Diversity statements can activate stereotype threat: evidence from a natural field experiment

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Abstract

What do diversity statements do? We randomize 3,825 incoming college first-years to receive emails with or without a diversity statement. We find that our statements reduced interest in academic resources, especially among men. Follow-up surveys reveal that they raised stereotype-related worries for Black and Hispanic students but lowered them for Asian students. Finally, transcript data indicate that GPA declined for men and grew for women. Potential mechanisms include changes in STEM affinity for both genders, selection of easier courses among women, and disengagement with university resources among men. Finally, a prediction survey indicates that university advisors and instructors predicted these results with surprising accuracy. Our results suggest that organizations should empirically test diversity statements before implementing them.

Keywords: diversity, stereotype threat, social identity, peer effects
JEL Classifications: I23, I24, J15, J16

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1 Introduction

In the U.S., a growing number of institutions have issued "diversity statements": written statements proclaiming commitment to the diversity, equity, and inclusion of their members (Coffman et al., 2021; Stringfellow, 2020; Verlinden, 2023). For example, at least 95% of U.S. R1 universities have a statement expressing support for the diversity and inclusion of their students (DiMaggio and Powell, 1983). Since these statements frequently pronounce support for underrepresented groups, their message may improve sense of belonging among the marginalized.

In the university context, diversity statements may especially help women and racial minorities. Despite being the majority on college campuses, women remain significantly underrepresented in science, technology, engineering, and math (STEM) fields – particularly, physics, engineering and computer science (Cheryan et al., 2017; Cimpian et al., 2020; Koch et al., 2022; Rainey et al., 2018; Weeden et al., 2020). Prior work has shown that women tend to underperform on math examinations when reminded of their gender (Beasley and Fischer, 2012; Deemer et al., 2016b; Good et al., 2008; Kapitanoff and Pandey, 2017). Similarly, students demonstrate awareness that others may hold racial stereotypes about their academic performance. For example, Black and Hispanic students are aware of being associated with negative stereotypes and Asian students of stereotypes of being nerdy or overachieving (Beasley and Fischer, 2012; Fischer, 2010; Owens and Massey, 2011; Totonchi et al., 2021).

Field experiments have shown that short online interventions can ameliorate these obstacles. By addressing students' sense of belonging, these interventions improved grade progression, GPA, physical health, and career success ten years later among racial minorities (Binning et al., 2020; Brady et al., 2020; Murphy et al., 2020; Walton and Cohen, 2011; Walton et al., 2023; Yeager et al., 2016). These "sense-of-belonging" interventions aimed to change how students approach the challenges of college, by providing mental tools to frame challenges as universal to all students, and as temporary setbacks that fade. Such tools may especially help underrepresented students, who are more likely to attribute college struggles to their identity or social group (Brady et al., 2020).

It is unclear whether diversity statements will achieve the same objectives, since they differ from "sense-of-belonging" interventions in two important ways. First, the sense-of-belonging interventions deliver mental tools to re-interpret challenges. Second, they require participants to actively reflect to self-generate these mental tools. Diversity statements do not incorporate either feature. Rather, diversity statements may underscore in- and out-

group differences without providing the tools to interpret them.

Indeed, almost all experiments on diversity statements take place in the lab, examine short-term outcomes, use small samples, and yield mixed findings. Some find that diversity statements that recognize differences improved sense of belonging for marginalized groups more than those that emphasize similarities (Birnbaum et al., 2021; Celeste et al., 2019; Good et al., 2020; Wilton et al., 2015). Others find that rhetoric around gaps and disparities heighten in- versus out-group perceptions (Flores, 2007; Gutiérrez, 2008; Quinn, 2020), creating a "wedge to separate subgroups" (Charness and Chen, 2020). For individuals who did not previously question their place, it can name concerns about belonging into existence. Furthermore, diversity statements risk activating stereotype threat (Steele, 1997; Steele and Aronson, 1995; Steele et al., 2002). Prior lab experiments show that overt emphasis of gender gaps raised women's perceived stereotype threat, lowered their sense of belonging, and increased their general negative affect (Cowgill et al., 2021; Murphy et al., 2007; Pietri et al., 2019). Other experimental work shows that diversity statements could foster feelings of exclusion among non-minoritized students (Dover et al., 2016; Plaut et al., 2011).

In partnership with a large state university ("University"), we design and implement a field experiment to measure how diversity statements impact incoming undergraduates. University communications may signal to students how someone of their social group will be viewed in their new environment, where they must develop new identities among 40,000 new peers from differing backgrounds. These communications may shape first impressions regarding social interactions, institutional support, and fields of study that are "appropriate" for one's social group.

During the first week of the academic year (August 2022), we sent emails that offered a free information session on succeeding in college to a random third of the incoming first-year class ($N = 3,825$). We randomized whether the emails included one of three diversity statements. We find that receiving any diversity statement depressed interest in the information sessions by 47% and led to significantly lower interest among men than women ($p < 0.001$).

We then administered a survey 12 weeks after the intervention to investigate whether the diversity statements have a long-term "chilling" effect. We find that they raised worries about stereotypes and peer interactions for Black and Hispanic students in a manner consistent with the activation of stereotype threat. By the end of the semester, the cumulative effect of the diversity statements appeared to lower GPA for men and raise GPA for women. Event-study analysis shows that the effect for women (partly) arises from course selection: they were less likely to enroll in advanced courses right after receiving the diversity statements, an

immediate response with lasting effects on performance. For men, however, we find evidence of disengagement from the university as one potential mechanism behind the decline in GPA.

Finally, in a prediction survey we asked university administrators and instructors to guess how students reacted to the diversity statements. Although respondents did not know our results, qualitative responses were surprisingly accurate: respondents guessed correctly that academic interest would decline for men and white students, that worries regarding stereotypes would rise among Black and Hispanic students, and that GPA would rise for women but lower for men. This accuracy appears to stem from respondents' extensive interactions with students regarding diversity, equity, and inclusion initiatives.

This paper makes contributions to three literatures. The first is the broad social science literature on diversity, equity, and inclusion (DEI). Society currently applauds organizations for DEI *efforts* (Stringfellow, 2020; Verlinden, 2023), prioritizing intention above results. Some consultants even encourage the adoption of diversity statements as a branding strategy (Doeing, 2019). We present the first field evidence that these efforts have the potential to create long-lasting harm to the very populations they purportedly support. This evidence is consistent with prior work showing negative short-term impacts on attitudes, mostly in lab settings using small samples and hypothetical scenarios (Bowman Williams, 2022; Cowgill et al., 2021; Georgeac and Rattan, 2023; Pietri et al., 2019; Wilton et al., 2015). Our conclusion is not that diversity statements are categorically harmful, but that the subtleties of language can have unintended consequences. Despite enthusiastic adoption, diversity statements currently undergo little empirical testing. Such testing is critical to craft practices that harness the success of prior sense-of-belonging interventions (Binning et al., 2020; Brady et al., 2020; Kizilcec and Saltarelli, 2019; Walton and Cohen, 2011; Walton et al., 2023).

Second, we provide empirical evidence for economic models of social identity (Akerlof and Kranton, 2000; Bénabou and Tirole, 2011, 2016) and psychological models of stereotype threat (Spencer et al., 1999; Steele, 1997; Steele and Aronson, 1995; Steele et al., 2002). Our results indicate that diversity statements can function as social cues that heighten sensitivity to one's race and gender. Consistent with Liqui Lung (2023), we find that although these social cues are limited in predicting individual outcomes, they influence different groups in systematic ways. Our results are consistent with stereotype threat along both race and gender lines, similar to lab evidence on risk and time preferences from Benjamin et al. (2010). The diversity statements raised worries for Black and Hispanic students but lowered worries for Asian students, suggesting that worries were influenced by second-order beliefs regarding how others view one's race. Our event-study analysis shows that women were less likely

to add advanced courses immediately after receiving the diversity statement. Women also reported lower interest and confidence in STEM, while men exhibited opposite effects. The results align with the "escalating commitment" model of Bénabou and Tirole (2011).[1]

Third, we contribute to the economics of discrimination, especially in the education context (Moss-Racusin et al., 2012; Reuben et al., 2014). Only recently have economists formalized a model of systemic discrimination (Bohren et al., 2023), which explains how inequity in one domain (e.g., high school quality) permeates into other domains (e.g., college success), creating systemwide gaps in characteristics that are not inherently linked to group identity. Our paper provides field evidence for this model, in that our impacts permeate to multiple domains, from academic interest to social worries to grades. Furthermore, our paper shows that merely acknowledging differences risks chilling underrepresented groups, underscoring why systemic discrimination is so difficult to eradicate. Prior work documents instances in which underrepresented groups respond to stereotype threats by disassociating from the domain in which the threat operates, re-entrenching their underrepresentation (Aronson et al., 2002; Spencer et al., 2016). Indeed, we find evidence of this disassociation in the lower interest and confidence in STEM among treated women 12 weeks post-intervention. Thus, in addition to permeating across multiple domains, stereotype threat influences attitudes in small, subtle ways, culminating into disparities that endure over months.

2 Materials and Methods

2.1 Email Intervention

Our partner institution granted access to a random third of the incoming class for our study ($N = 3,825$). This sample includes only U.S. citizens or permanent residents of first-year standing whose immediate prior institution was a high school. We emailed them an invitation to a one-hour information session on academic success. We sent these emails prior to the start of classes, when first-years would be especially interested in selecting courses and developing study strategies. Our focus is on the effects of the emails rather than the information sessions. We did not design the experiment to assess the impact of the information sessions, since students select in to participate and since each session's content varied depending on who participated.

