

Intersectionality, Depression, and Voter Turnout

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Abstract

Context: This article untangles the effects of depression on voter turnout among blacks and whites and among women and men and considers several factors—income, health insurance, church attendance, group consciousness, and empowerment—that may mitigate the negative effects of depression on turnout.

Methods: The authors estimated regression models of voter turnout on depression across race and gender groups using data from the Panel Study of Income Dynamics and the National Longitudinal Study of Adolescent to Adult Health. They used interaction terms to assess whether the effect of depression is conditional on the potential mitigating factors.

Findings: Reporting increased depressive symptoms was associated with a lower probability of voting across electoral contexts for all respondents, and few factors mitigated this negative effect. Only in the case of black men did the authors find that a coethnic candidate mitigated the negative effect of depression, while a higher level of group consciousness did the opposite.

Conclusions: The effect of depression was strong, cut across racial and gender groups, and was generally robust to the effects of income, health insurance, church attendance, group consciousness, and empowerment. More research is required to understand how to reduce depression and improve turnout among those who experience it.

Keywords voting, depression, race, gender, intersectionality

Depression is the leading cause of disability and one of the most common disorders in the United States. While many Americans suffer from the condition, they often do so silently—and researchers are only beginning to study its effects on politics. Those with depression are susceptible to a range of altered mental states, such as a sad mood, a sense of alienation, and

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diminished interest in social activities. It should come as no surprise, then, that individuals with depression participate in politics much less than their healthy counterparts (Ojeda 2015; Ojeda and Pacheco 2017). These findings, together with a larger body of work identifying the negative consequences of poor general health on electoral participation (Gollust and Rahn 2015; Mattila et al. 2013; Pacheco and Fletcher 2015), increasingly point to health as one of the primary causes of inequality in participation. This fact is especially concerning given the degree to which government structures the accessibility, affordability, and quality of health care systems for ordinary citizens. Whose voices are heard in the political process, and whether those voices are healthy or unhealthy, can therefore have serious ramifications for health care coverage, health, and overall well-being.

Yet, as far as political voice goes, it is well established that not all groups have equal influence. Women, minorities, and the poor are frequently left out of the political process. Mirroring this political inequality is the fact that health disparities are unevenly distributed across these groups (Schulz and Mullings 2006). Those with underrepresented political voices are subject to fewer diagnoses of existing illnesses, inadequate treatment after diagnosis, and less preventive care (Geiger 2006). Issues of health also emerge within groups. Depression, as is true of many other diseases and illnesses, is most common among society's most disadvantaged.

We draw on an intersectional framework to examine how health inequalities impact the political voices of various groups. It is well established that women suffer from depression at higher rates than do men (Kessler et al. 1994), even as they vote more often (Leighley and Nagler 2013). Meanwhile, turnout among blacks is lower than among whites (Leighley and Nagler 2013), as are their rates of depression (Riolo 2015). These facts, although not inherently incongruent, do not fit together and therefore invite further scrutiny using an intersectional framework. Importantly, an intersectional framework gives special attention to the experience of black women, a group typically excluded in the social scientific research process (Crenshaw 1989; Hancock 2007; Smooth 2006). Black women present an especially perplexing pattern with respect to depression and political participation because their identity as women and as black reveals a tension in the diverging patterns presented by gender and race alone. This complexity might be overlooked were it not for our intersectional approach.

We present evidence of a depression-participation gap across all racial and gender groups using two nationally representative longitudinal panels of youth cohorts. Although the magnitude of the gap is consistently largest for white women, differences across groups are not statistically significant.

We then focus on how income, health insurance, church attendance, group consciousness, and empowerment work within the systems of race and gender to shape how depression affects political participation. With a few exceptions—namely, the effect of group consciousness and empowerment for black men—our results suggest that these factors do little to reduce the negative consequences of depression on turnout. Although the lack of group differences in the depression-participation gap suggests that an additive model is more appropriate, we found that an intersectional approach still yields important insights as it relates to how depression affects the political participation of black men.

Health, Depression, and Political Participation

Research on the participatory consequences of health is flourishing. Numerous studies have found that poor health and functional disability have widespread detrimental consequences for participation, affecting even the smallest and most routine acts of democratic citizenship (Pacheco and Fletcher 2015; Gollust and Rahn 2015; Powell and Johnson 2018, this issue). One offshoot of this research focuses on how mental health, which refers to the psychosocial well-being of individuals, affects political behavior. Conditions such as alcoholism (Sund et al. 2016), amnesia (Coronoel et al. 2012), psychosis (Sund et al. 2016), and schizophrenic symptoms (Plutzer and Wiefek 2006) are correlated with lower rates of political engagement. Depression, a mood disorder defined by the loss of interest in activity and social isolation and that handicaps the ability to engage in healthy relationships, has also been found to decrease participation (Ojeda 2015; Ojeda and Pacheco 2017; Sund et al. 2016). Although depression can affect anyone, the risk of onset and persistence is exacerbated by poverty, unemployment, traumatic life events, physical illnesses, and problems caused by drug and alcohol use (WHO 2017). According to the World Health Organization (2017), depression impacts long-term mood and is distinct from temporary feelings of sadness, stress, and fear, which are regularly experienced by everyone.

