"Achievement Gap" Language Affects Teachers' Issue Prioritization

David M. Quinn
Tara-Marie Desruisseaux
Akua Nkansah-Amankra

Rossier School of Education
University of Southern California

Abstract

The term "achievement gap" is regularly used to describe between-group differences in educational outcomes. However, critics of the term argue that it implies the problem is merely one of student performance, and may depress support for policies aimed at structural solutions. We hypothesized that the phrase "racial achievement gap" would elicit lower levels of issue prioritization than the phrase "racial inequality in educational outcomes" due to the latter's connotations of social justice. In a randomized survey experiment with a national teacher sample (n=1,549), our hypothesis was confirmed. However, language did not affect teachers' explanations for existing academic outcome disparities.

"Achievement Gap" Language Affects Teachers' Issue Prioritization

The term "achievement gap" is regularly used to describe between-group differences in educational outcomes, often by race/ethnicity (Ladson-Billings, 2006). While the label is typically applied to address the need to "close the gap," some scholars have raised concerns about its use. This language is often associated with a deficit lens, whereby White achievement is assumed to be the norm and racially minoritized students are evaluated primarily based on what they are perceived to lack compared to that norm (e.g., Love, 2004)[1]. Additionally, by focusing on student performance rather than on structures of racial inequality, the "achievement gap" framing may suggest that it is the students themselves who need "fixing." As such, the term arguably plays into racial stereotypes regarding intellect and work ethic. This may lead people to deprioritize the issue, or may encourage short-term solutions that do not target the root of the problem (Ladson-Billings, 2006).

The concern over potential unintended consequences of the "achievement gap" framing is supported by general research from psychology and political science showing that terminology can affect our views and policy preferences. For example, Republicans are more likely to support a policy described as a "carbon offset" than an identical policy described as a "carbon tax" (Hardisty, Johnson, & Weber, 2009). However, we lack empirical research on the effect of the dominant "achievement gap" discourse in education. Is the term itself counterproductive?

In the present study, we introduce empirical evidence to the rich theoretical literature on achievement gap framing. We tested whether the phrase "racial achievement gap," compared to the phrase "racial inequality in educational outcomes" affected the extent to which teachers prioritized closing gaps/ending inequality, or the explanations they gave for those gaps/inequalities.[2] We were specifically interested in teachers given their frequent exposure to

achievement gap discourses, their direct role in advancing educational equity, and the importance of having their buy-in for implementing equity-advancing policies. We hypothesized that the "inequality" rephrasing, while substantively synonymous to a "gap," would carry associations with racial justice, and direct attention to structural causes. Thus, we expected this rephrasing would elicit higher priority levels for the issue and stronger endorsement for structural explanations.

Methods

We conducted this study in the context of a larger web-based survey of a national (though not nationally-representative) sample of US school teachers obtained through Qualtrics panels (n=1,549; see Table 1 for sample descriptive statistics, randomization balance, and comparisons to nationally-representative data). Teachers were randomly assigned to one of two versions of our survey items. One version used the term "racial achievement gap" while the other used "racial inequality in educational outcomes."[3] The first item read:

> *As you know, there is **[a racial achievement gap/racial inequality in educational***
>
> ***outcomes]** between Black and White students in the US. Thinking about all of the*
>
> *important issues facing the country today, how much of a priority do you think it is to*
>
> ***[close the racial achievement gap/end racial inequality in educational outcomes]***
>
> *between Black and White students?*

Response options were "not a priority," "low priority," "medium priority," "high priority," and "essential" (converted to a 1-5 scale). Next, respondents were asked, "To what extent do you believe each of these factors is responsible for **[the racial achievement gap/racial inequality in educational outcomes]** between Black and White students?" Respondents rated the following factors (with order randomized): school quality, student motivation, parenting, discrimination

and racism, neighborhood environments, genetics, home environments, and income levels.
Response options were "not at all," "slightly," "somewhat," "quite," and "extremely" (both items
adapted from Valant & Newark [2016]).

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Results

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Table 2 shows results from t-tests of the causal effects of "gap" language on each
outcome, along with descriptive statistics by condition (see Appendices B-E for various
robustness checks).

Teachers who received the "gap" version of the item did not prioritize closing
gaps/ending inequality as highly as teachers who received the "inequality" version of the item
(by -.11 SD)[4]. Exploratory subgroup analyses suggest the effect was driven by White teachers,
who showed an effect of -.18 SD (robust to Sidak correction for multiple comparisons), while
item phrasing had near-zero effects for Black and Latinx teachers (though small sample sizes
should be noted).

