficients represent the average within-country effect. The model is not explaining any between-country variance. This is similar to the estimates obtained from a fixed-effects model and could be acquired by including dummy variables for each country. In more practical terms, the coefficients estimated from this model tell us how changes within a given country over time are correlated with women’s political engagement. The coefficients from this model do not speak to how differences between countries are correlated with women’s political engagement.

This distinction is important. Between-country estimates (those obtained from purely cross-national samples or from between-subject estimators) do not indicate how changes in women’s descriptive representation within a country correlate with changes in women’s political engagement. Between-country estimates indicate only, for example, how women’s political engagement in a country with a small percentage of women in the legislature compares to a country with a higher percentage of women in the legislature. Therefore, the between-country estimates may leave us wondering if there is something unique about a country that has a large proportion of female legislators that also causes higher levels of political engagement among women.

Finally we include a random coefficient for gender of the respondent. This allows us to go beyond what we can do in the fixed-effects model by
estimating survey-specific slopes on gender for each survey in the model. Substantively, the mixed logistic model allows us to calculate survey-specific and country-specific probabilities similar to the fixed-effects model.

Our findings are reported in Table 1. As expected, the coefficient on woman in each of the engagement models is negative and significant. This provides compelling evidence that, ceteris paribus, women are significantly less likely to engage in all types of political behaviors, confirming our suspicion that the gender gap in political engagement is present in sub-Saharan African countries.

Second, the interaction between the percentage of women in the legislature and woman is positive and significant in all of our political engagement models. This indicates that women are more likely to engage in politics as the percentage of women in the national legislature increases, resulting in narrowing of the gender gap. According to the multilevel model, the positive relationship between women’s political engagement and women’s descriptive representation holds within countries, resulting in a decrease in the gender gap. These estimates suggest that the relationship occurs not just when we look between countries (e.g., comparing women’s political engagement in South Africa to women’s political engagement in Malawi) but also when we compare women’s political engagement in one country over time. Taken together, our results support the hypothesis that increases in women’s descriptive representation are associated with decreases in the political engagement gender gap.

Although this relationship is consistent across all our dependent variables, to allow us to more easily interpret our results we have graphed the relationship between the gender gap in political engagement and women’s descriptive representation in the national legislature. Figure 1 graphs the relationship between political engagement and women’s descriptive representation for four of our five dependent variables: talking about politics, interest in politics, contacting a member of parliament, and contacting a party official. The relationship between our fifth dependent variable (attending a political demonstration) and women’s descriptive representation is positive and significant, but this relationship is not as robust as those for our other measures, thus we elected to omit it from the figure. The lesser impact of women’s descriptive representation on demonstrating is consistent with the findings of Desposato and Norrander (2009). The top line (denoted by circles) graphs the relationship for the average man in our sample, whereas the bottom line (denoted by triangles) graphs the relationship for the average woman in our sample. First, note that the slope of the relationships between the probability of a man’s political engagement and the percentage of women in the legislature is almost flat, indicating that an increase in women’s descriptive representation does not affect men’s political engagement. However, the slope of
### Table 1. Effects of Women’s Descriptive Representation on Women’s Political Engagement: Mixed Logistic Estimator using Afrobarometer Data (1999–2008).

