

Temporal Distance and Discrimination: An Audit Study in Academia

Katherine L. Milkman¹, Modupe Akinola², and Dolly Chugh³

¹The Wharton School, University of Pennsylvania; ²Columbia Business School, Columbia University; and
³Stern School of Business, New York University

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Abstract

Through a field experiment set in academia (with a sample of 6,548 professors), we found that decisions about distant-future events were more likely to generate discrimination against women and minorities (relative to Caucasian males) than were decisions about near-future events. In our study, faculty members received e-mails from fictional prospective doctoral students seeking to schedule a meeting either that day or in 1 week; students' names signaled their race (Caucasian, African American, Hispanic, Indian, or Chinese) and gender. When the requests were to meet in 1 week, Caucasian males were granted access to faculty members 26% more often than were women and minorities; also, compared with women and minorities, Caucasian males received more and faster responses. However, these patterns were essentially eliminated when prospective students requested a meeting that same day. Our identification of a *temporal discrimination effect* is consistent with the predictions of construal-level theory and implies that subtle contextual shifts can alter patterns of race- and gender-based discrimination.

Keywords

decision making, discrimination, racial and ethnic attitudes and relations, minority groups, prejudice

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Despite the protections guaranteed by the Civil Rights Act, women and minorities continue to experience inequity in domains such as employment, housing, and elementary and secondary education (Bertrand & Mullainathan, 2004; Farkas, 2003; Massey & Lundy, 2001). Past research has demonstrated that judgments about upcoming events are heavily influenced by *temporal distance*, or how far in the future an event will occur (Trope & Liberman, 2003, 2010). We examined whether temporal distance increased race- and gender-based bias in university faculty members' decisions about whether to grant students access to valued opportunities.

Temporal distance is one of several types of psychological distance that have been shown to alter individuals' construals of future events (Trope & Liberman, 2003, 2010). Immediate events trigger concrete construals, which are characterized by an emphasis on details. Concrete construals focus decision makers' attention on how an event will occur (e.g., logistics) and on evaluating its feasibility. In contrast, distant events trigger abstract construals, which are characterized by coarse generalizations. Abstract construals focus decision makers' attention on why an event should occur and on its personal desirability (Liberman & Trope, 1998; Trope & Liberman, 2003). For example, an individual deciding whether to schedule an appointment in the next several hours may consider if, where, and when he or she can do it, whereas an individual

deciding whether to schedule an appointment in the distant future may consider whether doing so would be worthwhile, valuable, or desirable.

Recent laboratory studies have demonstrated that abstract construals, relative to concrete construals, increase decision makers' reliance on stereotypes (McCrea, Wieber, & Myers, 2012). The application of such generalizations to judgments of individuals may increase bias against minorities and women and may also increase favoritism toward Caucasian men (Cuddy, Fiske, & Glick, 2007; Schwab, 1986), particularly when these individuals' qualifications are ambiguous. Activating the negative stereotypes associated with a group is likely to cause perceivers to view members of that group as less desirable.

We propose a *temporal discrimination effect* whereby increasing temporal distance amplifies decision makers' focus on personal-desirability concerns (i.e., "Is doing it worthwhile?") and stereotypes, thus generating discrimination against women and minorities. Conversely, we hypothesize that considerations of near-future events should dampen discrimination by

Corresponding Author:

Katherine L. Milkman, University of Pennsylvania, 3730 Walnut St., 566
 Jon M. Huntsman Hall, Philadelphia, PA 19104
 E-mail: kmilkman@wharton.upenn.edu

prompting concrete construals and focusing decision makers' attention on *how* an event could occur rather than whether it *ought* to occur. In this context, concerns about desirability (and a reliance on stereotypes in addressing those concerns) should be secondary to concerns about feasibility.