[1] Bénabou and Tirole (2011) argue that certain groups may over-invest in a pursuit if they derive utility from identifying with it. Our treatment led men to report greater interest and identification with STEM. We expect the opposite for women: under-investment in advanced and STEM classes if social cues lower their confidence in them.

A quarter of this sample received the email with no diversity statement. Three-quarters received the email with a diversity statement. These emails differ from the "generic" email in only the following three sentences.

> "Students' academic experiences may differ by [gender identity/race and ethnicity/gender identity, race, and ethnicity]. [University] is committed to understanding these differences to ensure that [Students] from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session."

This statement is informed by Celeste et al. (2019), Good et al. (2020), and Wilton et al. (2015), which found that diversity statements that recognized differences improved attitudes for women and minorities compared to those that emphasized similarity.

The "gender" email only mentions differences by gender identity; the "race" email mentions only differences by race and ethnicity; and the "intersection" email mentions differences by gender identity, race, and ethnicity. Appendix Tables A.1-A.2 report no significant differences in covariate distribution or primary outcomes across diversity statements. To preserve power, we pool across treatments. The control group is therefore students who received no diversity statement ($N = 953$). The treatment group consists of students who received any diversity statement ($N = 2,827$).

The link to register for the academic success information session follows the diversity statement. Clicking on the link is our immediate measure of whether the diversity statement affected student interest in academic resources ("academic interest").[2]

2.2 Student Survey

In November 2022, we conducted a student survey to detect any longer-term impacts of our intervention on student attitudes. How could long-term impacts arise from a short email 12 weeks earlier? Since students had just arrived on campus, the diversity statements could have made a lasting impression on them, cementing the idea that others would view them in terms of their race and gender. Another possibility is that the diversity statements did not directly make a lasting impression, but elicited small changes in behavior that multiplied over the course of the term. We timed the emails the day before classes began, to make them fresh when students selected courses and attended class. Decisions in one week influence decisions in the next, which could cause a short intervention to snowball into sustained changes months later. For example, our event-study analysis shows that the intervention

[2]Although we also observe how far students progress in the registration process (e.g., whether they finish registration), most of the variation in this progress can be explained by whether they click on the link at all.

had immediate effects on course selection in August 2022, which could impact end-of-term course grades.

We paid students $20 to complete the survey. Of the 3,825 students in the intervention sample, 1,300 (34%) took it and consented to release their transcript information. We consider attrition following Ghanem et al. (2023), who formalize the assumptions necessary to interpret the difference in treatment and control means as the average treatment effect (ATE). We fail to reject the null of distributional equivalence between the covariates in the treatment and the control group conditional on response status, a necessary condition to interpret the difference in means as an ATE for respondents (ATE-R, Appendix Table A.3 column 11).[3] We also inverse weight by the probability of completing the survey. The results are similar to specifications where we do not use inverse weights (Appendix Table A.4).

2.3 Student Record Data

At the end of the Fall 2022 semester, we obtained student records for the 1,300 survey respondents who consented to release their identifying information and student records. The data contain information about sex, race, SAT/ACT scores, math placement score, major declaration, courses enrolled, and course grade. Our pre-registered analysis focuses on grade point average (GPA). Our event-study analysis uses information on courses enrolled and course enrollment date.

3 Methodology

Our experimental design and primary outcomes of interest are pre-registered at the American Economic Association Registry (Chuan and Johnson, 2023). Our immediate measure of academic interest is whether students click to register for the session. The registration link is embedded in the same email as the diversity statement, which was sent to the intervention sample of 3,825 students. Since the email's subject line was the same for all students, treatment condition cannot influence the likelihood of opening the email. For the survey and student record data, our sample consists of the 1,300 survey respondents who consented to release their student records.

[3]However, there is some evidence that STEM majors were differentially likely to respond to the survey based on treatment status, which compromises our ability to interpret the difference in means as an ATE for the entire intervention sample (ATE-P, Appendix Table A.3 column 2).

For both samples, our regression specification is

$$y_i = \alpha_0 + \alpha_1 diversity_i + \alpha_2 female_i + \alpha_3 race_i + \alpha_4 diversity_i female_i + \alpha_5 diversity_i race_i + \alpha_6 female_i race_i + \alpha_7 diversity_i female_i race_i + \alpha_8 X_i + \epsilon_i \quad (1)$$

where $female_i$ equals 0 for men and 1 for women; $race_i$ is a matrix of race dummies for Black, Hispanic, or Asian, with White as the omitted group; $diversity_i$ equals 0 if student i received the generic email and 1 if student i received any diversity email. In our preferred specification, the control matrix X_i includes citizenship, disability status, first-generation college status, and year in college. In additional regressions, we add controls for math placement score, SAT/ACT score, employment status, on-campus residence, and membership in student organizations.

4 Results

4.1 Main Results

Table 1 displays the main results as estimated probabilities after regressions controlling for the covariates described above. Odd-numbered columns show outcomes for control students, who received a "Generic" email without a diversity statement. Even-numbered columns show predicted outcomes for treated students, who received a diversity statement. Column 1 displays our immediate measure of academic interest: whether students clicked on the link regarding the academic information session. At baseline, 10% demonstrated academic interest among both men and women. However, column 2 shows that if the email contained a diversity statement, academic interest declined to 4% for men ($p < 0.01$) and 7% for women ($p < 0.10$), creating a significant 3 percentage point gender gap in the treatment group ($p < 0.00005$). It is possible that the diversity statements chilled students, lowering their interest in the information session. However, the lower interest could have occurred because the treatment emails were longer, or because students did not wish to participate in the discussion mentioned in the treatment emails.

To determine whether the diversity statements exacerbated apprehensions about college, our follow-up survey asks students about stereotype threat using measures adapted from Picho and Brown (2011). Our key measure is whether students agree with the statement "I worry my class performance is used to confirm or disprove a stereotype" (see Appendix B). We first discuss raw statistics in the control group. Women were almost twice as likely as

men to express this worry (19% vs. 12%, $p < 0.05$). Almost twice as many Black (20%) and Hispanic (19%) students expressed this worry compared to White students (12%, differences insignificant at $p > 0.10$). A whopping 49% of all Asian students expressed this worry (Asian-White gap significant at $p < 0.001$).

We next compare treatment and control. While we find no effects by gender, the statements more than doubled worry regarding stereotypes for Black students (45% vs. 18%, $p < 0.005$). They raised worry by 10 percentage points among Hispanic students (28% vs. 18%, $p < 0.05$). We find no change in worry for White and Asian students. In fact, coefficient estimates significantly differed between Black compared to White or Asian students ($p < 0.01$ Black-White gap; $p < 0.05$ Black-Asian gap). Our results align with Birnbaum et al. (2021), who reported GPA effects two years post-intervention for Black and Hispanic students but not White and Asian students.[4]

Effects differed for Asian relative to Black and Hispanic students despite similar rates of representation at University (6-8%), suggesting that beliefs regarding perceptions of one's race guided the response to diversity statements.[5] Table 2 reports estimated probabilities for secondary outcomes: worries regarding classmate and professor interactions. For Asian students, the diversity statements lowered worries regarding classmate and professor interactions by 62% and 43%, respectively ($p < 0.05$ and $p > 0.10$). However, for both outcomes, the diversity statements raised the Black-White gap ($p < 0.10$ in treatment). Notably, coefficient estimates on worries regarding classmates significantly differed between Asian compared to Black or Hispanic students ($p < 0.05$ for Black-Asian gap; $p < 0.10$ for Hispanic-Asian gap). Taken together, the differential responses rule out alternative explanations such as feeling "singled out" (Brewer, 1991; Cowgill et al., 2021) or tokenized (Bowman Williams, 2022; Georgeac and Rattan, 2023; Leibbrandt and List, 2018), which would predict similar reactions among minoritized groups.

Our final primary outcome is academic performance, as measured by GPA from University's student record data. Columns 5-6 of Table 1 show differential impacts for men and women. In the control group, average GPA is 3.4 for both men and women. However, men exposed to the diversity statement experienced declines to 3.2 on average ($p < 0.01$), while women's GPA rose to 3.5 ($p < 0.05$), leading to a gender gap of 0.3 in the treated group ($p < 0.0005$). We delve into the mechanisms behind the differential gender effects in Section

[4]Importantly, Birnbaum et al. (2021) report GPA gains since their diversity statement involved active self-reflection. Our statements are more naturalistic in requiring no self-reflection from participants.

[5]Asian students tend to be positively stereotyped in academic domains as model students (Benard et al., 2023; Thompson et al., 2016; Wong et al., 1998).

4.2.

We correct for multiple hypothesis testing of our primary outcomes: academic interest, worries regarding stereotypes, and GPA. Our preferred approach adjusts over outcomes but not over subgroups, since we have separate hypotheses for each race or gender group (Rubin, 2021). Appendix Table A.5 presents the adjusted p-values. The results on academic interest and GPA remain significant by gender, but the rise in worries regarding stereotypes becomes insignificant ($p = 0.174$ for Black students, $p = 0.651$ for Hispanic students). The results are similar when we adjust over multiple outcomes *and* subgroups (Appendix Table A.6).