As seen in Table 2, the phrasing had no significant effect on teachers' explanations for
gaps/inequality. Regardless of item phrasing, teachers tended to believe that home environment,
neighborhood environment, and parenting were more responsible for gaps/inequalities than
school quality, discrimination, and income (differences are statistically significant).

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Discussion

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We find evidence that the language used to describe achievement inequality can, in
principle, affect the priority teachers place on ending those inequalities. Teachers, education
leaders, researchers, and journalists should therefore give thought to the messaging and language
they use when discussing issues regarding race and education.

We should also recognize that teachers generally placed high priority on closing gaps/ending inequality regardless of item phrasing, and the magnitude of the language effect was modest. However, we cannot rule out the possibility that the framing of between-group differences as "gaps" versus "inequalities" may have a larger effect through cumulative exposure in the long-term. Relatedly, although we found no significant effects on teachers' explanations for outcome disparities, longer-term and repeated exposure to gap discourses may lead teachers to focus on cultural or biological explanations. These remain important unanswered questions for further consideration.

As a study of teachers in particular, this work does not provide insight into how the general public may respond to the achievement gap term, or its broader surrounding discourse. People outside the field of education may hold different connotations for these terms, and may be affected differently when encountering them in policy debates or news stories. In addition to these questions, future research should examine the effects of terms such as "education debt" (Ladson-Billings, 2006) and "opportunity gap" (Milner, 2012).

Beyond the use of specific terms, we must better understand how the framing of educational disparities affects people's cognition, and how those framings may interact with people's background knowledge and personal experience. Such insight will help guide solutions-oriented conversations for advancing educational equity and excellence.

References

Hardisty, D. J., Johnson, E. J., & Weber, E. U. (2009). A dirty word or a dirty world?: Attribute

    framing, political affiliation, and query theory. *Psychological Science,* 21, 86–92.

    doi:10.1177/0956797609355572

Ladson-Billings, G. (2006). From the Achievement Gap to the Education Debt: Understanding

    Achievement in U.S. Schools. *Educational Researcher, 35*(7), 3-12.

    doi:10.3102/0013189x035007003

Love, B.J. (2004). *Brown* plus 50 counter-storytelling: A critical race theory

    analysis of the "majoritarian achievement gap" story. *Equity & Excellence in Education,*

    37(3), 227-246.

Milner, H.R. (2012). Beyond a test score: Explaining opportunity gaps in

    educational practice. *Journal of Black Studies 43*(6), 693-718.

Snyder, T.D., de Brey, C., and Dillow, S.A. (2019). *Digest of Education Statistics*

    2017 (NCES 2018-070). National Center for Education Statistics, Institute of Education

    Sciences, U.S. Department of Education. Washington, DC

Valant, J., & Newark, D. A. (2016). The politics of achievement gaps: US public

    opinion on race-based and wealth-based differences in test scores. *Educational*

    Researcher, *45*(6), 331-346.

Notes

[1] For example, Love (2004) argues that when White students achieve higher than Black students it is problematized as an "achievement gap," but not when Asian ethnic groups outperform Whites.

[2] We chose the term "inequality" as opposed to more established terms such as "education debt" (Ladson-Billings, 2006) or "opportunity gap" (Milner, 2012) because the latter terms refer to differences in resource inputs or educational experiences, as opposed to differences in educational outcomes. In contrast, "racial inequality in educational outcomes" is essentially synonymous with "racial achievement gap." Here, we conceive of "equity" as a state in which educational processes and resource distributions produce racial equality in educational outcomes.

[3] A potential concern is that these phrases may bring to mind different academic outcomes (e.g., test scores vs. high school graduation rates). If this is the case, and if respondents prioritize these outcomes differently, such distinctions may be driving our results. In a separate survey conducted with a new sample drawn from Amazon MTurk (n=500), we did not find evidence that respondents interpreted the phrases "achievement gap" and "inequality in educational outcomes" as referring to different educational outcomes (see Appendix A for detail). We thank an anonymous reviewer for raising this issue.

[4] Note that while Table 2 shows results in the original item scales, raw and standardized differences are nearly identical for many items because the SDs are close to 1.

Table 1.
Descriptive Sample Statistics by Condition with Comparisons to Nationally-representative Estimates for Teachers (2015-2016 School Year).