Because this research is in its infancy, the reasons that depression hinders political participation and for whom remain unclear. Depression is multisymptomatic and includes a loss of energy, low self-esteem, a sense of isolation, concentration problems, changes in eating and sleeping patterns, and thoughts of suicide—and so there are several pathways by which it could inhibit participation. A loss of energy could impair physical ability required of participation, while concentration problems may disrupt the

ability to engage in serious or prolonged thinking about politics. A depressed mood might dampen feelings of internal or external political efficacy, which in turn could reduce political engagement. The social origins of depression, such as stigmatized identity, gender roles, discrimination, marital problems, and lack of a support network, also contribute to the prevalence of depressive episodes and may reinforce feelings of isolation that neutralize recruitment efforts. Applicable to this research project is how these factors may not operate in identical ways across intersectional groups.

No studies to date have assessed whether the depression-participation gap encompasses everyone or is especially large for certain racial and gender groups, even though there are racial and gender disparities in health status and health care. From mortality, HIV/AIDS, and diabetes to health care access, quality of treatment, and reporting procedures, racial minorities do not experience health and the health care system in the same way that white Americans do. Black Americans in particular have been historically, grossly, and immorally mistreated by the medical establishment (Cohen 1999; Jones 1983; Skloot 2010). These disparities are complicated and, at times, accentuated in the area of mental health. Particular to the experiences of black women is the effect of racism and sexism as the underlying causes of poor mental health and stress in the home, in the workplace, and in everyday life (Jordan-Zachery 2017). We therefore ask, To what extent can the depression-participation gap generalize to white men, white women, black men, and black women? And can racial and gender disparities in depression account for disparities in political participation?

Applying an Intersectional Framework

Intersectionality first emerged as a lens to reveal that the power dynamics of socially constructed identities are not mutually exclusive (Crenshaw 1989). Analyzing the effects of race and gender situate the respective experiences of black men and white women relative to white men. Each are systemically disadvantaged by one aspect of their identities—race for black men and gender for white women—but are privileged by other aspects of their identities: gender for black men and race for white women. Black women, on the other hand, are confronted with a double jeopardy in which they are disadvantaged due to both their race (black) and gender (woman). A singular focus on one identity misses how black women simultaneously experience race and gender. In the case of black men, a

focus on race exclusively isolates how men experience masculinity and gender relative to white men. Besides the presentation of identity, intersectionality recognizes the psychological burden that black women face where they are forever working to stand straight in a perpetually “crooked room” (Harris-Perry 2011). While our methodological take on intersectionality is one of many, selecting this theoretical position allows us to examine how interlocking systems of oppression interact with political participation.

The cross-current of race and gender brings together different considerations in the study of political participation. Scholars traditionally study participation in terms of resources (Verba, Scholzman, and Brady 1995), motivation (Schuessler 2000), and mobilization and recruitment (Rosenstone and Hansen 1993). Importantly, scholars of minority politics have built on this research in several ways. First are those who point to resource disparities as a source of political inequality (Bobo and Gilliam 1990; Harris, Sinclair-Chapman, and McKenzie 2005; Michener 2017; Scholzman, Burns, and Verba 1994). Bobo and Gilliam (1990) found that racial disparities in turnout disappear once accounting for socioeconomic status given the presence of a coethnic political leader. Second are those scholars who focus on the motivational antecedents of participation (often in tandem with resources), in particular the role of identity in shaping who participates and when (Bobo and Gilliam 1990; Cole and Stewart 1996; Fraga 2016; Harris, Sinclair-Chapman, and McKenzie 2005). Third are scholars who focus on mobilization within communities of color. This research highlights how racial group identification and engagement can lead to electoral participation and provide ideological cues (Calhoun-Brown 1996; Ellison and Gay 1989; Leighley 2001).

Feminist scholars have likewise illuminated the causes of gender disparities in participation (Brown 2014; Smooth 2006). While women have become as equally likely to vote as men, if not more so, women lag behind men in other important behaviors, such as donating to campaigns, contacting officials, expressing political interest and knowledge, attending to the news, and feeling a sense of political efficacy (Burns, Scholzman, and Verba 2001; Jennings 1983; Verba, Scholzman, and Brady 1995). Scholars attribute these gaps to the lingering inequities of gendered political socialization. The culture of traditional gender roles has stunted the political ambition and participation of generations of women since the ratification of the 19th Amendment (Costantini 1990; Fox and Lawless 2003). Despite the rigidity of traditional sex roles loosening over time, indicated by the influx of women into higher education and the workplace,

women are still the dominant caregivers of children and face numerous barriers to career advancement. This division of labor can have persistent effects on political engagement, especially when the presence of gender stereotypes and the absence of female political role models influence how women perceive their sense of belonging in politics (Fox 2011).

Yet, social groups are not homogeneous. The effects of socialization, income, and experiences with discrimination vary across race, gender, and other socially relevant categories. For instance, despite black women facing higher instances of poverty, a factor known to depress participation, they are more likely to participate in politics than are white women. Thus, intersectional scholars have sought to illuminate the unique political experiences of black women (Berger 2004; Brown 2014; Brown and Gershon 2016). Brown (2014), for instance, found little evidence to support the mobilization model in explaining turnout among black women compared to white women but did find that the presence of linked fate is an important factor. Holman (2016) likewise demonstrated the unevenness of traditional models in explaining participation across groups; she found that education is the only consistent predictor of participation across different races of women. These findings reshape our understanding of political behavior by showing that the influences of resources, motivations, and mobilization are not uniform across groups.