4.2 Exploring the gender difference in GPA effects

We investigate why GPA declined for men but rose for women. We first ask which types of classes drove the GPA changes. Focusing on large classes, which provide sufficient statistical power to estimate reliable coefficients, we find that grade decline occurred in introductory first-year classes (Writing, Psychology, and Social Science, see Appendix Table A.7a), rather than advanced or STEM-based classes (Math, Chemistry, or Economics, see Appendix Table A.7b).[6] This suggests that academic difficulty is not driving the GPA decline among men.

Rather, the decline appears to be driven by greater disengagement from the university. Figure 1a shows that relative to control, treated men are 10 percentage points less likely to feel they know where to access social support, mental health support, and financial support ($p < 0.05$). The results parallel Yeager et al. (2016), who find rises in GPA among minority students and posit that the mechanism is greater engagement with the university, as shown by more close friends, extracurricular involvement, and use of social support services. In our case, we find opposite effects among men for both GPA and university engagement.

In contrast, the rise in GPA for women (at least partly) stems from increased selection of introductory and non-STEM courses. At University, students declare provisional majors and choose courses long before Week 1 of classes, but can change courses until Week 2. Our intervention occurred the day before classes started during Week 1, when students were actively changing courses. We therefore use administrative data to perform an event-study analysis of course additions by date (Figure 2).[7] While rates of adding advanced courses are high among the control group for both men and women, the intervention decreased the likelihood of adding advanced courses by 6 percentage points among women ($p < 0.001$).

[6]The writing class is a requirement for all first-years. The psychology and social science courses are the first courses in their respective majors.

[7]Some changes may not be reflected in the registrar's office until Week 3, as indicated by the nonzero point estimate in Figure 2.

Moreover, treated women were more likely to drop STEM courses than control women after the intervention ($p < 0.05$, Figure 1b). Treated women are also 10 percentage points more likely to report being prepared for their major ($p < 0.10$, Figure 1a), potentially due to an easier course portfolio. These results show 1) an immediate response to our intervention, and 2) how this immediate impact on course selection can lead to enduring changes to GPA over the term.

Lastly, we examine attitudes toward STEM (science, technology, engineering, and math). If the diversity statements activated stereotype threat, men and women may respond differently to STEM, long stereotyped as male-favoring. Figure 1b shows that the diversity statements raised men's affinity for STEM, as measured by self-reported preparation for STEM, fulfillment in pursuing STEM, others' pride in them if they pursued STEM, and fit in STEM ($p < 0.10$). In contrast, the statements appeared to decrease the fulfillment and pride measures among women ($p < 0.10$). There are two implications. First, the results provide further evidence that the mechanism behind our results is stereotype threat; they align with the rise in worries for Black and Hispanic students and the decline in worries for Asian students. Second, if STEM courses tend to have lower GPAs, and the diversity statements raised take-up of STEM classes for men, the impact on STEM attitudes may contribute to why GPA effects differ by gender.

4.3 Comparing experimental results to expert guesses

We conducted a survey of experts: course advisors and instructors who regularly interact with students at University (details on the respondent sample, procedure, and results in Appendix C). First, we asked advisors and instructors to guess the share of students who report worries regarding discrimination (stereotypes, classmate interactions, and professor interactions). We find that they overestimate students' worries, especially for Black and Hispanic students (Appendix Table A.8). University personnel's over-concern could affect how students believe they should feel. For example, University personnel may communicate greater worry for Black and Hispanic students than actually felt by these students, conveying to students that they should be more worried than they originally were.

Next, we show our diversity statements and ask respondents to guess effects on our primary outcomes: academic interest, worries regarding stereotypes, and GPA. Two results are noteworthy. First, after seeing our statements, University advisors and instructors guessed positive effects on academic interest and GPA for Black and Hispanic students, consistent with our original belief that the language of our statements would improve sense of belonging

for historically minoritized groups. However, our experimental results show no such effects of these outcomes for Black and Hispanic students.

Second, other than these guesses, University advisors and instructors were surprisingly accurate. Consistent with our results, they guessed that the diversity statements would decrease academic interest for men and White students; raise worries regarding stereotypes among Black and Hispanic students; and lower GPA for men but raise GPA for women (Appendix Table A.9). When asked to give the rationale behind their responses, a few respondents wrote of past experiences that diversity statements have otherized students, discouraging their participation and lowering confidence about performance (see Appendix C).

5 Conclusion and Discussion

Diversity statements have proliferated across U.S. organizations. The purported reason is that they improve sense of belonging among underrepresented groups. However, their popularity may also stem from the fact that they are easy, low-cost measures to improve the organization's brand (Doeing, 2019). What do diversity statements do, and for whom?

Prior field experiments on sense of belonging show that short online interventions can generate large, sustained benefits years later. However, lab studies point to pitfalls of diversity statements if their language instills in- versus out-group perceptions. They show that merely mentioning disparities can heighten stereotype threat (Cowgill et al., 2021; Murphy et al., 2007; Pietri et al., 2019). We administer a field experiment with 3,825 incoming first-years at a state university. We find that receiving the diversity statements led to immediate declines in interest, measured by click rates on an academic information session. Twelve weeks later, survey responses show that the statements raised worry regarding stereotypes among Black and Hispanic students, but lowered worry regarding classmate interactions among Asian students. The statements appeared to raise affinity with STEM among men but lower it among women. This pattern suggests that students were concerned about perceived stereotypes regarding their social group.

The diversity statements appeared to lower GPA for men but raise them for women. The decline in GPA for men is concentrated in introductory courses rather than advanced or STEM courses, ruling out academic difficulty as the main driver. Rather, treated men were more likely to exhibit disassociation from the university community, as measured by self-reported access to social, mental health, and financial support. The rise in GPA for

women can partly be explained by the selection of easier courses. Event-study estimates show that women are less likely to add advanced courses immediately after receiving the diversity statement. They are also more likely to drop STEM courses. If STEM courses have lower GPAs than non-STEM courses on average, men's association with STEM and women's disassociation with STEM may have also contributed to the GPA effects.

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This study points to the importance of empirical testing before widespread implementation. Our position is not that diversity statements are categorically harmful, but that language is subtle and may have unintended consequences. It is necessary to investigate a variety of outcomes across multiple subpopulations to obtain a holistic picture of the impacts, as we attempt to do.

Our study invites follow-up work in many directions. First, as with all field interventions, subjects differentially respond to the follow-up survey. We address potential selection into survey response using tests proposed by Ghanem et al. (2023) and use inverse propensity weights to adjust our results. Although inverse propensity weights do not change our results, they may only represent average treatment effects for survey respondents, rather than the student population. Second, we do not have sufficient power to examine intersectional results, since minority students only represent 6-8% of University. Future work should obtain follow-up data from a larger share of the student body, in order to address potential selection into response and better speak to intersectional impacts.

Third, we explore one type of diversity statement at one university. If diversity statements risk activating stereotype threat, as our results suggest, we would expect less activation using statements that emphasize unity. Relatedly, it is possible that our statements generated negative effects in our particular population, where Black and Hispanic students only represent 6-7% of students, and that effects could differ at institutions where historically

underrepresented students make up more of the student body. Prior lab work shows that recognizing diversity generates negative affect among the severely underrepresented but positive affect among those represented in greater numbers (Apfelbaum et al., 2016). We leave these important considerations to future work.

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Table 1: Estimated Probabilities of Primary Outcomes

	Academic Interest		Worries about Stereotypes		GPA	
	Control	Treated	Control	Treated	Control	Treated
	(1)	(2)	(3)	(4)	(5)	(6)
Male	0.099	0.037***	0.119	0.160	3.396	3.227***
	(0.016)	(0.006)	(0.018)	(0.024)	(0.071)	(0.051)
Observations	453	1337	136	318	136	318
Female	0.106	0.068*	0.196	0.207	3.400	3.510**
	(0.014)	(0.005)	(0.029)	(0.022)	(0.040)	(0.029)
Observations	500	1490	215	619	215	619
gender gap p-value	0.751	0.000	0.023	0.142	0.966	0.000
White	0.104	0.044***	0.115	0.115	3.432	3.427
	(0.011)	(0.004)	(0.024)	(0.016)	(0.043)	(0.045)
Observations	662	2009	249	674	249	674
Black	0.164	0.095	0.196	0.441**	3.188	2.879
	(0.038)	(0.013)	(0.068)	(0.073)	(0.132)	(0.160)
Observations	78	220	26	65	26	65
race gap p-value	0.137	0.000	0.271	0.000	0.091	0.001
Hispanic	0.036	0.054	0.186	0.319*	3.486	3.287
	(0.015)	(0.012)	(0.050)	(0.041)	(0.124)	(0.078)
Observations	76	209	20	66	20	66
race gap p-value	0.000	0.412	0.209	0.000	0.683	0.119
Asian	0.088	0.107	0.493	0.458	3.216	3.368
	(0.027)	(0.022)	(0.094)	(0.081)	(0.155)	(0.041)
Observations	70	187	32	77	32	77
race gap p-value	0.572	0.004	0.000	0.000	0.189	0.329
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Other Controls			Yes	Yes	Yes	Yes

Estimated probabilities of primary outcomes for control group (odd columns) and treated group (even columns). Columns 1-2 examine click rates on the registration link for the academic opportunity for the full experimental sample. Columns 3-6 examine worries regarding stereotypes and GPA for survey respondents. Demographic controls: citizenship, disability, first-generation student status, and year in college. Additional controls: math placement score, ACT/SAT scores, employment, on-campus residence, membership in organizations. Stars denote significant difference relative to control group. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Gender gap p-value reports the p-value of the gender gap relative to males. Race gap p-value reports the p-value of the race gap relative to White students. 3,780 students with race data in experimental sample (columns 1-2), 1,300 survey respondents (columns 3-6).