	Study Sample			National Estimates, 2015-2016 (excludes Pre-K Teachers)
	Ach Gap	Inequality		
	Mean	Mean	*p*	Mean
Female	0.613	0.612	0.861	0.766
Non-binary	0.005	0.010	0.240	
Black	0.095	0.092	0.838	0.067
White	0.710	0.682	0.243	0.801
Asian	0.035	0.045	0.283	0.023
Latinx	0.073	0.074	0.960	0.088
Other Race	0.006	0.003	0.261	0.006
Multi-racial	0.081	0.104	0.122	0.014
Teaching position				
Pre-K Teacher	0.148	0.160	0.523	
K-2 Teacher	0.158	0.135	0.197	
3-5 Teacher	0.167	0.170	0.882	0.476 (Elementary)
6-8 Teacher	0.175	0.160	0.421	0.178 (Middle)
9-12 Teacher	0.352	0.376	0.328	0.287 (High)
Demographics of school teach in				
Sch. Not primarily any race/ethnicity	0.183	0.230	0.022	
Sch. Primarily Asian/Pac. Is.	0.017	0.016	0.858	
Sch. Primarily Black	0.125	0.130	0.767	0.449 (School is <50% White)
Sch. Primarily Latino/a	0.103	0.109	0.696	
Sch. Primarily Nat. Am.	0.013	0.006	0.201	
Sch. Primarily White	0.560	0.510	0.046	
Experience in Education Field				

<1 year in field of edu	0.045	0.040	0.642	
1-3 years in field of edu	0.140	0.135	0.766	0.099 (<3 years)
4-6 years in field of edu	0.176	0.208	0.116	
7-10 years in field of edu	0.228	0.256	0.198	0.283 (3-9 years)
11-15 years in field of edu	0.180	0.144	0.055	
16-20 years in field of edu	0.090	0.091	0.955	0.393 (10-20 years)
>20 years in field of edu	0.141	0.127	0.410	0.225 (>20 years)
n	778	771		

Note. "Ach. Gap"= teachers assigned to "achievement gap" version of item; "Inequality"=teachers assigned to the "inequality in educational outcomes" version of items. All variables are 0/1 indicator variables. *p*-value is for t-test of mean difference between conditions. "other race" category includes Pacific Islander, Native American, and other. National estimates come from Snyder, de Brey, & Dillow (2019), tables 209.1 (race/ethnicity, gender, years in edu field) and 209.24 (grade-level, school demographics). Pre-K teachers are not included in sample for national estimates, but are included in our sample. See online Appendix F for our descriptive statistics excluding Pre-K teachers (alongside national comparisons). In national estimates, 6% of teachers teach combined grade-levels.

Table 2.
Treatment Effects on Prioritization of Gap/inequality and Explanations for Gap/inequality.

	Ach Gap - Inequality		Ach Gap			Inequality		
	Mean Difference	*p*	Mean	*sd*	*n*	Mean	*sd*	*n*
Priority to close gap/equalize outcomes								
Full sample	-0.110*	0.025	3.987	0.968	778	4.097	0.967	771
White	-0.172**	0.003	3.971	0.973	552	4.143	0.901	526
Black	0.022	0.896	4.135	0.970	74	4.113	1.090	71
Latinx	-0.053	0.770	4.000	0.886	57	4.053	1.025	57
Explanations for gap/inequality								
School quality	0.036	0.494	3.909	1.054	778	3.873	1.009	771
Student motivation	0.048	0.382	3.807	1.082	778	3.759	1.101	771
Parenting	-0.059	0.252	4.067	1.021	778	4.126	1.003	771
Discrimination	-0.045	0.427	3.850	1.127	778	3.895	1.117	771
Genetics	-0.065	0.357	2.740	1.400	778	2.805	1.380	771
Neighborhood	-0.004	0.933	4.147	0.945	778	4.150	0.901	771
Home environment	0.020	0.671	4.206	0.950	778	4.185	0.918	771
Income	0.099	0.058	3.950	1.006	778	3.851	1.046	771

*~p<.10 *p<.05 **p<.01 ***p<.001*
Note. "Ach. Gap"= teachers assigned to "achievement gap" version of items; "Inequality"=teachers assigned to the "inequality in educational outcomes" version of items. "*Priority to close gap/equalize outcomes*" item read: "*As you know, there is [a racial achievement gap/racial inequality in educational outcomes] between Black and White students in the US. Thinking about all of the important issues facing the country today, how much of a priority do you think it is to [close the racial achievement gap/ end racial inequality in educational outcomes] between Black and White students?*" Responses were on a 5-point scale with 1=not a priority, 2=low priority, 3=medium priority, 4=high priority, 5=essential. Comparisons on this outcome for Asian and "other race" teachers not shown due to small sample sizes. "*Explanations for gap/inequality*" items began with stem: "To what extent do you believe each of these factors is responsible for **[the racial achievement gap/racial inequality in educational outcomes]** between Black and White students?" Response options were 1="not at all," 2="slightly," 3="somewhat," 4="quite," and 5="extremely." See Appendices for robustness checks with alternative specifications, including chi-square tests and ordered logistic regression models (results are robust).

