

Supplemental Online Material

Missing Data Analysis

To assess the impact of attrition, we compared non-Black participants who were in their second-year of residency and completed all three waves to non-Black participants who were in their second-year of residency but did not complete all waves. There were no significant differences in most of the predictors, covariates, or outcomes ($ps = .09-.87$). Participants who completed all three waves completed fewer hours of diversity training ($M=11.56$) than those who did not complete all three waves ($M=14.31$).

Table S1

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	p	t	df	p	Mean Diff.	SE Diff.	95% CI of Diff. Lower Upper	
Demographics										
Wave 1 Participant Gender	Equal variances	9.765	.002	-1.75	312	.081	-.045	.026	-.097	.006
	Equal variances not assumed			-1.76	577.095	.080	-.045	.026	-.096	.005
Wave 1 Participant Race	Equal variances	4.565	.033	-.70	3132	.484	-.059	.084	-.223	.105
	Equal variances not assumed			-.68	563.838	.499	-.059	.086	-.228	.111
Wave 2 Participant Family Income	Equal variances	3.253	.071	-1.24	2978	.217	-.120	.097	-.312	.071
Baseline Contact with Black People										
Wave 1 Amount of Contact with Black People	Equal variances	.028	.868	1.08	3084	.279	.044	.041	-.036	.124
Wave 1 Favorability of Contact with Black People	Equal variances	2.358	.125	-1.50	3081	.133	-.048	.032	-.111	.015
Medical School Contact with Black People										
Wave 2 Amount of Contact with Black People	Equal variances	1.036	.309	.44	3001	.664	.017	.038	-.058	.091
Wave 2 Favorability of Contact with Black People	Equal variances	.022	.882	.88	2989	.379	.027	.030	-.033	.086
Residency Contact with Black People										

Wave 3 Amount of Contact with Black People	Equal variances	.001	.980	1.61	2764	.107	.110	.069	-.024	.246
Wave 3 Favorability of Contact with Black People	Equal variances	.130	.719	.84	2757	.403	.046	.055	-.062	.155
Medical School Experiences										
Wave 2 Negative Role Modeling of Racial Bias	Equal variances	3.238	.072	1.08	2983	.280	.057	.052	-.046	.160
Wave 2 Perceived Welcoming Racial Climate	Equal variances	3.769	.052	-.14	2997	.893	-.007	.054	-.113	.098
Wave 2 Hours of training-racial disparities and bias	Equal variances	30.529	.000	4.71	2967	.000	2.747	.583	1.604	3.890
	Equal variances not assumed			3.98	385.353	.000	2.747	.690	1.390	4.104
Residency School Experiences										
Wave 3 Negative Role Modeling of Racial Bias	Equal variances	.034	.853	-.36	2751	.716	-.055	.151	-.351	.241
Wave 3 Perceived Welcoming Racial Climate	Equal variances	.733	.392	.95	2768	.342	.101	.106	-.107	.308
Wave 3 Hours of training-racial disparities and bias	Equal variances	.892	.345	.79	2582	.430	.608	.770	-.902	2.117
Explicit Attitudes toward Black and White People (FT = Feeling Thermometer)										
Wave 1 FT toward Black People	Equal variances	1.159	.282	.01	3083	.991	.012	1.031	-2.009	2.033
Wave 1 FT toward White People	Equal variances	1.954	.162	-1.10	3082	.273	-	.934	-2.856	.808
							1.023			
Wave 2 FT toward Black People	Equal variances	.002	.962	.11	3008	.910	.133	1.185	-2.189	2.456
Wave 2 FT toward White People	Equal variances	.089	.766	-.22	3010	.830	-.241	1.121	-2.439	1.956
Wave 3 FT toward Black People	Equal variances	.058	.810	-.83	2736	.405	-	2.393	-6.686	2.698
							1.993			
Wave 3 FT toward White People	Equal variances	.183	.669	-.89	2740	.374	-	2.266	-6.456	2.430
							2.013			
Pro-White Implicit Bias										
Wave 1 Pro-White IAT	Equal variances	.763	.382	-.43	3073	.664	-.010	.022	-.053	.034
Wave 2 Pro-White IAT	Equal variances	.034	.855	-.65	2941	.518	-.016	.025	-.066	.033
Wave 3 Pro-White IAT	Equal variances	1.051	.305	.30	2674	.762	.015	.049	-.081	.111

This table reports the results of the preregistered analyses predicting explicit and implicit bias during residency (Wave 3). The effect of diversity training was not preregistered and is therefore exploratory. The main difference between the analyses is that the full model does not account for Wave 2 bias. The results of the individual models are the same as those reported in the main text. The only difference between the results reported in the main text and the ones that follow is that Wave 1 quantity of contact with Black people is related to less implicit bias at Wave 3 when Wave 2 implicit bias is omitted from the model. As in the main text, Wave 2 quality of contact with Black people is related to less explicit and implicit bias at Wave 3.

Table S2

Contact, Negative Role Modeling, Climate and Diversity Training in Medical School as Predictors of Explicit and Implicit Bias against Black people in Second Year of Residency

Predictors	Explicit Bias						Implicit Bias					
	Individual Model ^a			Full Model ^b			Individual Model ^c			Full Model ^d		
	β	SE	p	β	SE	p	β	SE	p	β	SE	p
Wave 2 Quality of contact with Black people ^e	.08	.02	<.001	.07	.02	<.001	-.06	.02	.002	-.05	.02	.005
Wave 2 Quantity of contact with Black people ^f	.04	.02	.018	.02	.02	.18	-.02	.02	.27	-.02	.02	.43
Wave 2 Perceived welcoming racial climate	.04	.02	.023	.01	.02	.62	-.01	.02	.62	.02	.02	.39
Wave 2 Observed role modeling of racial bias	-.03	.01	.081	-.01	.02	.38	.02	.02	.34	.02	.02	.44
Wave 2 Hours of diversity training	.00	.02	.86	-.01	.02	.63	-.00	.02	.93	.00	.02	.89
Wave 1 Quality of contact with Black people ^g	.05	.01	<.001	.03	.01	.019	-.06	.02	<.001	-.04	.02	.022
Wave 1 Quantity of contact with Black people ^h	.05	.02	.003	.03	.02	.093	-.06	.02	<.001	-.04	.02	.039
ICC(s)	1.1e-20 - 9.9e-15			1.8e-17			6.0e-16 - 1.4e-10			1.1e-13		
R ²				.521268						.1242011		

Note. All predictors and dependent variables have been standardized. Each row reports a standardized slope (β), the standard error of that slope, and *p*-value. All models include a random intercept by school and account for the effect of stratum as a categorical predictor. All reported values are based on pooled estimates across multiple imputations. Bolded values are statistically significant.