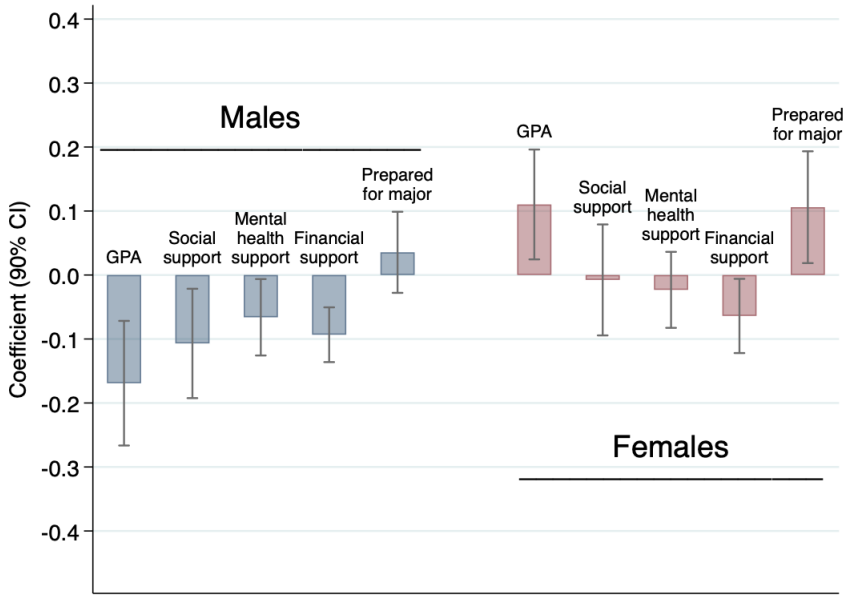
Table 2: Estimated Probabilities of Secondary Outcomes: Worry

	Worries about Classmates		Worries about Professors	
	Control	Treated	Control	Treated
	(1)	(2)	(3)	(4)
Male	0.104	0.131	0.047	0.092
	(0.019)	(0.026)	(0.018)	(0.018)
Observations	136	318	136	318
Female	0.130	0.148	0.078	0.078
	(0.016)	(0.011)	(0.016)	(0.011)
Observations	215	619	215	619
gender gap p-value	0.301	0.536	0.208	0.497
White	0.050	0.101***	0.035	0.064**
	(0.014)	(0.015)	(0.007)	(0.010)
Observations	249	674	249	674
Black	0.322	0.379	0.090	0.171
	(0.075)	(0.058)	(0.066)	(0.063)
Observations	26	65	26	65
race gap p-value	0.001	0.000	0.414	0.099
Hispanic	0.307	0.293	0.152	0.179
	(0.108)	(0.069)	(0.049)	(0.060)
Observations	20	66	20	66
race gap p-value	0.030	0.008	0.029	0.063
Asian	0.380	0.137**	0.208	0.112
	(0.086)	(0.049)	(0.100)	(0.041)
Observations	32	77	32	77
race gap p-value	0.001	0.479	0.095	0.261
Demographic Controls	Yes	Yes	Yes	Yes
Other Controls	Yes	Yes	Yes	Yes

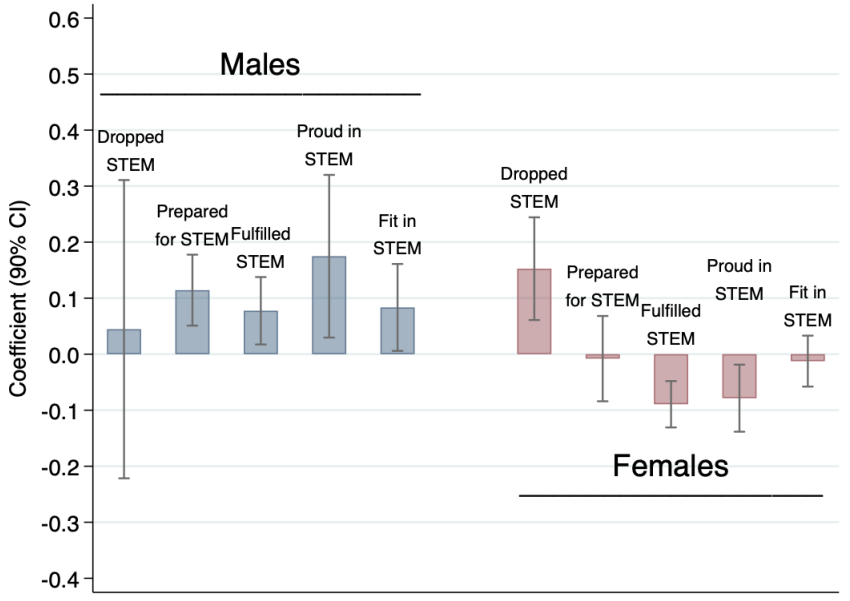
Notes: Estimated probabilities for control group (odd columns) and treated group (even columns). Columns 1-2 report worries about classmate interactions and columns 3-4 report worries about professor interactions. Demographic controls: citizenship, disability, first-generation student status, and year in college. Additional controls: math placement score, ACT/SAT scores, employment, on-campus residence, membership in organizations. Stars denote significant difference relative to control group. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Gender gap p-value reports the p-value of the gender gap relative to males. Race gap p-value reports the p-value of the race gap relative to White students.

Figure 1: Mechanisms behind GPA Effects

(a) GPA, University Engagement, and Academic Preparation

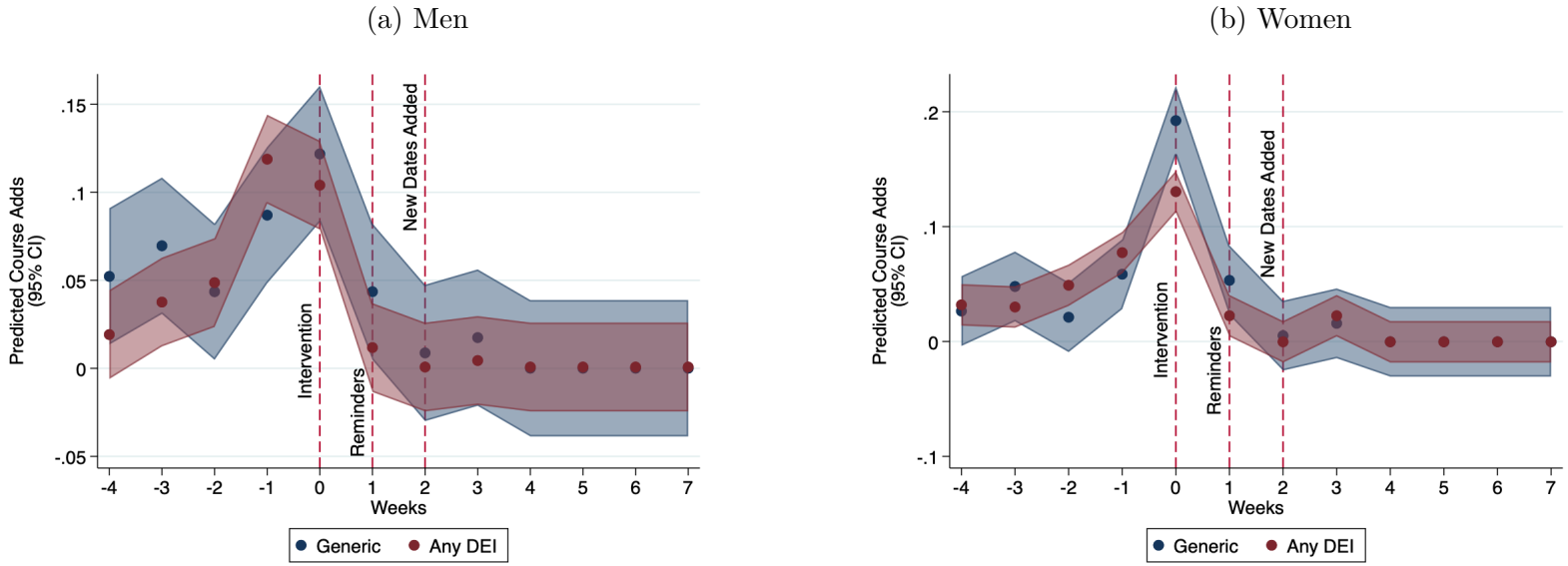


(b) STEM Attitudes



Notes: Estimated effect of receiving diversity statement for men (left) and women (right). Panel a displays coefficient estimates for average GPA alongside the proportion of respondents who reported knowing where to access social support, mental health support, and financial support. The last bar reports estimates for the proportion of respondents who report being prepared for their major. Panel b shows coefficient estimates on STEM-related outcomes. "Dropped STEM" is the share of all dropped courses that were STEM courses, multiplied by 10 to maintain scale consistency. The next four bars summarize the proportion of respondents who report being prepared for STEM, being more fulfilled in a STEM field, that others would be more proud of them if they majored in STEM, and that they fit in with STEM students.