Online Appendix A. Academic Outcomes Brought to Mind by Terms "Racial Achievement Gap" versus "Racial Inequality in Educational Outcomes"

As noted in the main text, the two phrases used in our experimental manipulation may bring to mind different academic outcomes. If this is the case, and if respondents prioritize different outcomes differently (e.g., perhaps respondents believe that closing gaps/ending inequality in high school graduation rates is more important than closing gaps/ending inequality in test scores), such differences may be driving our results. To bring evidence to bear on this question, we conducted a separate survey with a sample drawn from Amazon MTurk (n=500). Respondents first viewed the text: "*As you may know, there is [a racial achievement gap/racial inequality in educational outcomes] between Black and White students in the US.*" On a separate screen, respondents were asked: "*When you saw the term '[racial achievement gap/racial inequality in educational outcomes],' what educational outcome came to your mind first?*" Respondents could select one choice from the following options: "standardized test scores," "grades/GPA," "high school degree," "college degree," "advanced degree," "other."

In Table A1, we tabulate respondents' answers by condition. "College degree" was the modal response in both conditions, and a chi-squared test showed no evidence of a difference in outcomes brought to mind across groups. An important limitation of this follow-up survey is that we did not have a way of re-surveying our original respondents. Additionally, the follow-up sample did not specifically recruit teachers. We are therefore unable to rule out the possibility that in our original sample, teachers in each condition imagined different sets of outcomes, which they prioritized differently.

Table A2 provides descriptive statistics for the follow-up sample by condition on race/ethnicity, gender, education level, and age range.

Table A1. Tabulations for follow-up sample.

	Inequality		Gap		Total	
	No.	%	No.	%	No.	%
Standardized test scores	30	12	38	15.2	68	13.6
Grades/GPA	33	13.2	32	12.8	65	13
High school degree	65	26	48	19.2	113	22.6
College degree	100	40	113	45.2	213	42.6
Advanced degree	8	3.2	9	3.6	17	3.4
Other	14	5.6	10	4	24	4.8
Total	250	100	250	100	500	100

$\chi^2 = 5.033, p = 0.412$

Responses to item: "When you saw the term '**[racial achievement gap/racial inequality in educational outcomes]**,' what educational outcome came to your mind first?"

Table A2.
Descriptive statistics and randomization balance for follow-up MTurk sample.

| | Mean | | Difference | *p* |
	Gap	Inequality		
Latinx	0.02	0.028	-0.008	0.560
Hispanic	0.008	0.036	-0.028	0.033
Asian	0.076	0.1	-0.024	0.345
White	0.748	0.7	0.048	0.231
Black	0.064	0.064	0	1
Native American	0.012	0.004	0.008	0.316
Multi-racial	0.068	0.06	0.008	0.715
Other race	0.004	0.008	-0.004	0.563
Female	0.436	0.416	0.02	0.652
Non-binary	0.008	0.004	0.004	0.563
Edu: HS degree	0.068	0.092	-0.024	0.324
Edu: Some college	0.208	0.176	0.032	0.365
Edu: Associate's	0.136	0.136	0	1
Edu: Bachelor's	0.416	0.444	-0.028	0.528
Edu: Master's	0.148	0.136	0.012	0.701
Edu: Doctorate	0.024	0.016	0.008	0.524
Age: 18-29	0.24	0.292	-0.052	0.189
Age: 30-39	0.4	0.368	0.032	0.463
Age: 40-49	0.2	0.188	0.012	0.735
Age: 50-59	0.108	0.092	0.016	0.552
Age: 60-69	0.044	0.048	-0.004	0.831
Age: 70-79	0.008	0.008	0	1
Age: 80+	0	0.004	-0.004	0.318
N	250	250		

Note. Gap=respondent was randomly assigned to the "achievement gap" version of the item (versus the "inequality" version). All means are for binary indicators of the named row category. *p*=*p*-value for the null hypothesis of no difference between groups.

Online Appendix B. Tabulation of Priority Item by Condition with Chi-squared Tests.