To test for the temporal discrimination effect, we conducted a between-subjects field experiment with a sample of 6,548 university faculty members. We studied professors' willingness to meet with prospective doctoral students in the future and manipulated the temporal distance of this possible upcoming event. Specifically, we analyzed faculty members' responsiveness to e-mail messages from (fictional) prospective doctoral students requesting a short meeting either that day (*now* condition) or in 1 week (*later* condition); the purported students' names were selected to signal different races and genders. Given that in academia (our study context), Caucasian males are associated with positive or neutral stereotypes and females and minorities are often associated with negative stereotypes, we predicted that faculty members would exhibit greater bias against female and minority students (relative to Caucasian males) when responding to requests for access 1 week in the future than when responding to requests for access that day. (For more details about the stereotypes associated with each group studied, see Experimental Design in the Supplemental Material available online.)

We measured three dependent variables: (a) whether a given e-mail message elicited a response within 1 week, (b) whether the request to meet was accepted, and (c) how quickly the recipient responded. We predicted that students would receive relatively undifferentiated treatment in the now condition because concerns about feasibility would dominate faculty members' attention; however, we predicted that in the later condition, faculty members' concerns about the desirability of meeting with students would result in Caucasian males receiving increased attention and access, and minorities and females receiving reduced attention and access.

Method

To select study participants, we identified all 6,300 doctoral programs across all academic disciplines at the top 260 U.S. universities (U.S. News & World Report, 2010); approximately 200,000 faculty members were affiliated with these programs. (For details on selection of participants and consent, see Experimental Design in the Supplemental Material.) We then selected one to two faculty members from each doctoral program's Web site, for a total of 6,548 professors of known race, academic rank, and gender. We oversampled minority faculty members to achieve sufficient statistical power for investigating how they responded to students of their own race.

Following past research (Bertrand & Mullainathan, 2004), we selected names to signal prospective students' race (Caucasian, African American, Hispanic, Indian, or Chinese) and gender (two names for each gender of each race, for a total of

20 names; for details about our analysis confirming the similarity between the two names for each gender of each race, see Analysis in the Supplemental Material). An independent sample (distinct from the sample in our main experiment) accurately identified the race and gender signaled by each name (average accuracy of 97% for race and 98% for gender).

Each participant in our main experiment received one e-mail in which a prospective student requested a 10-min meeting to discuss research opportunities on a Monday during the academic year. (To read the template for e-mails sent in each condition, see Experimental Design in the Supplemental Material.) All messages were sent at 8:00 a.m. and were identical except for two randomized elements: (a) the sender's race and gender and (b) whether the requested meeting was "anytime today" (now condition) or "anytime next Monday" (later condition)—our manipulation of temporal distance. Data collection and analysis were conducted by the first two authors with the approval of the institutional review boards of the University of Pennsylvania and Columbia University.

Results

Emergence of the temporal discrimination effect

As hypothesized, minorities and women experienced more discrimination when seeking access to faculty in the distant future than when seeking access to faculty in the near future. A sample-weighted analysis¹ of the behavior of all participants in our study revealed that faculty members in the now condition responded at similar rates to Caucasian males (69%) and to minority and female students (67%), $\text{logit } \chi^2(1, N = 3,241) = 0.81, p = .368$. However, in the later condition, faculty members responded at a significantly higher rate to Caucasian males (74%) than to other students (64%), $\text{logit } \chi^2(1, N = 3,307) = 12.93, p < .001$ (Fig. 1a). Our analysis of meeting-acceptance rates revealed a similar pattern: In the now condition, faculty members agreed to meet with Caucasian males (36%) and minority and female students (37%) at similar rates, $\text{logit } \chi^2(1, N = 3,241) = 0.03, p = .857$; however, in the later condition, Caucasian males (48%) were granted significantly more meetings than other students were (38%), $\text{logit } \chi^2(1, N = 3,307) = 12.40, p < .001$ (Fig. 1b). In the later condition, participants also responded more quickly to Caucasian males than to other students, whereas there was no such gap in the now condition (see Fig. S1 in the Supplemental Material).