Figure 2: Probability of Adding Advanced Courses



Notes: Event-study probabilities of adding 200-level course by week since email intervention. Data from administrative student records ($N = 1,300$).

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Supplementary Materials

A Additional Tables and Figures

Table A.1: Balance Regressions

	Any Diversity	Gender	Race	Race and Gender
	(1)	(2)	(3)	(4)
female	1.020	1.028	1.014	1.018
	(0.082)	(0.102)	(0.100)	(0.101)
white	1.002	1.054	1.030	0.932
	(0.149)	(0.193)	(0.189)	(0.166)
black	0.938	1.101	0.875	0.847
	(0.181)	(0.259)	(0.213)	(0.200)
hispanic	0.911	0.774	1.141	0.830
	(0.177)	(0.192)	(0.270)	(0.197)
asian	0.873	0.860	1.130	0.662
	(0.175)	(0.215)	(0.275)	(0.167)
STEM major	1.135	1.120	1.034	1.264
	(0.171)	(0.209)	(0.191)	(0.236)
STEM college	0.754	0.689	0.760	0.841
	(0.521)	(0.560)	(0.618)	(0.726)
major group 1	0.755	0.683	0.789	0.820
	(0.529)	(0.564)	(0.651)	(0.717)
major group 2	0.999	1.019	0.978	1.001
	(0.229)	(0.284)	(0.273)	(0.280)
major group 3	0.759	0.740	0.667	0.904
	(0.520)	(0.597)	(0.540)	(0.777)
major group 4	0.832	0.768	0.751	1.026
	(0.558)	(0.605)	(0.593)	(0.861)
major group 5	0.736	0.651	0.736	0.850
	(0.498)	(0.520)	(0.586)	(0.721)
major group 6	0.982	0.981	0.956	1.011
	(0.195)	(0.239)	(0.231)	(0.246)
major group 7	0.788	0.849	0.777	0.719
	(0.620)	(0.785)	(0.726)	(0.724)
major group 8	0.963	0.953	0.966	0.970
	(0.192)	(0.233)	(0.235)	(0.236)
major group 9	0.906	0.895	0.928	0.895
	(0.223)	(0.271)	(0.279)	(0.271)
major group 10	0.773	0.691	0.731	0.939
	(0.511)	(0.536)	(0.567)	(0.778)
major group 11	0.979	1.022	1.038	0.880
	(0.336)	(0.425)	(0.431)	(0.375)
major group 12	0.828	0.754	0.762	1.016
	(0.545)	(0.582)	(0.588)	(0.837)
major group 13	0.778	0.711	0.736	0.924
	(0.539)	(0.580)	(0.601)	(0.801)
Observations	3780		3780	
Joint χ^2 Statistic	2.664		18.655	
Joint χ^2 p-value	1.000		1.000	

Regressions of covariates on email assignment following McKenzie (2015). Column 1 reports on results of logit regression with outcome equal to 0 if student is assigned to the control email and 1 if student receives any treatment email. Columns 2-4 report results of a multinomial logit regression with separate dummies for receiving any of the 3 diversity emails described in Section 2.1. Majors are classified into groups by University (15 total, with major group 14 as omitted category and $N = 14$ in major group 15). Exponentiated coefficients. $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$. 3,780 students with race data in experimental sample.

Table A.2: Main Outcomes, T-Test across Conditions

	All	Control	Any Diversity	Gender	Race	Race Gender
	(1)	(2)	(3)	(4)	(5)	(6)
	Panel A: Academic Interest					
	0.066	0.100	0.055*	0.056***	0.050***	0.059***
	(0.004)	(0.010)	(0.004)	(0.008)	(0.007)	(0.008)
Observations	3780	953	2827	943	942	942
p-value compared to diversity				0.906	0.534	0.623
	Panel B: Worries about Stereotypes					
	0.184	0.172	0.188	0.195	0.153	0.213
	(0.011)	(0.021)	(0.013)	(0.022)	(0.022)	(0.023)
Observations	1300	351	949	325	290	322
p-value compared to diversity				0.789	0.183	0.338
	Panel C: GPA					
	3.392	3.385	3.394	3.361	3.406	3.412
	(0.022)	(0.041)	(0.025)	(0.046)	(0.046)	(0.042)
Observations	1300	351	949	325	290	322
p-value compared to diversity				0.512	0.823	0.725

Notes: Summary statistics and t-test results for primary outcomes. Email conditions: no diversity statement (*control*, column 2), any diversity statement (*Any Diversity*, column 3), gender diversity statement (column 4), race diversity statement (column 5), and race and gender diversity statement (column 6). Column 3 combines Columns 4-6. See Section 2.1 for details about email intervention. Stars denote significant difference from control condition. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. *P-value compared to diversity* reports p-value of t-test comparing condition to any diversity statement (column 2). 3,780 students with race data in experimental sample (panel a), 1,300 survey respondents (panels b-c).

Table A.3: Attrition tests: p-values (Ghanem et al., 2023)

	(1)	(2)
STEM major	0.666	0.003
STEM college	0.903	0.044
major group 1	0.812	0.724
major group 2	0.922	0.929
major group 3	0.993	0.221
major group 4	0.657	0.220
major group 5	0.969	0.962
major group 6	0.944	0.837
major group 7	0.412	0.580
major group 8	0.860	0.281
major group 9	0.910	0.985
major group 10	0.860	0.818
major group 11	0.871	0.972
major group 12	0.609	0.096
major group 13	0.861	0.651
major group 14	0.991	0.195
major group 15	0.149	0.274
Observations	3825	3825

Test of sharp testable restrictions from Proposition 2 of Ghanem et al. (2023), where the randomization is stratified by gender. Column 1 tests the assumption of equivalent covariate distributions in treatment and control groups conditional on response status. If this assumption is satisfied, differences between treatment and control identify the average treatment effect for respondents. Column 2 tests whether covariates are independent of response status conditional on treatment. This test would determine whether the difference between treatment and control among respondents would identify the average treatment effect for the intervention sample. Majors are classified into groups by University.

Table A.4: Estimated Probabilities of Primary Outcomes

	No inverse propensity weights					
	Academic Interest		Worries about Stereotypes		GPA	
	Control	Treated	Control	Treated	Control	Treated
	(1)	(2)	(3)	(4)	(5)	(6)
Male	0.099	0.037***	0.115	0.159	3.378	3.209***
	(0.016)	(0.006)	(0.018)	(0.024)	(0.073)	(0.052)
Observations	453	1337	136	318	136	318
Female	0.106	0.068*	0.197	0.210	3.388	3.500**
	(0.014)	(0.005)	(0.029)	(0.020)	(0.038)	(0.030)
Observations	500	1490	215	619	215	619
gender gap p-value	0.751	0.000	0.016	0.099	0.907	0.000
White	0.104	0.044***	0.128	0.123	3.441	3.456
	(0.011)	(0.004)	(0.026)	(0.016)	(0.032)	(0.043)
Observations	662	2009	249	674	249	674
Black	0.164	0.095	0.212	0.456**	3.157	2.945
	(0.038)	(0.013)	(0.064)	(0.061)	(0.150)	(0.121)
Observations	78	220	26	65	26	65
race gap p-value	0.137	0.000	0.233	0.000	0.074	0.000
Hispanic	0.036	0.054	0.253	0.345	3.319	3.291
	(0.015)	(0.012)	(0.063)	(0.036)	(0.154)	(0.073)
Observations	76	209	20	66	20	66
race gap p-value	0.000	0.412	0.080	0.000	0.447	0.054
Asian	0.088	0.107	0.448	0.468	3.140	3.412
	(0.027)	(0.022)	(0.100)	(0.107)	(0.190)	(0.032)
Observations	70	187	32	77	32	77
race gap p-value	0.572	0.004	0.004	0.002	0.128	0.403
Demographic Controls	Yes	Yes	Yes	Yes	Yes	Yes
Other Controls		Yes		Yes		Yes

Notes: Estimated probabilities of primary outcomes for control group (odd columns) and treated group (even columns). Columns 1-2 examine click rates on the registration link for the academic opportunity for the full experimental sample. Columns 3-6 examine worries regarding stereotypes and GPA for survey respondents. Demographic controls: citizenship, disability, first-generation student status, and year in college. Additional controls: math placement score, ACT/SAT scores, employment, on-campus residence, membership in organizations. Stars denote significant difference relative to control group. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. Gender gap p-value reports the p-value of the gender gap relative to males. Race gap p-value reports the p-value of the race gap relative to White students. 3,780 students with race data in experimental sample, 1,300 survey respondents.

Table A.5: Multiple Hypothesis Testing Correction: p-values

	Academic Interest	Worry about Stereotypes	GPA
Male	0.010	0.377	0.060
Female	0.054	0.517	0.054
White	0.006	0.924	0.924
Black	0.174	0.174	0.172
Hispanic	0.323	0.651	0.992
Asian	0.970	0.725	0.880

Notes: Romano-Wolf multiple hypothesis testing corrections, alpha adjustment over outcomes.