Building on this line of work, we argue that differences in the depression-participation gap among white men, white women, black men, and black women result from differences in how the experience and management of depression affect the resources, motivations, and mobilization underpinning the participation of each group. In particular, we expected that the negative consequences of depression will be greatest among the most disadvantaged members of society. Importantly, in our argument about differences is also a claim about similarity: that depression as a mental disability socially isolates and alienates individuals from the political process in a way that cuts across race and gender. This hypothesis is not meant to suggest that there are no racial or gendered differences—we have articulated one already, and we discuss additional expected differences below. Rather, it simply recognizes that depression is a pernicious condition whose consequences are difficult to avoid regardless of social status.

Mitigating the Effect of Depression

Our goal was to determine the degree to which the depression-participation gap is present across groups and the extent to which the presence of

resources, both material and psychological, reduce this gap. We highlight five factors that we considered especially likely to mitigate the effect of depression on turnout—income, health insurance, church attendance, group consciousness, and empowerment—and discuss how we expected each factor to attenuate the depression-participation gap and for whom. Notably, we did not expect any of the factors to apply equally across all groups.

Income. We expected income to be an important resource for managing the experience of depression. Income provides access to health care and treatments that might otherwise be unavailable. It also allows individuals to better manage their everyday life, affording time for political participation. Nevertheless, there are significant racial and gender disparities in income that might affect how it mitigates the effects of depression. Black Americans and women are much poorer on average than white men and typically face greater structural and policy barriers to paying down debt, building credit, securing a loan, and so forth. This means that incomes are not socially equal even when they are numerically equal (Oliver and Shapiro 1995). Moreover, income is not a salient predictor of participation for blacks as it is for whites. Once controlling for income, black Americans participate at higher rates than do white Americans (Bobo and Gilliam 1990). As such, we expect that income will both reduce the overall level of depression and its effects on the turnout, but that this attenuation will be especially strong among white men and, to a lesser extent, white women.

Health insurance. Health insurance provides ordinary citizens with access to treatments that assist in managing the effects of depression in everyday life, potentially including activities like political participation. Similar to income, health insurance may offset the financial burdens of receiving treatment for a permanent or temporary illness. Although one of the primary causes of being uninsured is unemployment (Artiga 2013), inequalities in coverage, usage, and quality are often starkly divided along racial lines (Kessler et al. 1994). We therefore expect that those with health insurance will be less affected by depression because they can better manage the condition. However, since insurance is not itself an indicator of utilization or quality, which are known to be lower for black Americans, we expect insurance to mitigate the effects of depression on turnout more so for white Americans.

Churches. Churches have long been a site of political mobilization, especially for black Americans. Holman (2016: 17) notes that “politically active Black churches mobilize church attendants to political participation, teach civic skills, and provide voting shortcuts” for congregational

members. Moreover, scholars of public health have noted that black Americans are much more likely to seek mental health care through spiritual advisers (Cooper et al. 2001). We therefore expect that the mobilizing nature of churches will mitigate the negative effects of depression, especially for black Americans for whom the church also serves as a resource for coping with health problems like depression.

Empowerment. An individual's propensity to participate in politics is not solely a function of their individual resources but also shaped by the political context and electoral landscape. Bobo and Gilliam (1990) argue that the increasing participation of black Americans is linked to their rising levels of political incorporation. There are several pathways by which greater representation leads to increased levels of participation: individuals may become more attentive to politics, they may gain greater political knowledge, and they may become more efficacious. An update to this literature demonstrates that both a coethnic candidate and the ethnoracial political context, that is, majority minority district, increases individual likelihood of participation among black Americans (Fraga 2016). Obama's historic election as the first black president and the historic black turnout may therefore mask the effects of depression for black Americans.

In summary, we argue that the effect of depression will reduce turnout for everyone but that the size of this effect will vary across racial and gender groups. We expected that the most disadvantaged members of society (i.e., black women) will experience the most negative consequences, while the most advantaged members of society (i.e., white men) will experience the least negative consequences. We further expected that factors such as income, health insurance, church attendance, group consciousness, and empowerment will mitigate the effects of depression but will do so differently across racial and gender groups.

Methods, Data, and Measures

The data for the analyses comes from two studies: the Panel Study of Income Dynamics (PSID) and the National Longitudinal Study of Adolescent to Adult Health (Add Health). The PSID is a nationally representative longitudinal sample of American families dating back to the 1960s. The Transition to Adolescence subsample follows the children of the PSID families as they enter adolescence and includes measures of voter turnout and depressive symptoms. Add Health is a nationally representative longitudinal sample that follows individuals from adolescence into middle adulthood. Wave III of the study was the first in which respondents were

Table 1 Features of the data sets used in the analyses

Feature	PSID	Add Health
Data type	Longitudinal survey of individuals in families	Longitudinal survey of individuals in schools
Elections	2004, 2006, 2008, 2010	2000
Age of sample (years)	18–27	19–28
Sample size	1,964	4,100
White men	489 (24.9%)	1,384 (33.8%)
White women	549 (28.0%)	1587 (38.7%)
Black men	478 (24.3%)	492 (12.0%)
Black women	448 (22.8%)	637 (15.5%)
Missing controls	Partisan strength	Group consciousness
Additional notes	Our models include family and individual random effects, election counter, and midterm dummy.	Our models use only a cross-section of the data set and include poststratification weights.

Notes: PSID, Panel Study of Income Dynamics; Add Health, National Longitudinal Study of Adolescent to Adult Health.

eligible to vote, so a battery of questions about politics were included alongside the standard health questions, including those about depression. We replicated the findings from these studies using the General Social Survey (GSS) and report the results of the GSS in the online appendix.¹ The key features of the PSID and Add Health data sets are presented in table 1.