<table>
<thead>
<tr>
<th></th>
<th>Talk about Politics</th>
<th>Participate in Demonstration</th>
<th>Interest in Politics</th>
<th>Contact Member of Parliament</th>
<th>Contact Party Leader</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woman</td>
<td>−0.863***</td>
<td>−0.740***</td>
<td>−0.837***</td>
<td>−0.965***</td>
<td>−0.926***</td>
</tr>
<tr>
<td>% Women in Legislature</td>
<td>0.008***</td>
<td>0.015</td>
<td>0.018***</td>
<td>−0.003</td>
<td>0.003</td>
</tr>
<tr>
<td>Woman X % Women in Legislature</td>
<td>0.008*</td>
<td>0.008*</td>
<td>0.008***</td>
<td>0.015**</td>
<td>0.018***</td>
</tr>
<tr>
<td>Gender Development Index</td>
<td>−1.608</td>
<td>−0.178</td>
<td>−1.277</td>
<td>−1.355</td>
<td>−1.382</td>
</tr>
<tr>
<td>Woman X GDI</td>
<td>0.359</td>
<td>0.434</td>
<td>0.463*</td>
<td>0.476</td>
<td>0.206</td>
</tr>
<tr>
<td>Political Rights</td>
<td>0.060</td>
<td>−0.096</td>
<td>0.068</td>
<td>0.105</td>
<td>−0.065</td>
</tr>
<tr>
<td>Civil Liberties</td>
<td>−0.132</td>
<td>0.138</td>
<td>−0.202</td>
<td>−0.017</td>
<td>0.011</td>
</tr>
<tr>
<td>Years Democratic</td>
<td>−0.007</td>
<td>0.010</td>
<td>−0.002</td>
<td>−0.003</td>
<td>−0.010</td>
</tr>
<tr>
<td>Gross National Income</td>
<td>0.000</td>
<td>−0.000</td>
<td>0.000</td>
<td>0.000</td>
<td>0.000</td>
</tr>
<tr>
<td>Gross National Income</td>
<td>−0.367</td>
<td>0.258</td>
<td>−0.71***</td>
<td>−0.315</td>
<td>−0.114</td>
</tr>
<tr>
<td>Individual-Level Measures</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.002**</td>
<td>−0.008***</td>
<td>0.003***</td>
<td>0.017***</td>
<td>0.013***</td>
</tr>
<tr>
<td>Devout</td>
<td>0.049***</td>
<td>0.053***</td>
<td>0.066***</td>
<td>0.093***</td>
<td>0.052***</td>
</tr>
<tr>
<td>Income</td>
<td>0.014*</td>
<td>0.050***</td>
<td>−0.015</td>
<td>0.031**</td>
<td>0.072***</td>
</tr>
<tr>
<td>Education</td>
<td>0.264***</td>
<td>0.168***</td>
<td>0.208***</td>
<td>0.141***</td>
<td>0.209***</td>
</tr>
<tr>
<td>Constant</td>
<td>0.776</td>
<td>−2.842***</td>
<td>1.746***</td>
<td>−3.024***</td>
<td>−2.231***</td>
</tr>
<tr>
<td>Variance Component</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>St. Dev. of the Country-Level Intercept</td>
<td>−1.400***</td>
<td>−1.375***</td>
<td>−10.232</td>
<td>−0.985***</td>
<td>−1.520***</td>
</tr>
<tr>
<td>St. Dev. of the Gender</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coefficient</td>
<td>−1.639***</td>
<td>−1.781***</td>
<td>−2.054***</td>
<td>−1.520***</td>
<td>−1.476***</td>
</tr>
<tr>
<td>St. Dev. of the Survey-Level Intercept</td>
<td>−0.932***</td>
<td>−1.020***</td>
<td>−0.843***</td>
<td>−1.109***</td>
<td>−1.271***</td>
</tr>
<tr>
<td>Observations</td>
<td>90798</td>
<td>89761</td>
<td>90585</td>
<td>77151</td>
<td>50391</td>
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<tr>
<td>Surveys</td>
<td>66</td>
<td>65</td>
<td>66</td>
<td>55</td>
<td>35</td>
</tr>
</tbody>
</table>

Standard errors are in parentheses. ***p<0.001; **p<0.01; *p<0.05.
the relationships between the probability of the average woman’s political engagement and the percentage of women in the legislature is positive. This demonstrates that as the percentage of women in the national legislature increases, women are more likely engage in political behaviors. The distance between the point estimates for men and women represents the gender gap. Given that the slope for man is flat and the slope for woman is positive in all of our graphs, this results in a decrease in the size of the gender gap as the percentage of women in the legislature increases.

Figure 1. The political engagement gender gap.
Figure 1 depicts the probability of political engagement as the percentage of women in the legislature increases for four different measures of political engagement. The distance between the point estimates for men and women represents the gender gap. The point estimates are for the average man and woman in the sample (all other control variables held at their mean value and dichotomous variables held at their modal value). Predicted probabilities are based on estimates produced from the multilevel model. When confidence intervals overlap, the difference between point estimates (the gender gap) is no longer statistically significant.
national legislature increases for each one of our measures. Once women occupy somewhere between 25% and 35% of the legislative chamber, the predicted probability of the average woman’s political engagement is not statistically different from the predicted probability of the average man’s political engagement.

Overall, we find strong support for our central hypothesis that as the percentage of women in the national legislature increases the political engagement gender gap decreases. Our findings are robust to multiple model specifications demonstrating that this relationship holds not only in a pooled sample but also within individual countries. Finally, we are able to show that our findings hold irrespective of both country-level variation (i.e., GNI, GDI, political rights, civil liberties, and years democratic) and individual socioeconomic indicators.

**Additional Analysis**

To increase our confidence in this relationship—that it is women’s descriptive representation in the legislature and not simply the adoption of quotas that is affecting women’s political engagement—we analyzed two additional models. The first model (not shown) estimates the relationship between the adoption of compulsory gender quotas and women’s political engagement across our sample. To do this, we include a dummy variable for the adoption of gender quotas. As in the previous model, we interacted the dummy variable with the respondent’s gender. The interaction is necessary to determine if the adoption of gender quotas affects the gender gap in political participation. All other components of the model are specified as before. The relationship between the adoption of gender quotas and women’s political participation does not hold.