Table A.6: Multiple Hypothesis Testing Correction with Gender and Race Interactions: p-values

A: Treatment and Gender Interactions

	Academic Interest	Worry about Stereotypes	GPA
Treatment	0.048	0.251	0.080
Treatment × Female	0.393	0.393	0.048

B: Treatment and Race Interactions

	Academic Interest	Worry about Stereotypes	GPA
Treatment	0.931	0.822	0.822
Treatment × Black	0.277	0.822	0.822
Treatment × Hispanic	0.455	0.584	0.822
Treatment × Asian	0.822	0.931	0.832

Notes: The table shows two separate Romano-Wolf multiple hypothesis testing corrections. Panel a corrects for hypothesis testing over the three outcome with multiple independent variables (treatment and treatment × female interaction). Panel b corrects for hypothesis testing over the three outcomes with multiple independent variables (treatment and treatment × race interactions).

Table A.7: Changes in course grades

A: Large courses that exhibit grade decline

	Introductory Writing		Introductory Psychology		Introductory Social Science	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	-0.122*	-0.118	-0.145	-0.622**	-0.0336	-0.461**
	(0.0710)	(0.135)	(0.117)	(0.290)	(0.141)	(0.201)
Female		0.110		-0.0708		-0.278
		(0.107)		(0.205)		(0.201)
Female		0.0761		0.606*		0.676**
× Treatment		(0.158)		(0.317)		(0.280)
Observations	550	550	251	251	227	227
Control Mean	3.654	3.654	3.444	3.444	3.400	3.400
Control SE	(0.033)	(0.033)	(0.052)	(0.052)	(0.054)	(0.054)

B: Large courses that do not exhibit grade decline

	Introductory Math		Introductory Chemistry		Introductory Economics	
	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	0.0768	-0.155	0.192	0.163	0.321**	0.306
	(0.137)	(0.228)	(0.171)	(0.295)	(0.161)	(0.202)
Female		-0.0311		-0.0440		-0.162
		(0.230)		(0.320)		(0.282)
Female		0.316		0.0384		0.0294
× Treatment		(0.288)		(0.359)		(0.309)
Observations	440	440	387	387	216	216
Control Mean	2.811	2.811	3.074	3.074	3.219	3.219
Control SE	(0.053)	(0.053)	(0.058)	(0.058)	(0.055)	(0.055)

Notes: Estimated effect of receiving diversity statement on course grades. Standard errors clustered by student. Regressions control for citizenship, disability status, and first generation status. $^{*}p < 0.10,^{**}p < 0.05,^{***}p < 0.01$

Table A.8: Comparing self-reported student worries to expert guesses

	Worries regarding...					
	Stereotypes		Classmates		Professors	
	Empirical Results (Control)	Expert Guess	Empirical Results (Control)	Expert Guess	Empirical Results (Control)	Expert Guess
	(1)	(2)	(3)	(4)	(5)	(6)
All	0.164	0.262***	0.119	0.322***	0.065	0.249***
	(0.015)	(0.016)	(0.013)	(0.016)	(0.011)	(0.013)
Observations	351	108	351	116	351	110
Male	0.119	0.197***	0.104	0.238***	0.047	0.192***
	(0.018)	(0.013)	(0.019)	(0.014)	(0.018)	(0.013)
Observations	136	108	136	117	136	110
Female	0.196	0.269**	0.130	0.334***	0.078	0.260***
	(0.029)	(0.016)	(0.016)	(0.017)	(0.016)	(0.013)
Observations	215	108	215	116	215	110
White	0.115	0.192***	0.050	0.254***	0.035	0.197***
	(0.024)	(0.017)	(0.014)	(0.018)	(0.007)	(0.017)
Observations	249	108	249	117	249	110
Black	0.196	0.552***	0.322	0.622***	0.090	0.576***
	(0.068)	(0.026)	(0.075)	(0.022)	(0.066)	(0.024)
Observations	26	108	26	117	26	110
Hispanic	0.186	0.448***	0.307	0.537**	0.152	0.471***
	(0.050)	(0.025)	(0.108)	(0.021)	(0.049)	(0.023)
Observations	20	108	20	117	20	110
Asian	0.493	0.471	0.380	0.482	0.208	0.386*
	(0.094)	(0.025)	(0.086)	(0.021)	(0.100)	(0.023)
Observations	32	108	32	118	32	110

Notes: Odd columns display self-reported worries for control group after controlling for demographic and additional controls. Even columns display raw summary statistics of expert guesses from course advisors and instructors at University. Standard errors in parentheses. Stars denote significant differences between guesses and experimental results. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A.9: Comparing experimental effects to expert guesses

	Academic Interest		Worries regarding Stereotypes		GPA	
	Experimental Effect	Guessed Direction	Experimental Effect	Guessed Direction	Experimental Effect	Guessed Direction
	(1)	(2)	(3)	(4)	(5)	(6)
All	-0.047**	-	0.020	+	-0.029	+
	(0.016)		(0.020)		(0.042)	
prediction p-value		0.206		0.001		0.388
Obs	3780	123	1288	123	1288	123
Male	-0.062***	-	0.041	-	-0.169***	-
	(0.021)		(0.036)		(0.055)	
prediction p-value		0.000		0.014		0.024
Obs	1790	123	454	123	454	123
Female	-0.038*	+	0.011	+	0.110**	+
	(0.018)		(0.026)		(0.049)	
prediction p-value		0.012		0.000		0.205
Obs	1990	123	834	123	834	123
White	-0.061***	-	0.000	+	-0.004	+
	(0.015)		(0.025)		(0.048)	
prediction p-value		0.005		0.068		0.388
Obs	2671	123	923	123	923	123
Black	-0.070	+	0.245**	+	-0.310	+
	(0.042)		(0.084)		(0.259)	
prediction p-value		0.000		0.000		0.000
Obs	298	123	91	123	91	123
Hispanic	0.018	+	0.134*	+	-0.199	+
	(0.020)		(0.066)		(0.126)	
prediction p-value		0.000		0.000		0.001
Obs	285	123	86	123	86	123
Asian	0.019	-	-0.034	+	0.152	+
	(0.037)		(0.132)		(0.157)	
prediction p-value		0.096		0.000		0.151
Obs	257	123	109	123	109	123

Notes: Odd columns show experimental effects of receiving diversity statement after controlling for demographic and additional controls. Even columns show expert guesses from University course advisors and instructors (see text). Standard errors of experimental effects in parentheses. Prediction p-value denotes whether expert guesses significantly differ from 0 based on sign test. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

B Student Survey Appendix

Our survey aimed to measure students' attitudes regarding their academic environment. Our questions targeted perceptions of stereotype threat, social integration as measured by perceived access to university support, and identification with STEM (science, technology, engineering, and mathematics).

B.1 Stereotype Threat

First, we elicited students' perceived stereotype threat using three measures. The first two questions ask about threats stemming from others, namely classmates and professors. We adapt two questions from the Social Identities and Attitudes Scale (SIAS; Picho and Brown, 2011) and ask students the extent to which they "worry that [their] classmates/professors interact with [them] differently because of [their] identity/background." The third question assesses students' group-concept threat, which focuses on the perception that one's social group is the object of judgment. It asks the degree to which they agree or disagree with the statement, "I worry that my class performance is used to confirm or disprove a stereotype." Versions of this question have been commonly used in the psychology literature (see Bedyńska et al., 2021; Cromley et al., 2013; Deemer et al., 2016a; Smith et al., 2015).

B.2 Perceived access to university resources

Stereotype threat influences students' sense of belonging in college, which may inform beliefs about access to university support and resources. Following Oreopoulos et al. (2020), we ask students the following: "Do you know how to get the following resources at University: Academic assistance?"). We then expand upon their single item on academic assistance to capture the breadth of social integration factors, including social support, mental health support, and financial support, which have been linked to higher education retention and success (Tinto, 1975). These measures resemble those used in Yeager et al. (2016), who argue that raising sense of belonging among Black students improved their social integration, as measured by greater use of university resources.

B.3 Attitudes toward STEM (science, technology, engineering, and mathematics)

Science, technology, engineering, and mathematics (STEM) have long been stereotyped to be male-favoring domains (see Spencer et al., 1999; Steele, 1997; Steele and Aronson, 1995; Steele et al., 2002). If stereotype threat drove students' responses to the intervention, attitudes toward STEM may change based on gender. We therefore ask students about their confidence and psychological reward from pursuing STEM: whether they feel "academically prepared for STEM classes" and if they would be "fulfilled in a STEM field." Given the importance of others' perceptions on student decisions (see Bursztyn and Jensen, 2015, 2017), we also ask about social concerns: whether students believe "others would be more proud of them if they pursued a STEM major", and whether students feel that they "fit in with students in STEM classes".

C Expert Prediction Survey Appendix

C.1 Procedure

We administered a prediction survey to University employees who interact regularly with University students: course advisors and instructors. In total, we received 123 responses from "experts" who advise or instruct students (75 course advisors, 18 faculty, and 30 PhD students). Our survey first asked respondents to guess the rate of worries regarding stereotypes, classmate interactions, and professor interactions. Respondents entered an integer between 0-100 that best represented their guess of the share of students who agreed with the statements regarding worry described in Section 4.1.

Next, we displayed our diversity statements and asked respondents to select whether the diversity statements would increase, decrease, or not affect our primary outcomes: academic interest, worries about stereotypes, and GPA. We code the response as 1 (-1) if the diversity statement was predicted to increase (decrease) the outcome and 0 if the diversity statement was predicted to not change the outcome. We then conduct a sign test to determine if average predictions differed significantly from 0.