The key dependent variable in our analyses is self-reported voter turnout. PSID respondents in 2004 and 2008 were asked, “Did you vote in the national election for President last November, in [YEAR]?” In 2006 and 2010, respondents were asked, “Did you vote in the national elections last November [YEAR], that were held to elect U.S. Senators and members of the House of Representatives?” In all years, respondents were given the response option of answering yes, no, or don’t know. Respondents in the Add Health were asked, “Did you vote in the most recent presidential election?” and given response options of yes, no, or don’t know. All responses are dichotomized into vote/did not vote, with respondents who were ineligible or didn’t know coded as missing.

The reliance on self-reported voting presents some challenges. Research shows that survey respondents tend to overreport turnout out of feelings of

1. The online appendix and other replication material for this article can be found on Harvard Dataverse at doi.org/10.7910/DVN/RXJM6X.

social desirability (Holbrook and Krosnick 2010) and that this trend is most accentuated among respondents who have the profile of a typical voter (Hill and Hurley 1984). Bias in the measurement of voter turnout could threaten the validity of our results if overreporting were more prevalent among those without depression than among those with depression; such a pattern could result in a positive but spurious correlation between depression and voter turnout. That said, it is not clear that the relationship between depression and social desirability is necessarily negative. If the two are unrelated, then our analysis of how depression affects turnout will be unbiased, and if they are positively correlated, then detecting a relationship between depression and turnout would be more difficult. Using data from the Cooperative Congressional Election Study, we present evidence in the online appendix that indicates that the issue of overreporting attenuates but does not invalidate the results of our study.

The key independent variable in our analyses is depressive symptoms. Depression is a mood disorder defined by the fifth edition of the American Psychiatric Association's *Diagnostic and Statistical Manual of Mental Disorders* as "Markedly diminished interest or pleasure in all, or almost all, activities most of the day, nearly every day." (American Psychiatric Association 2013) and includes such symptoms as a depressed mood, diminished interest in activities, weight loss, insomnia, psychomotor agitation, fatigue, feelings of worthlessness, difficulty thinking, and suicide ideation or attempts. The measures of depressive symptoms in the PSID and Add Health use abridged versions of survey instruments developed by psychologists and thus mimic validated inventories of depression.² The specific items included in each of the data sets are reported in table 2.

The Add Health has the most extensive battery of depressive symptom questions, including questions that capture all the subdimensions of depression (negative thought, positive thought, somatic problems, and interpersonal problems). The PSID measures also resemble the typical depression inventories in terms of question wording, albeit with fewer questions. The Cronbach's alpha of the items for each data set shows that the items generally form a reliable scale (table 2, bottom). We generated depressive symptom scales using the items in table 2 by taking the mean

2. The most famous survey instruments are the Beck Depression Inventory, a 21-item self-administered questionnaire, and the Children's Depression Inventory, a 27-item self-administered questionnaire geared toward children and adolescents. A substantial body of research has validated these and other tools, finding that the best of these measures include four subscales: positive emotions (e.g., I feel happy), negative emotions (e.g., I feel sad), interpersonal trouble (e.g., No one likes me), and psychomotor difficulty (e.g., My arms and legs feel heavy).

Table 2 Measures of depressive symptoms across data sets

	PSID	Add Health
So sad nothing could cheer you up	✓	✓
Sad		✓
Hopeless	✓	
That everything was an effort/too tired to do things	✓	✓
Worthless	✓	
Bothered by things that usually don't bother you		✓
Felt that you were just as good as other people		✓
Had trouble keeping your mind on what you were doing		✓
Depressed		✓
Felt that people disliked you		✓
Cronbach's alpha	0.75–0.79	0.82
Means		
Overall	0.67–0.73	0.5
Standard deviation	0.65–0.68	0.45
White men	0.56–0.66	0.41
White women	0.60–0.68	0.51
Black men	0.75–0.86	0.49
Black women	0.72–0.82	0.57

Notes: PSID (Panel Study of Income Dynamics): “During the past 30 days, how often did you feel . . . ?” (none, some, most or all of the time [0–3]). Add Health (National Longitudinal Study of Adolescent to Adult Health): “You [were] . . . during the past seven days?” (never or rarely, sometimes, a lot of the time, most or all of the time [0–3]).

score across the items and report the distributions of these symptoms across race and gender categories for each data set (table 2, bottom). Our analyses used these measures of depressive symptoms rather than a binary measure of depressed or not depressed, because doing so provides more granularity in capturing how depression is experienced and allows us to examine the effects of depressive symptoms for respondents who might have significant but subclinical symptoms.

The measurement of depression is notoriously challenging in the context of survey research, and this challenge is amplified by racial and gender disparities in the expression and diagnosis of depressive symptoms (Alang 2016; Williams et al. 2007). We used self-reported symptoms instead of professional diagnoses because obtaining diagnoses is prohibitively time-consuming and expensive and would require a licensed psychiatric professional or medical record with diagnoses. Arguably, this decision sacrifices

quality for quantity and raises questions about the validity of our findings to the extent that men, especially black men, are less forthcoming about depressive symptoms than are women (Hudson et al. 2018; Seidler et al. 2016). It is not clear, however, how much these disparities in self-reporting manifested in the data sets we used. Black women generally report the most depressive symptoms, and white men generally report the fewest symptoms, according to these data sets, but our results also show that black men often report as many symptoms as white women and sometimes as many as black women. Nor is it clear that professional diagnoses would alleviate the concerns about racial and gender disparities in the measurement of depression. Diagnoses leave no room for granularity and would be systematically biased against social groups that have limited access to health care, including black Americans (Wells et al. 2001). It seems likely that the anonymity of a survey reduces the pressure of social norms that men feel in a clinical setting. The result may thus be a more honest assessment of depressive symptoms. Ultimately, there are no perfect solutions, only trade-offs between suboptimal ones, so our results should be interpreted in light of the problems inherent in the self-reporting of symptoms.