Table B1.
Tabulations for Full Sample

	Inequality		Ach Gap		Total	
	No.	%	No.	%	No.	%
not a priority	15	1.9	13	1.7	28	1.8
low priority	41	5.3	36	4.6	77	5
medium priority	113	14.7	183	23.5	296	19.1
high priority	287	37.2	262	33.7	549	35.4
essential	315	40.9	284	36.5	599	38.7
Total	771	100	778	100	1,549	100

$\chi^2 = 19.7331$, $p = 0.001$

Table B2.
Tabulations for White Teachers Only

	Inequality		Ach Gap		Total	
	No.	%	No.	%	No.	%
not a priority	8	1.5	8	1.4	16	1.5
low priority	20	3.8	27	4.9	47	4.4
medium priority	73	13.9	140	25.4	213	19.8
high priority	213	40.5	175	31.7	388	36
essential	212	40.3	202	36.6	414	38.4
Total	526	100	552	100	1,078	100

$\chi^2 = 25.4686$, $p < 0.001$

"*Priority to close gap/equalize outcomes*" item read: "*As you know, there is **[a racial achievement gap/racial inequality in educational outcomes]** between Black and White students in the US. Thinking about all of the important issues facing the country today, how much of a priority do you think it is to **[close the racial achievement gap/ end racial inequality in educational outcomes]** between Black and White students?*"

Online Appendix C. Tabulation of Dichotomized Priority Item by Condition with Chi-squared Tests.

Table C1.
Tabulations for Full Sample

	Inequality		Ach Gap		Total	
	No.	%	No.	%	No.	%
<High Priority	169	21.9	232	29.8	401	25.9
>=High Priority	602	78.1	546	70.2	1,148	74.1
Total	771	100	778	100	1,549	100

$\chi^2 = 12.5981$, $p < 0.001$

Table C2.
Tabulations for White Teachers Only

	Inequality		Ach Gap		Total	
	No.	%	No.	%	No.	%
<High Priority	101	19.2	175	31.7	276	25.6
>=High Priority	425	80.8	377	68.3	802	74.4
Total	526	100	552	100	1,078	100

$\chi^2 = 22.0992$, $p < 0.001$

"*Priority to close gap/equalize outcomes*" item read: "*As you know, there is [a racial achievement gap/racial inequality in educational outcomes] between Black and White students in the US. Thinking about all of the important issues facing the country today, how much of a priority do you think it is to [close the racial achievement gap/ end racial inequality in educational outcomes] between Black and White students?"* <High Priority: respondent answered 1=not a priority, 2=low priority, or 3=medium priority; >=High Priority: respondent answered 4=high priority or 5=essential.

Online Appendix D. Ordered Logistic Regression Models Predicting Priority Item.

In the ordered logistic regression models in Table D1, the five-point ordinal "priority" variable is predicted by the indicator for the "Achievement Gap" experimental condition. The constants reported for each cut score indicate the estimated cut points for the underlying latent priority scale when the achievement gap indicator equals zero (i.e., for the "inequality" experimental group). The first cut estimates the cut score for the latent trait between priority=1 and priority=2; the second cut estimates the cut score for the latent trait between priority=2 and priority=3, and so on. The "Ach Gap" coefficient for the full sample estimates that the ordered log odds for a respondent in the achievement gap group are -.246 lower than the ordered log odds for a respondent in the "inequality" condition.

Table D1.

	Full Sample	White Teachers
Ach Gap	-0.246**	-0.338**
	(0.0935)	(0.112)
cut1		
_cons	-4.126***	-4.383***
	(0.197)	(0.260)
cut2		
_cons	-2.753***	-2.966***
	(0.113)	(0.145)
cut3		
_cons	-1.179***	-1.242***
	(0.0760)	(0.0919)
cut4		
_cons	0.341***	0.309***
	(0.0694)	(0.0830)
N	1549	1078

Note. Standard errors in parentheses. Ach Gap= binary indicator that respondent was randomly assigned to "achievement gap" version of survey item. "Inequality"=teachers assigned to the "inequality in educational outcomes" version of items. "*Priority to close gap/equalize outcomes*" item read: "*As you know, there is [a racial achievement gap/racial inequality in educational outcomes] between Black and White students in the US. Thinking about all of the important issues facing the country today, how much of a priority do you think it is to [close the racial achievement gap/ end racial inequality in educational outcomes] between Black and White students?*" *R*esponses were on a 5-point scale with 1=not a priority, 2=low priority, 3=medium priority, 4=high priority, 5=essential.

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

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

Online Appendix E. OLS Regression Models.