We next used logistic and ordinary least squares regressions to predict whether students' e-mails elicited a response (Models 1 and 2) and whether participants accepted the request to meet (Models 3 and 4), and we used Cox proportional-hazards regression models to predict response speed (Model 5). In these analyses, we evaluated the impact of our primary predictors (temporal distance, minority or female identity, and their interaction), clustering standard errors by student name and controlling for faculty race, gender, and rank; school

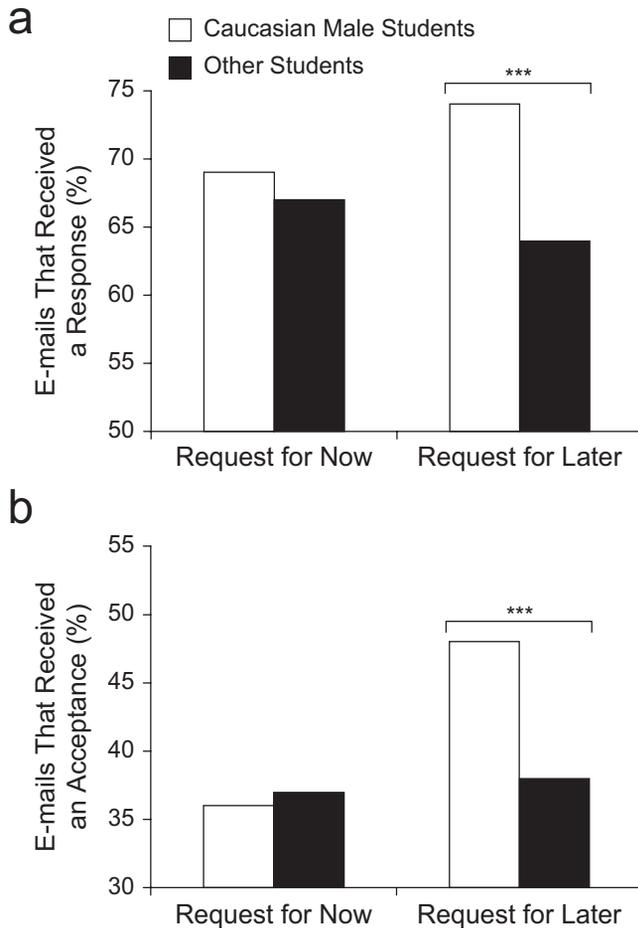


Fig. 1. Percentage of faculty members who (a) responded to and (b) agreed to meet with Caucasian male students and other (i.e., female and minority) students as a function of condition (now vs. later). All percentages are sample weighted. Asterisks indicate significant differences between the two groups of students (***) $p < .001$.

ranking of the faculty member; and student-faculty racial match for minorities. (For more details about our regression analyses, see Analysis in the Supplemental Material.)

Results from our regression analyses confirmed that across outcomes studied, responsiveness to female and minority students was significantly lower than responsiveness to Caucasian male students in the later condition, but this pattern was much weaker in the now condition (Table 1). Exponentiating the beta weights for Model 1 in Table 1 indicated that the odds of a minority or female student receiving a response to a request for a meeting the next week were 0.61 times those for a Caucasian male; thus, minority and female students' requests to meet in the temporally distant future engendered considerable discrimination. For a Caucasian male, making a request to meet now (rather than later) multiplied the odds of receiving a response by 0.79. In other words, Caucasian males fared better when they requested to meet later. However, this pattern was

reversed for female and minority students, for whom making a request to meet now (rather than later) multiplied the odds of receiving a response by 1.12. All results held if only Caucasian faculty members' responses were examined or sample weights were eliminated.