The models control for age, income, education, church attendance, marital status, partisan strength, self-reported health status, health insurance, and group consciousness. The exact question wording and response options for the control variables are reported in the online appendix, along with descriptive statistics and correlations between variables. The models that include all respondents also control for gender and race. The Add Health models exclude a measure of group consciousness, because appropriate measures of these variables were not available. All models were estimated as logistic regressions. Survey weights accounting for post-stratification adjustments were included in the cross-sectional analyses of the Add Health. The PSID models, which are based on longitudinal data, were estimated using a multilevel random effects model to account for the fact that individuals are nested within families.

Results

We report our results in two sections. First, we describe how the size of the depression-participation gap varies across race and gender groups. Second, we describe our analysis of whether and for whom the factors of income, health insurance, church attendance, group consciousness, and empowerment mitigate the negative effects of depression.

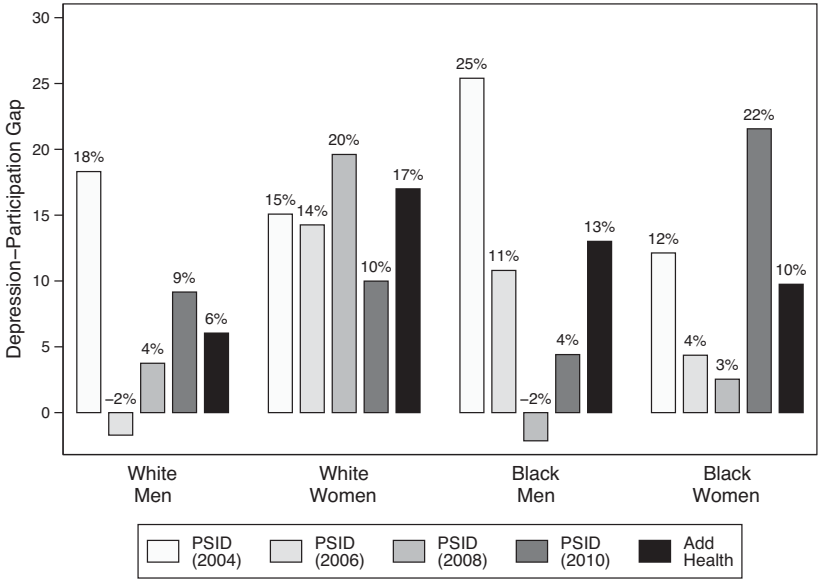


Figure 1 The size of the depression-participation gap.

Note: PSID, Panel Study of Income Dynamics; Add Health, National Longitudinal Study of Adolescent to Adult Health.

The Depression-Participation Gap

Figure 1 presents our initial examination at the depression-participation gap across race and gender categories. The size of the gap, which is calculated as the percentage point difference in turnout between those in the top quintile of depressive symptoms and those in the bottom quintile, is consistently positive and large. In only 2 of the 20 instances are those with depression more likely to report voting, while the gap exceeds 10 percentage points in 12 of the 20 instances. The gap is consistently largest for white women, ranging between 10 and 20 percentage points, although the largest instances of the gap are for black men in the 2004 PSID, at 25 percentage points, and for black women in the 2010 PSID, at 22 percentage points.

The effect of depressive symptoms on political participation, which is demonstrated in figure 1 without controlling for other important predictors of participation, is largely reproduced in models that account for age, education, income, church attendance, marital status, partisan strength, health insurance, and group consciousness (PSID only). Figure 2 presents

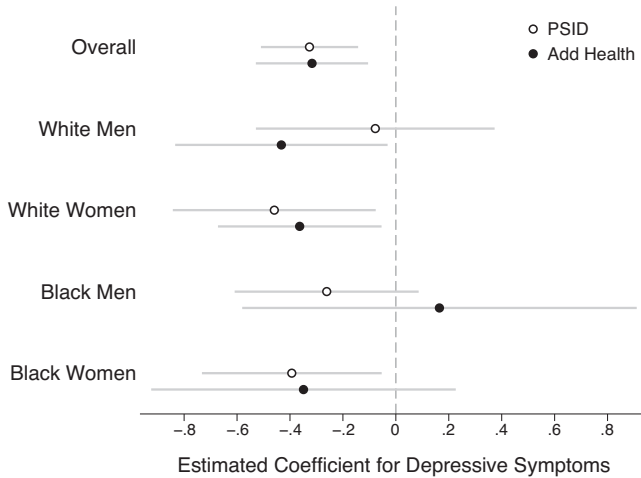


Figure 2 Coefficients from a logistic regression of turnout on depressive symptoms.

Note: PSID, Panel Study of Income Dynamics; Add Health, National Longitudinal Study of Adolescent to Adult Health.

the estimated coefficients for depressive symptoms in models of all respondents and then for each race and gender group across the two data sets. The full results of each model are reported in the online appendix. The overall results (figure 2, top) show consistently negative, large, and statistically significant coefficients in models of all respondents. These results replicate prior research (Ojeda 2015; Ojeda and Pacheco 2017). The group models reveal that the effect of depressive symptoms is negative across all groups but is consistently largest for white and black women and most often smallest for white and black men. While this pattern suggests that the effect for all respondents is driven by the strength of the effect seen in the models of women, additional tests that use interaction terms within a single model revealed no statistically significant group differences. These results are reported in the appendix.