The second model (not shown) includes a dummy variable indicating the adoption of any type of gender quota including voluntary or party quotas. Again, we include an interaction term between the gender of the respondent and the adoption of gender quotas. As before, this model does not demonstrate support for the idea that the adoption of gender quotas alone is sufficient to increase women’s political engagement. This is a result of the fact that multiple countries have adopted quotas that have not resulted in significant gains for women. Therefore, the relationship between descriptive representation and women’s political engagement is dependent on substantial increases in women’s representation.

This finding indicates that the benefits from the adoption and implementation of successful quotas are twofold: countries benefit by extending political representation to women—a historically marginalized group—and
positively influence their political engagement. If, on the other hand, quotas are passed and then ignored by political leaders (e.g., political party quotas in Botswana) or are passed without placement mandates (e.g., Burkina Faso), quotas will not have a positive impact on women’s descriptive representation or women’s political engagement. This indicates that leaders will have to do more than just pass quotas in an effort to curry political favor; they will need to fill them.

Conclusion

Our article makes two important contributions to the literature on women’s descriptive representation and its impact on women’s political engagement. First, we extend the study of women’s descriptive representation and its influence on women’s political engagement to sub-Saharan Africa—the first time this type of analysis has been conducted in the region. Second, we are able to more effectively isolate the causal relationship between women’s descriptive representation and women’s political engagement by using time-series cross-national data and multilevel modeling. Previous research in comparative politics has attempted to answer this question only by examining cross-national data. Although the extension of this body of research to cross-national data is a significant contribution in and of itself, the results from cross-national analysis cannot inform our expectations about how changes in women’s descriptive representation in a given country will influence women in that country over time. Our data speak more directly to this issue by utilizing variation both within and across countries. Where previous research relies exclusively on cross-national data and may leave us wondering if there is something unique about countries that have larger percentages of women in the legislature, we are able to address this issue specifically. Our findings indicate that the results hold within individual countries.

Overall, our results provide strong evidence that increases in the percentage of women in the national legislature are associated with increases in women’s political engagement relative to that of men, effectively decreasing the size of the political engagement gender gap in sub-Saharan Africa. It is important to note that the reduction in the political engagement gender gap occurs not because of the disenfranchisement or disengagement of men but through increases in women’s political engagement. In addition, it is not necessary for women to achieve perfect gender parity (i.e., hold precisely 50% of political power) to erase the gender gap in political engagement, but substantial gains (occupying between 25% and 35% of legislative seats) must occur. This finding may lend some credence to the critical mass hypothesis that suggests once
women occupy a sizable proportion of the legislature (commonly posited to be 30%) women’s presence will start to have a broader impact on the political process. To conclude, this research suggests that when a country adopts institutional rules (e.g., gender quotas) to increase women’s descriptive representation and these rules result in significant political gains for women, we can expect that the country will also benefit from women’s increased political engagement. “Engendering” politics at the elite level translates to “engendered” politics at the mass level.

**Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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**Notes**

1. Women’s descriptive representation in sub-Saharan Africa has experienced significant changes over the past several decades, but as a result of data availability, the temporal domain of our empirical analysis covers the period from 1999 to 2008. Moreover, Afrobarometer surveys have increased the number of countries included since the first wave; thus, not every country appears in every wave. We examine 11 countries from the first round, 16 from the second round, 18 from the third round, and 20 from the fourth round. In addition, we use data from three additional interim waves.


3. Contacting parliamentary representatives and political party officials may seem like a high bar for political behavior. In fact, our results show that the baseline level at which both men and women contact political officials is much lower than the baseline level at which men and women engage in other facets of politics (e.g., discussing politics with their friends). However, given that we are interested in the gender gap, we have no reason to believe that increases in women’s descriptive representation should not be associated with decreases in the gender gap for contacting political officials. It seems plausible that women will feel more comfortable contacting political leaders if they believe politics is not just a “male domain” (Verba, Burns, & Schlozman, 1997). Moreover, the selection of this measure is consistent with the previous literature (e.g., Verba et al., 1997; Wolbrecht & Campbell, 2007; Zetterberg, 2009).
4. Tripp and Hughes (2010) examine the impact of postconflict social and political reconstruction on women’s political representation in Africa. Following their conceptualization and operationalization of postconflict status, we ran a model that included a dummy variable denoting those country-years in which the country was 10 or fewer years removed from a major conflict. The addition of this control variable did not significantly affect our results. However, because of the small number of major conflicts in our sample of 20 countries, there is too little variation to draw any substantive conclusions, and therefore we do not include this variable in our final analysis.

5. A multilevel model is also known as a hierarchical model (Gelman & Hill, 2007).

6. Our findings are robust to estimations using country and survey fixed effects.

References


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