The temporal discrimination effect in faculty members' responses to same-race students

For minorities, across conditions, contacting a professor of the same race (rather than a professor of a different race) multiplied the odds of receiving a response by a factor of 1.28 (Table 1, Model 1). However, even professors who received e-mails from students of their own race displayed more discriminatory behavior in the later condition than in the now condition, and our supplementary analyses showed no interaction between student-faculty racial match and temporal distance. In other words, the temporal discrimination effect persisted even in the case of faculty members' responses to students of their own race, a result consistent with prior research demonstrating that individuals exhibit discrimination even against members of their own ethnic group (Fershtman & Gneezy, 2001).

The persistence of the temporal discrimination effect across negatively stereotyped groups

Because there are meaningful differences in stereotypes pertaining to different groups (Cuddy et al., 2007), we disaggregated our analyses to examine the effect of temporal distance on faculty members' responses to students from each group studied. Figure 2 shows response rates and meeting-acceptance rates for each minority group and Caucasian females relative to Caucasian males. Despite differences in stereotypes and empirical differences in levels of bias, participants' responses to every minority group studied showed a temporal discrimination trend (Table 2), such that each group experienced greater discrimination (relative to Caucasian males) in the later condition than in the now condition (for effect-size estimates and p values by group, see Table S5 in the Supplemental Material; for more details about our analysis, see Analysis in the Supplemental Material).

Supplementary analyses: corroborating the effect of temporal distance on construal level

We content-coded a random sample of faculty members' replies in order to perform two analyses to test the effectiveness of our manipulation. First, we assessed whether e-mail messages responding to a request for a meeting the next week focused more on *why* to meet (coded as 3) with a student than on *how* to do so (coded as 1). Replies in the now condition ($M = 1.24$) were significantly more focused on how and less focused on why to meet than were replies in the later condition ($M = 1.38$), $t(987) = 4.47$, $p < .001$. Second, using a logistic regression analysis clustering standard errors by student name,

Table 1. Results of Regression Analyses Predicting Responses to E-mails From Prospective Students ($N = 6,548$)

| Predictor | Model 1: response elicited (logistic regression) | Model 2: response elicited (ordinary least squares regression) | Model 3: meeting accepted (logistic regression) | Model 4: meeting accepted (ordinary least squares regression) | Model 5: response speed (Cox proportional-hazards model) |
|--|--|--|---|---|--|
| Primary predictors | | | | | |
| Minority or female student | -0.487*** (0.125) | -0.104*** (0.026) | -0.440*** (0.089) | -0.105*** (0.021) | -0.255*** (0.072) |
| Request to meet that day | -0.240* (0.099) | -0.049* (0.020) | -0.497*** (0.036) | -0.118*** (0.007) | 0.006 (0.042) |
| Request to Meet That Day \times Minority or Female Student | 0.350** (0.124) | 0.074** (0.026) | 0.433*** (0.078) | 0.104*** (0.018) | 0.171** (0.060) |
| Recipient characteristics | | | | | |
| Recipient's ethnicity or gender | | | | | |
| African American | -0.305 (0.242) | -0.069 (0.057) | -0.280 (0.262) | -0.063 (0.056) | -0.229 [†] (0.129) |
| Hispanic | -0.113 (0.271) | -0.025 (0.061) | -0.323 (0.241) | -0.072 (0.051) | -0.073 (0.165) |
| Indian | -0.070 (0.178) | -0.016 (0.040) | 0.255 (0.196) | 0.061 (0.048) | -0.007 (0.120) |
| Chinese | -0.108 (0.128) | -0.024 (0.029) | 0.107 (0.158) | 0.026 (0.038) | -0.069 (0.084) |
| Other race | -0.118 (0.204) | -0.027 (0.047) | -0.022 (0.153) | -0.005 (0.035) | -0.122 (0.117) |
| Male | -0.104 [†] (0.056) | -0.023 [†] (0.012) | 0.163* (0.080) | 0.037 [†] (0.018) | -0.054 (0.034) |
| Recipient's School Ranking ^a \times 10 | -0.009* (0.004) | -0.002* (0.001) | 0.008 (0.006) | 0.002 (0.001) | -0.004 (0.003) |
| Recipient's faculty rank | | | | | |
| Assistant professor | 0.224** (0.071) | 0.048** (0.015) | 0.436*** (0.076) | 0.104*** (0.018) | 0.127** (0.042) |
| Associate professor | -0.050 (0.091) | -0.011 (0.021) | -0.027 (0.080) | -0.006 (0.018) | -0.053 (0.055) |
| Other rank | -0.476** (0.172) | -0.113* (0.042) | -0.726*** (0.186) | -0.147*** (0.034) | -0.297* (0.135) |
| Student and faculty member of same minority | 0.249*** (0.064) | 0.054*** (0.014) | 0.261*** (0.047) | 0.061*** (0.011) | 0.135*** (0.039) |
| Model fit | | | | | |
| R^2 or pseudo- R^2 | .01 | .01 | .02 | .02 | — |
| Log pseudolikelihood | -4,170.79 | — | -4,281.51 | — | -35,873.04 |