Consistent with our hypothesis, the effect of depressive symptoms on turnout is typically larger for women, especially white women, than it is for men; however, given that these differences not statistically significant, we concluded only that the effect of depression is negative and statistically significant for all respondents. Table 3 reports the predicted probability of voting given changes in depressive symptoms and other key variables. As expected, partisan strength, education, and age have the strongest effects

Table 3 Predicted probability of voting across key variables

	PSID	Add Health	Mean
Partisan strength		29.1	29.1
Education	18.4	17.3	17.9
Age	26.7	4.3	15.5
Church attendance	9.5	10.3	9.9
Depression	-6.9	-5.8	-6.4
Income	7.8	1.3	4.6

Notes: PSID, Panel Study of Income Dynamics; Add Health, National Longitudinal Study of Adolescent to Adult Health. Values are percentage point changes in the predicted probability of voting given a change from 1 standard deviation below the mean to 1 standard deviation above the mean, for continuous variables, or a 0 to 1 change, for dichotomous variables.

on turnout. A change in educational attainment from 1 standard deviation below the mean to 1 standard deviation above the mean—which roughly corresponds to a change from some high school to some college—results in an 18-percentage-point increase in the probability of voting on average. The second tier of predictors in terms of effect size comprises church attendance, depressive symptoms, and income. An increase in depressive symptoms—from roughly the 20th to the 80th percentile—corresponds to more than a six-percentage-point decline in the predicted probability of voting.

Before turning to the mitigating factors we note that, although the effect of depressive symptoms is roughly equal across groups, its distribution varies across racial and gender groups and thus creates a small but unequal burden overall. Black respondents, both men and women, reported more depressive symptoms in the PSID, and black women, followed by white women, reported the most in the Add Health. These differences are statistically significant, so the implication is that black women are the most likely to experience depression's negative consequences. Though this finding is small in magnitude, the findings should be interpreted with the underlying distribution of depressive symptoms in mind.

Mitigating the Gap

We next examined the factors that we hypothesized would mitigate the effect of depression on participation: income, health insurance, church attendance, group consciousness, and a coethnic candidate. For these analyses, we expanded the models reported earlier to include an interaction term between depression and the factor of interest. The interaction term

Table 4 The effects of moderators on the depression-participation gaps

Moderator	All	White men	White women	Black men	Black women
Income					
PSID	-0.030	-0.219	0.099	0.063	-0.153
Add Health	0.010	0.038	-0.024	0.075	0.146*
Health insurance					
PSID	0.529*	1.155	0.107	0.323	0.586
Add Health	0.235	0.134	0.247	0.104	-0.288
Church attendance					
PSID	-0.063	0.011	-0.271*	-0.065	0.038
Add Health	-0.047	-0.107	-0.076	-0.256	0.190
Group consciousness ^a					
PSID	-0.079*	-0.142	-0.030	-0.180*	-0.172†

Notes: PSID, Panel Study of Income Dynamics; Add Health, National Longitudinal Study of Adolescent to Adult Health. Cell values are estimated interaction term coefficients. The direction of the effect indicates whether the factor of interest (e.g., income) strengthens (-) or weakens (+) the negative effect of depression on voter turnout. For instance, income weakens the negative effect of depression on voter turnout for all respondents in the Add Health, such that depression has a less negative effect on turnout as respondent income increases. Note that this effect is not statistically significant.

^aThere are no results for group consciousness from the Add Health data because the study lacked an adequate measure.

* $p < 0.05$, † $p < 0.10$.

presents the conditional effects of depression on voter turnout across values of the factor of interest and thus indicates whether it strengthens, weakens, or does not affect the negative effect of depression on voter turnout. Because the effect of depression is negative, a negative interaction term indicates a strengthening of this effect, whereas a positive value indicates a weakening.

We report the estimated coefficients for the interaction terms in table 4 and present the full results for the online appendix. The results reveal that almost all of the interaction term coefficients are inconsistent in direction or significance across data sets, suggesting that income, health insurance, church attendance, or group consciousness does little to affect the effect of depression on turnout. The few statistically significant findings often fail to replicate or are contradicted by the other data set. For example, the interactive effect of income is positive and statistically significant for black women in the Add Health. This finding indicates that income mitigates the negative effect of depression for this group. However, the corresponding

interaction term in the PSID is oppositely signed and not statistically significant. Given this inconsistency, it is hard to conclude that this effect is substantively meaningful.³

Even though most of the factors do not condition how depression affects participation, they can still mitigate the negative effects of depression by improving the probability of voting. The results from the prior section revealed that church attendance, for example, increased voter turnout, and the lack of statistical significance in the interaction term reported in this section reveals that the effect of church attendance applies irrespective of depressive symptoms. Thus, a person with depression who attends church is more likely to participate than a person with depression who does not attend church. The same is true for income. In contrast, health insurance and group consciousness do not seem to exert independent effects on turnout.