C.2 Results

We first compare guesses about student worries with the true rates in the control group, which did not receive the diversity statement. Appendix Table A.8 shows that consistent with our results, respondents guessed larger rates of worry for women and students of color; their qualitative responses indicate that interactions with students led them to expect greater worries from women than men and from Black, Hispanic, and Asian students than white students. Respondents overestimated students' worries regarding discrimination for almost every gender and race group. This overestimation was especially large for Black and Hispanic students: guesses are about 20-35 percentage points higher for worries regarding stereotypes and classmates, and 32-48 percentage points higher for worries regarding professors. The prediction survey indicates that the instructors and course advisors that interact with students may overestimate students' discomfort on campus, which could influence how they interact with students. For example, advisors and instructors may convey greater alarm about fit to Black and Hispanic students than the students themselves have, magnifying these concerns among students.

Next, we report on guesses regarding the effects of the diversity statement. Appendix Table A.9 summarizes the results. Two results are noteworthy. First, after seeing our statements, University advisors and instructors guessed positive effects on academic interest and GPA for Black and Hispanic students, consistent with our original belief that the language of our statements would improve sense of belonging for historically minoritized groups. However, our experimental results show no such effects of these outcomes for Black and Hispanic students.

Second, other than these guesses, University advisors and instructors were surprisingly accurate about the effects of our diversity statements. They guessed that the diversity statements would decrease academic interest for men and white students ($p < 0.01$); that they would raise worries regarding stereotypes among Black and Hispanic students ($p < 0.001$);

and that they would lower GPA for men ($p < 0.05$) but raise GPA for women ($p > 0.10$). These predictions match study results.

The qualitative rationale given by many respondents for their guesses included recounting past experiences that the diversity statements could otherize students, discouraging their participation and raising worries about performance. Respondent 1 wrote, regarding the diversity statement: "some student groups [could] worry more as it was a call out about difference (as a student of color... these types of emails ... read to me 'your kind don't usually do well here' and discouraged me from participating and increased my own worry about my performance)". Respondent 2 mentioned that the diversity statements could make "students feel more like the 'other' rather than sending the message they will ... fit in ... This could lead to lower self-confidence and sense of belonging, ultimately resulting in lower engagement and academic performance."

D Experimental Materials: Student Survey

Background & Consent

What is your preferred e-mail address?

What is your age?

- ○ Under 18
- ○ 18 or older

Research Participant Information and Consent Form

You are being asked to participate in a research study about academic life at UNIVERSITY. Researchers are required to provide a consent form to convey that participation is voluntary. You should feel free to discuss and ask the researchers any questions you may have.

The consent form is available at the link below. Please indicate whether you consent to participate.

Major Choice - Consent Form

- ○ Yes, I consent to participate.
- ○ No, I do not wish to participate.

Electronic Signature: Please sign and date to indicate your willingness to participate and release your academic records to the research team.

First name	
Middle name	
Last name	
E-mail Address	
Today's date	

Research Participant Information and Assent Form

You are being asked to participate in a research study about academic life at UNIVERSITY. Because you are under 18, researchers are required to provide a parental permission form and a participant assent form to convey that participation is voluntary.

The assent form is available at the link below. Please indicate whether you assent to participate.

Major Choice - Assent Form

- ○ Yes, I assent to participate.
- ○ No, I do not wish to participate.

Electronic Signature: Please sign and date to indicate your willingness to participate and release your academic records to the research team.

First name	
Middle name	
Last name	
E-mail Address	
Today's date	

Assent

Because you are under 18, parental permission is required to participate in this research study. We will send your parent/guardian a permission form via e-mail. Please let them know that you are interested in participating and ask them to complete the permission form that is in their e-mail inbox.

What is a good e-mail address to use to contact your parent/guardian?

If your parent/guardian does not have a working e-mail address, please list another form of contact.

Social Belonging

Do you know how to get the following resources at UNIVERSITY?

	Yes	No
Academic assistance	○	○
Social support	○	○
Financial support	○	○
Mental health support	○	○

To what extent do you agree/disagree with the following statements regarding your feelings at UNIVERSITY?

	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree
I worry that my CLASSMATES interact with me differently because of my identity/background	○	○	○	○	○
My gender is important in defining who I am	○	○	○	○	○
I worry that my PROFESSORS interact with me differently because of my identity/background	○	○	○	○	○
I fit in with the other students at UNIVERSITY	○	○	○	○	○
I worry that my class performance is used as evidence to confirm or disprove a stereotype	○	○	○	○	○
It is important for me to find peers I identify with in my major	○	○	○	○	○
My race/ethnicity is important in defining who I am	○	○	○	○	○

At UNIVERSITY, I have personally experienced some form of discrimination due to my identity. (Discrimination is verbal or non-verbal conduct that is discriminatory, harassing, threatening, intimidating, or hostile.)

○ Yes

○ Maybe

○ No

Majors

How likely are you to take more STEM classes beyond the university's requirement (i.e., as an elective or part of your major/minor)?

STEM classes are classes in science, technology, engineering, and math.

- ○ Extremely unlikely
- ○ Somewhat unlikely
- ○ Neither likely nor unlikely
- ○ Somewhat likely
- ○ Extremely likely

Please select "Yes"

- ○ Yes
- ○ No
- ○ Maybe

Have you already declared or identified your intended academic major(s)?

- ○ Yes: Please list
- ○ No

How do you feel about your (intended) academic major at UNIVERSITY?

	Agree	Somewhat Agree	Neither Agree nor Disagree	Somewhat Disagree	Disagree
I fit in with other students in my major(s)	○	○	○	○	○
I will be more fulfilled in my chosen major(s) than if I study something else	○	○	○	○	○
My job prospects are better in my major(s) than elsewhere	○	○	○	○	○
I am academically prepared for the classes in my major(s)	○	○	○	○	○

STEM Classes

How many total classes did you take this semester?

- ○ 0
- ○ 1
- ○ 2
- ○ 3
- ○ 4
- ○ 5
- ○ 6
- ○ 7

For each course you took this semester, write the code or name of the class. Then, rate your performance in each class.

	Excellent	Good	Fair	Bad	Terrible
Course 1: Please list the course code or name	○	○	○	○	○
Course 2: Please list the course code or name	○	○	○	○	○
Course 3: Please list the course code or name	○	○	○	○	○
Course 4: Please list the course code or name	○	○	○	○	○
Course 5: Please list the course code or name	○	○	○	○	○
Course 6: Please list the course code or name	○	○	○	○	○
Course 7: Please list the course code or name	○	○	○	○	○

Did you study or do assignments with other students in your classes this semester?

- ○ No, never
- ○ Yes, 1 or 2 times this semester
- ○ Yes, 3-5 times this semester
- ○ Yes, at least 6 times this semester

Did you take any STEM classes this semester?

STEM classes are classes in science, technology, engineering, and math.

- ○ Yes
- ○ No

To what extent do you agree/disagree with the following statements about STEM?

	Agree	Somewhat Agree	Neither Agree/Disagree	Somewhat Disagree	Disagree
Others will be more proud of me if I major in a STEM field	○	○	○	○	○
I am academically prepared for STEM classes	○	○	○	○	○
I will be more fulfilled in a STEM field	○	○	○	○	○
I studied with my STEM classmates	○	○	○	○	○
My job prospects will be better if I major in a STEM field	○	○	○	○	○
I fit in with STEM Students	○	○	○	○	○

To what extent do you agree/disagree with the following statements about STEM?

	Agree	Somewhat Agree	Neither Agree/Disagree	Somewhat Disagree	Disagree
Others will be more proud of me if I major in a STEM field	○	○	○	○	○
I am academically prepared for STEM classes	○	○	○	○	○
My job prospects will be better if I major in a STEM field	○	○	○	○	○
I will be more fulfilled in a STEM field	○	○	○	○	○
I fit in with STEM students	○	○	○	○	○
I would have studied with my STEM classmates	○	○	○	○	○

Below, list up to 10 students from your classes this semester. Please list them in order of how frequently you are in contact with them.

For each student, select the option that best represents the frequency with which any contact occurs between the two of you.

Contact includes any form of in-person or remote communication (e.g., email, text, messaging apps).

	3+ times per week	1-2 times per week	2-3 times per month	About once per month	Less than once per month
Student Name 1: (first and last)	○	○	○	○	○
Student Name 2:	○	○	○	○	○
Student Name 3:	○	○	○	○	○
Student Name 4:	○	○	○	○	○
Student Name 5:	○	○	○	○	○
Student Name 6:	○	○	○	○	○
Student Name 7:	○	○	○	○	○
Student Name 8:	○	○	○	○	○
Student Name 9:	○	○	○	○	○
Student Name 10:	○	○	○	○	○

Student Info

Were you employed during this semester?

- ○
- ○ No
- ○ Yes

Where did you live this semester? [Select all that apply.]

- ☐ On-campus
- ☐ Off-campus, within half an hour's drive to campus
- ☐ Off-campus, commute at least half an hour to campus

Are you currently involved in any of the following organizations?

- ☐ UNIVERSITY organization(s)
- ☐ Community (non-UNIVERSITY) organization(s)

Are you willing to be interviewed about your experiences at UNIVERSITY?

- ○ Yes
- ○ No

Do you have any comments or suggestions for improvement for this survey?

E Experimental Materials: Expert Prediction Survey

Our expert survey randomized the student race order. We also randomized the order of the type of diversity statement (gender identity, race/ethnicity, or race/ethnicity and gender identity). For brevity, we show only one version of the survey.