In Table E1 and E2, we report the results of OLS regression models in which the priority outcome and the explanation outcomes are regressed on the Achievement Gap item indicator and the various other respondent-level indicator variables. The models in E1 include only teacher-level predictors (gender, with female and non-binary as omitted groups; race/ethnicity with White as the omitted group), while the models in E2 add school racial make-up indicator variables (with "school not primarily any single race/ethnicity" as the omitted group) and indicator variables for teachers' grade level assignment (with pre-K as the omitted group).

Table E1.
OLS Regression Models with Teacher-level Predictors.

	(1) Priority	(2) Sch. qual	(3) Motivation	(4) Parenting	(5) Discrim.	(6) Genetics	(7) Nhood	(8) Home	(9) Income
Ach Gap	-0.111*	0.0423	0.0550	-0.0563	-0.0381	-0.0613	0.000201	0.0253	0.102
	(0.0491)	(0.0523)	(0.0552)	(0.0515)	(0.0568)	(0.0698)	(0.0469)	(0.0470)	(0.0522)
Male	-0.0265	0.0149	0.182**	0.00978	-0.00803	0.382***	0.0129	-0.0783	-0.0145
	(0.0505)	(0.0539)	(0.0568)	(0.0530)	(0.0585)	(0.0719)	(0.0482)	(0.0484)	(0.0538)
Black	0.0707	0.255**	0.227*	-0.0776	0.276**	0.415***	-0.0905	-0.104	0.169
	(0.0854)	(0.0910)	(0.0960)	(0.0895)	(0.0988)	(0.121)	(0.0815)	(0.0818)	(0.0908)
Asian	-0.386**	0.0425	0.255	-0.0650	-0.0658	0.400*	-0.108	-0.205	0.0403
	(0.126)	(0.134)	(0.142)	(0.132)	(0.146)	(0.179)	(0.120)	(0.121)	(0.134)
Latinx	-0.0294	0.0998	-0.0760	-0.187	0.205	0.127	-0.199*	-0.177	-0.00821
	(0.0950)	(0.101)	(0.107)	(0.0996)	(0.110)	(0.135)	(0.0907)	(0.0910)	(0.101)
Other race	-0.749*	-0.855*	-0.745	-0.970*	-1.100**	-0.663	-0.886*	-1.965***	-0.623
	(0.366)	(0.390)	(0.412)	(0.384)	(0.424)	(0.520)	(0.349)	(0.350)	(0.389)
Multi-racial	0.00776	0.155	0.111	-0.0176	0.190	-0.00732	0.0790	-0.0332	0.00883
	(0.0859)	(0.0916)	(0.0966)	(0.0901)	(0.0995)	(0.122)	(0.0820)	(0.0823)	(0.0914)
Constant	4.122***	3.821***	3.654***	4.150***	3.843***	2.598***	4.168***	4.255***	3.840***
	(0.0429)	(0.0458)	(0.0483)	(0.0450)	(0.0497)	(0.0611)	(0.0410)	(0.0411)	(0.0457)
N	1549	1549	1549	1549	1549	1549	1549	1549	1549
R^2	0.013	0.010	0.016	0.007	0.014	0.031	0.009	0.025	0.006

Note Standard errors in parentheses. Predictors are binary indicators for variable label given. "Ach. Gap"= teachers assigned to "achievement gap" version of items; "Inequality"=teachers assigned to the "inequality in educational outcomes" version of items. "*Priority to close gap/equalize outcomes*" item read: "*As you know, there is **[a racial achievement gap/racial inequality in educational outcomes]** between Black and White students in the US. Thinking about all of the*

important issues facing the country today, how much of a priority do you think it is to **[close the racial achievement gap/ end racial inequality in educational outcomes]** *between Black and White students?"* Responses were on a 5-point scale with 1=not a priority, 2=low priority, 3=medium priority, 4=high priority, 5=essential. "*Explanations for gap/inequality*" items (columns 2-9) began with stem: "To what extent do you believe each of these factors is responsible for **[the racial achievement gap/racial inequality in educational outcomes]** between Black and White students?" Factors given in column header, with response options were 1="not at all," 2="slightly," 3="somewhat," 4="quite," and 5="extremely."
[*] $p < 0.05$, [**] $p < 0.01$, [***] $p < 0.001$

Table E2.
OLS Regression Models with all Possible Control Variables.