One exception to these inconsistent results is for black men and group consciousness (the PSID findings replicate in the GSS, as reported in the online appendix). It appears that black men who express a strong sense of racial group consciousness are more negatively affected by depression than those who do not express such a sentiment. Figure 3 displays the interactive effect between depression and group consciousness for black men in the PSID. Figure 3a plots the predicted probability of voting across values of depressive symptoms when group consciousness is strong (dark gray area) and when group consciousness is weak (light gray area). Differences in turnout between those with a strong and a weak group consciousness are observed only when depressive symptoms are absent or low. Once depressive symptoms exceed a value of 0.75 (which is the 60% percentile), the effect of group consciousness on turnout is not statistically significant. Figure 3b plots the predicted probability of voting across values of group consciousness when depressive symptoms are absent (dark gray area) and when they are abundant (light gray area). Depression distinguishes turnout only among those with a strong group consciousness. When group consciousness exceeds a value of 6 (which is about the 40% percentile), respondents with many depressive symptoms are much less likely to vote than are respondents without depressive symptoms.

3. The results of the GSS analysis, reported in the online appendix, do little to clarify these findings. Only in the case of the effect of group consciousness for black men do we see consistency across studies—in both the PSID and GSS. Furthermore, the overall pattern of findings is further weakened by the fact that 40 models (including those from the GSS) were estimated across the four racial and gender groups and so will likely produce one statistically significant finding at the level of $p < 0.10$ by pure chance, although we have no way of knowing which, if any, of the seven significant findings are due to this possibility.

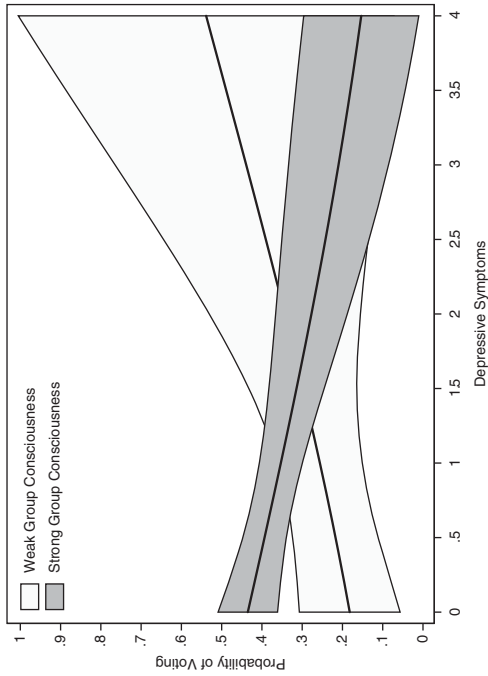
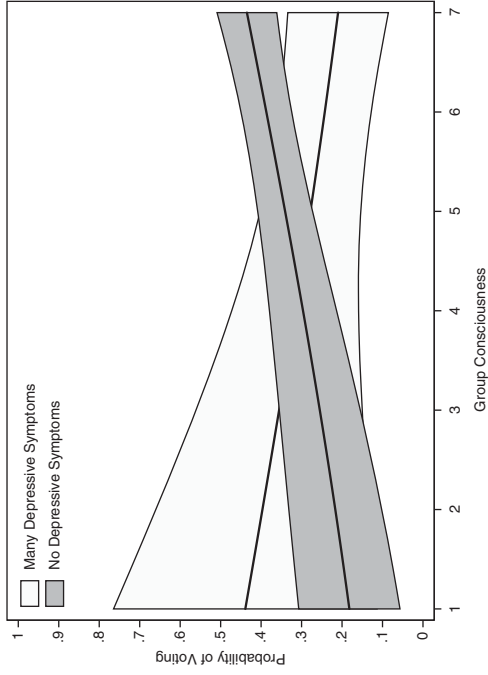


Figure 3 Black men in the Panel Study of Income Dynamics: the effect of strong and weak group consciousness on voting across values of depressive symptoms (a) and the effect of many and no depressive symptoms on voting across values of group consciousness (b).

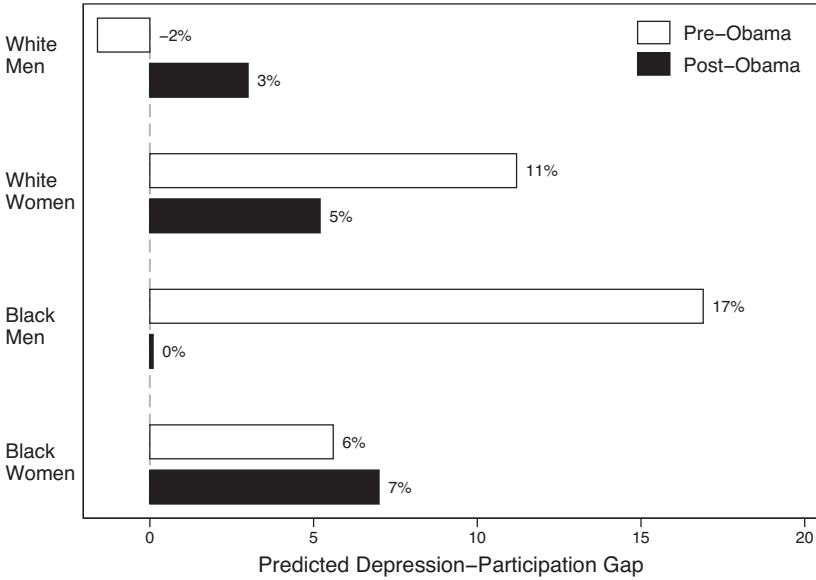


Figure 4 The depression-participation gap and Obama’s candidacy and election.