Note: The table presents beta coefficients, with standard errors in parentheses. The dependent variable for Models 1 and 2 was whether the e-mail elicited a response; the dependent variable for Models 3 and 4 was whether the participant accepted the fictional student's request for a meeting; and the dependent variable for Model 5 was how quickly the participant responded to the e-mail (when a response was not received within 1 week, data were treated as censored). Sample weights were included in all analyses to adjust for oversampling of minority faculty and unequal assignment of participants to conditions; standard errors were clustered by student name. Both ordinary least squares and logistic regression models predicting whether a response was elicited and whether the request was accepted are presented to demonstrate the robustness of the findings to the imperfections of both types of models (ordinary least squares estimates are imperfect for binary outcomes, whereas logit estimates are imperfect for interaction terms, as discussed in Results: Additional Tables and Information, in the Supplemental Material).

^aThe highest possible ranking was 1; the lowest-ranked schools were tied for a ranking of "Tier 4," or 225 (U.S. News & World Report, 2010).

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

we examined whether faculty members in the later condition were more likely than faculty members in the now condition to ask students for additional credentials, presumably to address concerns about desirability ("why" to meet); consistent with construal-level theory, results revealed that this was indeed the case (all observations: $\beta_{\text{now}} = -1.01$, $z = -11.39$, $p < .001$, pseudo- $R^2 = .032$, $N = 6,548$; observations involving a response: $\beta_{\text{now}} = -1.01$, $z = -12.56$, $p < .001$, pseudo- $R^2 = .041$, $N = 4,392$). Our results from these analyses offer convergent evidence that temporal distance shifts decision makers' construal-level mind-sets.²

Discussion

Our results show that decisions about distant-future events generate more discrimination against women and minorities than do decisions about near-future events, a phenomenon we call the temporal discrimination effect. We propose that construal-level theory offers the most parsimonious explanation for our findings: Temporal distance generates abstract construals (Trope & Liberman, 2003), which trigger increased reliance on stereotypes that benefit Caucasian males and hurt other groups (McCrea et al., 2012).