	(1) Priority	(2) Sch. qual	(3) Motivation	(4) Parenting	(5) Discrim.	(6) Genetics	(7) Nhood	(8) Home	(9) Income
Ach Gap	-0.106*	0.0435	0.0545	-0.0514	-0.0362	-0.0667	-0.00259	0.0267	0.101
	(0.0492)	(0.0526)	(0.0554)	(0.0516)	(0.0570)	(0.0700)	(0.0467)	(0.0469)	(0.0525)
Male	-0.0281	-0.00214	0.184**	0.00378	0.0133	0.443***	-0.0157	-0.0832	-0.0433
	(0.0538)	(0.0576)	(0.0606)	(0.0564)	(0.0623)	(0.0765)	(0.0510)	(0.0513)	(0.0574)
Black	0.0539	0.291**	0.157	-0.0759	0.250*	0.419**	-0.0843	-0.0945	0.203*
	(0.0937)	(0.100)	(0.105)	(0.0982)	(0.108)	(0.133)	(0.0888)	(0.0893)	(0.0999)
Asian	-0.366**	0.0752	0.297	-0.109	-0.0465	0.219	-0.0258	-0.138	0.0409
	(0.137)	(0.146)	(0.154)	(0.143)	(0.158)	(0.194)	(0.130)	(0.130)	(0.146)
Latinx	0.0169	0.127	-0.0812	-0.142	0.312**	0.141	-0.108	-0.0632	-0.000139
	(0.102)	(0.109)	(0.115)	(0.107)	(0.119)	(0.146)	(0.0970)	(0.0976)	(0.109)
Other race	-0.691	-0.822*	-0.713	-0.927*	-1.006*	-0.689	-0.779*	-1.829***	-0.572
	(0.369)	(0.394)	(0.415)	(0.386)	(0.427)	(0.524)	(0.349)	(0.351)	(0.393)
Multi-racial	0.0200	0.176	0.107	-0.0104	0.210*	-0.0378	0.122	0.0135	0.0240
	(0.0875)	(0.0936)	(0.0985)	(0.0917)	(0.101)	(0.124)	(0.0829)	(0.0834)	(0.0933)
Sch prim. API	-0.0881	-0.0571	-0.213	0.0688	0.0234	0.696*	-0.256	-0.214	0.124
	(0.215)	(0.230)	(0.242)	(0.225)	(0.249)	(0.305)	(0.203)	(0.205)	(0.229)
Sch	0.0247	-0.0659	0.194	-0.0479	0.104	-0.00109	0.124	0.0558	0.00732

prim. Black									
	(0.0908)	(0.0971)	(0.102)	(0.0952)	(0.105)	(0.129)	(0.0861)	(0.0865)	(0.0968)
Sch prim. Latinx	-0.0980	-0.0401	0.00844	-0.185	-0.175	-0.0276	-0.185*	-0.238*	0.0400
	(0.0975)	(0.104)	(0.110)	(0.102)	(0.113)	(0.139)	(0.0924)	(0.0929)	(0.104)
Sch prim. Nat. Am.	-0.448	-0.216	-0.0779	-0.414	-0.252	0.345	-0.344	-0.752**	-0.0953
	(0.256)	(0.274)	(0.289)	(0.269)	(0.297)	(0.365)	(0.243)	(0.244)	(0.273)
Sch prim. White	-0.0135	0.0196	0.00711	-0.0648	0.0442	0.00499	0.0700	0.0275	0.0781
	(0.0651)	(0.0696)	(0.0733)	(0.0683)	(0.0754)	(0.0926)	(0.0617)	(0.0621)	(0.0694)
Teach K-2	-0.150	-0.0201	0.178	0.0859	-0.129	-0.129	0.271**	0.139	-0.0484
	(0.0900)	(0.0963)	(0.101)	(0.0944)	(0.104)	(0.128)	(0.0853)	(0.0858)	(0.0960)
Teach 9-12	-0.0541	0.0279	0.104	0.120	-0.146	-0.242*	0.256***	0.101	0.0699
	(0.0775)	(0.0828)	(0.0872)	(0.0812)	(0.0897)	(0.110)	(0.0734)	(0.0738)	(0.0826)
Teach 6-8	0.0108	0.0290	0.0754	0.0366	-0.241*	-0.247*	0.239**	0.143	0.0255
	(0.0880)	(0.0941)	(0.0991)	(0.0923)	(0.102)	(0.125)	(0.0834)	(0.0839)	(0.0939)
Teach 3-	0.0526	-0.0284	0.140	0.201*	-0.141	-0.0675	0.345***	0.225**	0.0358

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	(0.0871)	(0.0931)	(0.0980)	(0.0913)	(0.101)	(0.124)	(0.0825)	(0.0830)	(0.0929)
Constant	4.167***	3.816***	3.533***	4.115***	3.946***	2.732***	3.908***	4.135***	3.769***
	(0.0842)	(0.0900)	(0.0948)	(0.0883)	(0.0975)	(0.120)	(0.0798)	(0.0802)	(0.0898)
N	1549	1549	1549	1549	1549	1549	1549	1549	1549
R^2	0.020	0.012	0.022	0.015	0.021	0.039	0.030	0.043	0.009