In addition to income, health insurance, church attendance, and group consciousness, we also highlighted empowerment as one potential factor that could mitigate the depression-participation gap. The PSID is useful for testing this possibility because it includes data from the 2004, 2006, 2008, and 2010 elections. Crucial to this analysis is the fact that Barack Obama was a black presidential candidate in the 2008 election and a black president and candidate in the 2010 election. If the presence of a coethnic candidate mitigates the effect of depression, then we should see the depression-participation gap decline in 2008 and 2010 for black Americans. We tested for this possibility by including an interaction between depression and a dichotomous variable for the 2008/2010 in the model. Figure 4 displays the results of this analysis; the full results are reported in the online appendix.

The predicted size of the depression-participation gap reported in figure 4 shows that the effect of a coethnic candidate/leader is present only in the case of black men: the effect of depression on turnout for black men is large before the candidacy of Obama but is absent once Obama becomes a candidate and then president. Notably, this effect is driven entirely by the mobilization of black men with depressive symptoms, as the rate of

participation for black without depression did not change across conditions. In contrast, the effect of depression on white women and black women appears to be present regardless of candidate, while the effect of depression on white men is not statistically significant under either condition.

Discussion

The results of this study reaffirm that depression is a pernicious mental health condition that impairs political participation in the United States. We built on this research by considering how this effect was distributed across racial and gender groups and examining several factors that we expected to mitigate the depression-participation gap: income, health insurance, church attendance, group consciousness, and empowerment. To our surprise, we found limited evidence of group differences and few factors that mitigated the gap. Our results indicate that depression affects the political participation of all respondents. While we observed a larger effect on turnout for both black and white women than for men, these differences were not statistically significant.

Income, health insurance, and church attendance did not condition the effect of depression despite our theoretical expectations, while the effects of group consciousness and empowerment were limited to black men. Black men who expressed the strongest sense of group consciousness were the only ones affected by depression. This finding suggests that a strong sense of racial group consciousness may be gendered by empowering men more than women, and it presents a puzzle for future research to consider how group consciousness may empower or impose a burden to participate conditional on the experience of depressive symptoms. We also found that the electoral context, in particular a coethnic candidate, eliminated the depression-participation gap among black men by empowering those with depressive symptoms to participate. The change in the depression-participation gap for black women was not statistically significant. This is surprising given that Hillary Clinton's presidential bid looms over the political context of the 2008 election. Given that our study is limited by not providing greater insight into these competing factors, future research should interrogate the factors that link racial group consciousness to political participation among women, as well as how to best measure group consciousness in the presence of intersectional identities.

Overall these findings raise concerns about what, if anything, mitigates the depression-participation gap. Although we examined only a handful of

factors and cannot say conclusively that the effect of depression is impenetrable, it is important to keep in mind that these factors were selected because we expected them to matter most. In the same vein, the findings that show a limited influence of a coethnic candidate among black women raise the possibility that the empowerment thesis, so entrenched in the study of racial politics, is also gendered.

At the heart of our study are the questions of who experiences depression and what its consequences are for well-being. We answered the second part of this question by showing that the effect of depression on voter turnout is fairly similar across groups; however, the first question of who bears the burden of depression remains unresolved. While we cite psychological research showing that black Americans experience lower rates of depression, we found that black women consistently report more depressive symptoms than any other group. It is possible that this discrepancy is due to the use of self-report, abridged survey instruments, and flawed sampling procedures in our data sets, but it is also possible that racial biases in the diagnosis of depression could be the source of the discrepancy. Indeed, self-report may in some ways be a more genuine representation of depressive symptoms than those that are reported in a socially monitored situation (but, for how health optimism biases the self-reporting of health status, see Pacheco 2018, this issue). It is therefore not immediately evident that our findings are the “wrong” ones. That the simple question of who is affected by depression remains unresolved highlights the need for more intersectional studies of depression across all disciplines.

Our study is not without limitations. The first issue is one of sample size. Many individuals with depression are excluded from sampling frames of gold-standard political surveys, including the ones used here, because they are institutionalized in mental health care facilities or under guardianship. This problem layered on top of the small sample sizes of racial minorities puts our findings at risk of type 2 errors. Given that we concluded that income, health insurance, and church attendance had little mitigating effect on the depression-participation gap, we should be aware that the small sample sizes make it difficult to detect such effects in the first place. These findings should thus be treated with caution. Our study is also limited by its observational nature. Like any observational study, omitted variables loom large and put the findings at risk of type 1 errors. Experimental studies of depression are, of course, ethically challenging for social scientists, but we would still encourage researchers to challenge our statistically significant findings in other ways to ensure that they are what we claim them to be. Perhaps the biggest limitation of our study is related to those groups who

were excluded altogether. There are multiple intersections of marginalized identities that should be explored with respect to how they are uniquely affected by depression. In this article we limited our analyses to white and black Americans, but we encourage other researchers to adapt our analysis to other groups. These groups need not be racial and gendered but could include sexual orientation, gender presentation, nativity, and ability, to name a few of many sources of difference.

In light of these limitations, our study has broad implications for the study of racial and gendered inequity in health and politics. We approach depression in a novel way and introduce to the study of depression social factors that influence engagement in politics. We hope that the findings from our work will spur interest in examining how other races beyond African Americans and whites experience depression and if that experience impacts their political participation in meaningful ways. A few places where our findings are particularly useful are found within this special issue. David K. Jones's article on the politics of health care in the Mississippi Delta describes an ideal setting to question how race, gender, class, and geography converge within the lives of Southern people. The article by Jacob Haselswerdt and Jamila Michener highlights the potential for policy to shape how health status can motivate or depress participation; to our knowledge no studies have considered depression-related policies in these ways. Future research should therefore cross these streams to better understand how policy can mitigate the depression-participation gap across racial, gender, and other groups.

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