Mobile Warning

Some survey questions are difficult to read on a mobile device. Please switch from your mobile device to a computer.

We appreciate your cooperation.

Consent

Research Participant Information and Consent Form

This is a research study regarding university students. You will be asked to predict how these students reacted to an intervention that occurred in August 2022.

Participation is voluntary. You may choose not to participate at all, or you may refuse to participate in certain procedures or answer certain questions or discontinue your participation at any time without consequence. You should feel free to discuss with the researchers any questions you may have. **The research team will ensure that your responses remain strictly confidential.**

You will receive a $10 Amazon gift card for completing the survey. If you score among the top 50 in terms of how close your prediction is to the true results, you will receive an additional $10 in your gift card.

The consent form is available below. Please indicate whether you consent to participate.

College Experience Survey - Consent Form

- ◯ Yes, I consent to participate
- ◯ No, I do not wish to participate

Electronic Signature: Please sign and date to indicate your willingness to participate.

First Name

Middle Name

Last Name

Email Address

Today's Date

We recently asked college freshmen about their perceptions of college life. Please predict how they responded to each item presented in the next page.

We asked students whether they agreed with the following statement.

*I worry that my **classmates** interact with me differently because of my identity/background.*

For each group below, what proportion chose agree?

White male

- My guess is:
- I don't know

White female

- My guess is:
- I don't know

Black male

- My guess is:
- I don't know

Black female

- ○ My guess is: _____
- ○ I don't know

Hispanic male

- ○ My guess is: _____
- ○ I don't know

Hispanic female

- ○ My guess is: _____
- ○ I don't know

Asian male

- ○ My guess is: _____
- ○ I don't know

Asian female

- ○ My guess is: _____I
- ○ don't know

Remember: The top 50 scorers will earn $20 instead of $10.

We asked students whether they agreed with the following statement.

*I worry that my **professors** interact with me differently because of my identity/background.*

For each group below, what proportion chose agree?

White male

- ○ My guess is: _____
- ○ I don't know

White female

- ○ My guess is: _____
- ○ I don't know

Black male

- ○ My guess is: _____
- ○ I don't know

Black female

- ○ My guess is: _____
- ○ I don't know

Hispanic male

- ○ My guess is: _____
- ○ I don't know

Hispanic female

- ○ My guess is: _____
- ○ I don't know

Asian male

- ○ My guess is: _____
- ○ I don't know

Asian female

- ○ My guess is: [ ]
- ○ don't know

Remember: The top 50 scorers will earn $20 instead of $10.

We asked students whether they agreed with the following statement.

I worry that my class performance is used to confirm or disprove a stereotype.

For each group below, what proportion chose agree?

White male

- ○ My guess is: [ ]
- ○ I don't know

White female

- ○ My guess is: [ ]
- ○ I don't know

Black male

- ○ My guess is: [ ]
- ○ I don't know

Black female

- ○ My guess is: [ ]
- ○ I don't know

Hispanic male

- ○ My guess is: _____
- ○ I don't know

Hispanic female

- ○ My guess is: _____
- ○ I don't know

Asian male

- ○ My guess is: _____
- ○ I don't know

Asian female

- ○ My guess is: _____I
- ○ don't know

Remember: The top 50 scorers will earn $20 instead of $10.

What is your thought process behind your responses? Explain how worry rates may or may not differ by gender identity, race, or both.

As a reminder, we asked you to predict the % of students who worry about:

- *interactions with classmates interactions*
- *with professors*
- *academic performance confirming or disproving a stereotype*

There is no right answer. We are interested in your honest opinions. Your answers will remain confidential.

You will now be shown three separate comparisons between a Control Email (left) and a Diversity Statement Email (Treatment, right). The Treatment Email **differs in each comparison**. **Please pay attention to the highlighted text.**

Below is an example of what you will see.

CONTROL

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

TREATMENT

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Students' academic experiences may differ by gender identity. We are committed to understanding these differences to ensure that people from all background reach their full potential. You will have the opportunity to discuss these differences during the online session.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

These statements were used in emails sent to first-year students. You will be asked to predict how the students responded to various diversity statements.

NEW COMPARISON

Gender Identity Comparison (1/3)

Do you think the proportion of students who clicked on the registration link was higher in the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

TREATMENT

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Students' academic experiences may differ by gender identity. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control

- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Remember: The top 50 scorers will earn $20 instead of $10.

Gender Identity Comparison (2/3)

We asked students whether they agreed with the following statement.

"I worry that my class performance is used to confirm or disprove a stereotype."

Do you think the proportion of students who agreed with the statement was higher in the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

TREATMENT

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Students' academic experiences may differ by gender identity. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Remember: The top 50 scorers will earn $20 instead of $10.

Gender Identity Comparison (3/3)

4 months after the emails were sent, was GPA higher among students who received the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

TREATMENT

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Students' academic experiences may differ by gender identity. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Remember: The top 50 scorers will earn $20 instead of $10.

NEW COMPARISON

Race and Gender Identity Comparison (1/3)

Do you think the proportion of students who clicked on the registration link was higher in the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL	TREATMENT
Congratulations! **You've been selected** for a **special one-hour online session** to help students excel in their courses. Register here for the Academic Success Hour by 9/9/22. Sincerely, The Academic Success Team	Congratulations! **You've been selected** for a **special one-hour online session** to help students excel in their courses. **Students' academic experiences may differ by gender identity, race, and ethnicity**. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session. Register here for the Academic Success Hour by 9/9/22. Sincerely, The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Remember: The top 50 scorers will earn $20 instead of $10.

Race and Gender Identity Comparison (2/3)

We asked students whether they agreed with the following statement.

"I worry that my class performance is used to confirm or disprove a stereotype."

Do you think the proportion of students who agreed with the statement was higher in the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

TREATMENT

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Students' academic experiences may differ by gender identity, race, and ethnicity. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Remember: The top 50 scorers will earn $20 instead of $10.

Race and Gender Identity Comparison (3/3)

4 months after the emails were sent, was GPA higher among students who received the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

TREATMENT

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Students' academic experiences may differ by gender identity, race, and ethnicity. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Remember: The top 50 scorers will earn $20 instead of $10.

NEW COMPARISON

Race and Ethnicity Comparison (1/3)

Do you think the proportion of students who clicked on the registration link was higher in the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

TREATMENT

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Students' academic experiences may differ by race and ethnicity. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Remember: The top 50 scorers will earn $20 instead of $10.

Race and Ethnicity Comparison (2/3)

We asked students whether they agreed with the following statement.

"*I worry that my class performance is used to confirm or disprove a stereotype.*"

Do you think the proportion of students who agreed with the statement was higher in the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

TREATMENT

Congratulations!

You've been selected for a **special one-hour online session** to help students excel in their courses.

Students' academic experiences may differ by race and ethnicity. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session.

Register here for the Academic Success Hour by 9/9/22.

Sincerely,
The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Remember: The top 50 scorers will earn $20 instead of $10.

Race and Ethnicity Comparison (3/3)

4 months after the emails were sent, was GPA higher among students who received the **Control** email or the **Treatment** email? Please select your best guess for each group below.

CONTROL	TREATMENT
Congratulations! **You've been selected** for a **special one-hour online session** to help students excel in their courses. Register here for the Academic Success Hour by 9/9/22. Sincerely, The Academic Success Team	Congratulations! **You've been selected** for a **special one-hour online session** to help students excel in their courses. **Students' academic experiences may differ by race and ethnicity**. We are committed to understanding these differences to ensure that people from all backgrounds reach their full potential. You will have the opportunity to discuss these differences during the online session. Register here for the Academic Success Hour by 9/9/22. Sincerely, The Academic Success Team

White male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

White female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Black female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Hispanic female

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian male

- ○ Control
- ○ Treatment
- ○ They were the same
- ○ Don't know

Asian female

- ○ Control
- ○ Treatment
- ○ They were the same Don't
- ○ know

Remember: The top 50 scorers will earn $20 instead of $10.

What is your thought process behind your responses? Explain why outcomes may or may not differ between the Control and Treatment groups based on gender identity, race, or both.

As a reminder, we asked whether the Diversity Statement changed the following outcomes:

- *registration rates for the information session*
- *worries that own academic performance will be used by others to confirm/disprove stereotypes*
- *GPA*

There is no right answer. We are interested in your honest opinions. Your answers will remain confidential.

Gender: How do you identify?

- ○ Female
- ○ Male
- ○ Non-binary
- ○ Prefer to self-describe _____ Prefer
- ○ to not answer

Are you Hispanic or Latino?

- ○ Yes
- ○ No

- ○ Prefer to not answer

What is your racial identity? Select as many as apply.

- ☐ American Indian or Alaska Native
- ☐ Asian
- ☐ Black or African American
- ☐ Native Hawaiian or Other Pacific Islander
- ☐ White
- ☐ Other:
- ☐ Prefer to not answer

How strongly would you describe your political ideology?

- ○ Strong Liberal
- ○ Slight Liberal
- ○ Moderate
- ○ Slight Conservative Strong
- ○ Conservative Other:
- ○
- ○ Prefer to not answer

Please write your job title below.

Please write your employer below.

How frequently do you interact with undergraduate students directly?

- ○ At least once per day
- ○ At least 3 times per week
- ○ 1-2 times per week
- ○ More than twice per month, less than 1-2 times per week
- ○ Twice per month or fewer

Do you have any comments or suggestions for improvement for this survey?