Note Standard errors in parentheses. Predictors are binary indicators for variable label given. "Ach. Gap"= teachers assigned to "achievement gap" version of items; "Inequality"=teachers assigned to the "inequality in educational outcomes" version of items. "*Priority to close gap/equalize outcomes*" item read: "*As you know, there is [a racial achievement gap/racial inequality in educational outcomes] between Black and White students in the US. Thinking about all of the important issues facing the country today, how much of a priority do you think it is to [close the racial achievement gap/ end racial inequality in educational outcomes] between Black and White students?" R*esponses were on a 5-point scale with 1=not a priority, 2=low priority, 3=medium priority, 4=high priority, 5=essential. "*Explanations for gap/inequality*" items (columns 2-9) began with stem: "To what extent do you believe each of these factors is responsible for **[the racial achievement gap/racial inequality in educational outcomes]** between Black and White students?" Factors given in column header, with response options were 1="not at all," 2="slightly," 3="somewhat," 4="quite," and 5="extremely." Sch prim.=teach in a school that is primarily…API= Asian/Pacific Islander; Nat. Am.=Native American (school not primarily any one race/ethnicity is omitted reference group). Teach K-2=respondent teaches in grade K-2 (pre-K is omitted reference group).

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

Online Appendix F. Sample Descriptive Statistics Excluding Pre-K Teachers for Comparisons to National Estimates.
Table F1.
Descriptive Sample Statistics by Condition (excluding Pre-K Teachers) with Comparisons to Nationally-representative Estimates for 2015-2016 School Year.

| | Study Sample (Excluding Pre-K Teachers) | | | | | National Estimates, 2015-2016 |
| | Ach Gap | | Inequality | | | |
	Mean	n	Mean	n	p	Mean
Female	0.576	663	0.580	648	0.745	0.766
Non-binary	0.006	663	0.011	648	0.344	
Black	0.087	663	0.088	648	0.975	0.067
White	0.712	663	0.677	648	0.176	0.801
Asian	0.036	663	0.046	648	0.358	0.023
Latinx	0.081	663	0.080	648	0.936	0.088
Other Race	0.006	663	0.003	648	0.430	0.006
Multi-racial	0.077	663	0.105	648	0.078	0.014
Teaching position						
K-2 Teacher	0.186	663	0.160	648	0.231	
3-5 Teacher	0.196	663	0.202	648	0.783	0.476 (Elementary)
6-8 Teacher	0.205	663	0.190	648	0.487	0.178 (Middle)
9-12 Teacher	0.413	663	0.448	648	0.211	0.287 (High)
Demographics of school teach in						
Sch. Not primarily any race/ethnicity	0.178	663	0.224	648	0.038	
Sch. Primarily Asian/Pac. Is.	0.020	663	0.019	648	0.885	
Sch. Primarily Black	0.124	663	0.128	648	0.810	0.449 (School is <50% White)
Sch. Primarily Latino/a	0.110	663	0.117	648	0.683	
Sch. Primarily Nat. Am.	0.012	663	0.006	648	0.263	
Sch. Primarily White	0.557	663	0.506	648	0.068	
Experience in Education Field						

"ACHIEVEMENT GAP" LANGUAGE

<1 year in field of edu	0.038	663	0.029	648	0.400	
1-3 years in field of edu	0.121	663	0.122	648	0.945	0.099 (<3 years)
4-6 years in field of edu	0.172	663	0.198	648	0.233	
7-10 years in field of edu	0.238	663	0.270	648	0.187	0.283 (3-9 years)
11-15 years in field of edu	0.186	663	0.159	648	0.203	
16-20 years in field of edu	0.092	663	0.090	648	0.875	0.393 (10-20 years)
>20 years in field of edu	0.154	663	0.133	648	0.275	0.225 (>20 years)

Note. "Ach. Gap"= teachers assigned to "achievement gap" version of item; "Inequality"=teachers assigned to the "inequality in educational outcomes" version of items. All variables are 0/1 indicator variables. *p*-value is for t-test of mean difference between conditions. National estimates come from Snyder, de Brey, & Dillow (2019), tables 209.1 (race/ethnicity, gender, years in edu field) and 209.24 (grade-level, school demographics). In national estimates, 6% of teachers teach in combined grade-levels.