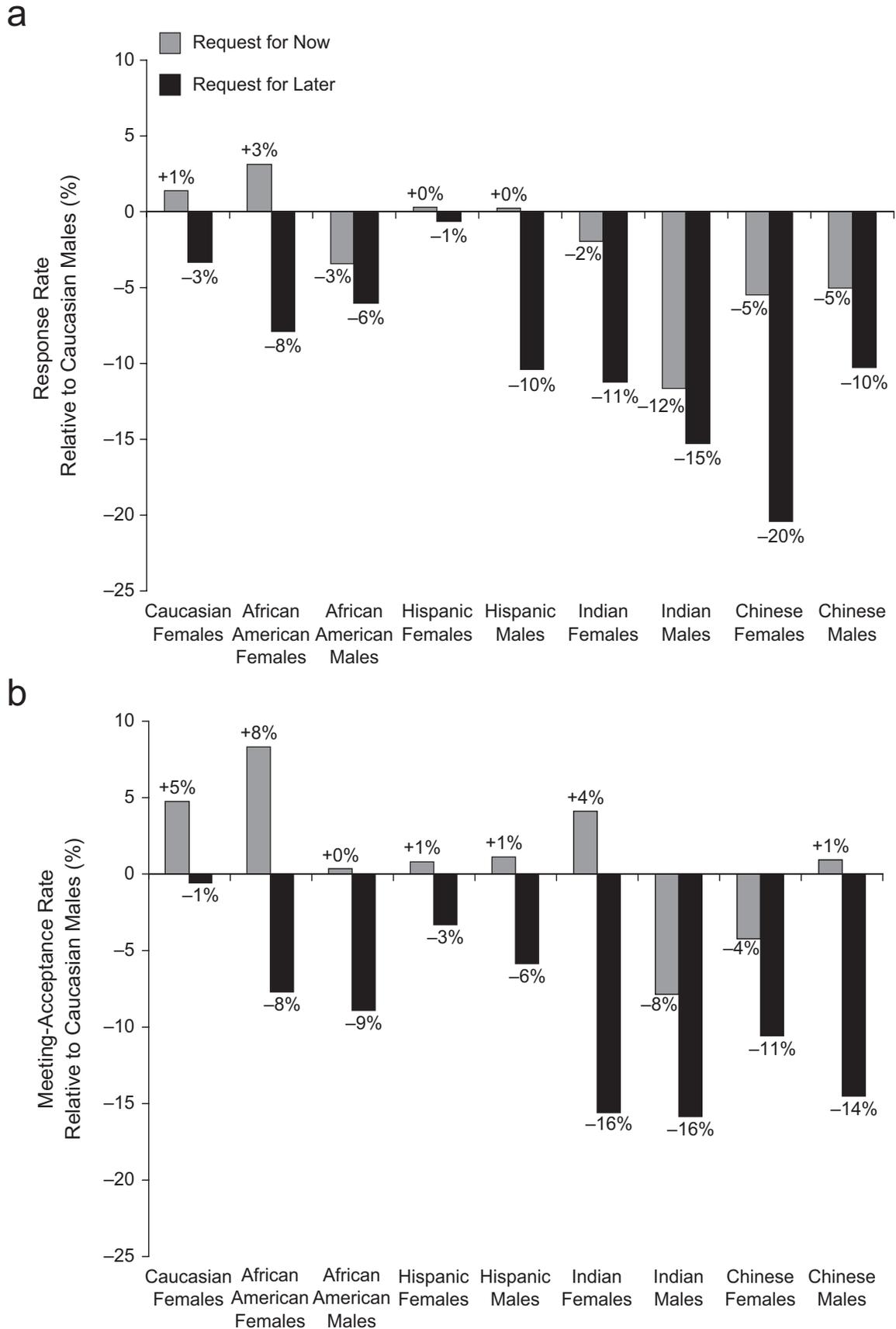


Fig. 2. Sample-weighted (a) response rates and (b) meeting-acceptance rates for minorities and females (relative to Caucasian males) in the now and later conditions. The percentage label for each bar is rounded to the nearest whole number. Response rates for Caucasian males were 69% in the now condition and 74% in the later condition; meeting-acceptance rates for Caucasian males were 36% in the now condition and 48% in the later condition.

Table 2. Results of Regression Analyses Predicting Responses to E-mails From Prospective Students in Each of the Minority Groups Examined ($N = 6,548$)

| Predictor | Model 6: response elicited (logistic regression) | Model 7: response elicited (ordinary least squares regression) | Model 8: meeting accepted (logistic regression) | Model 9: meeting accepted (ordinary least squares regression) | Model 10: response speed (Cox proportional-hazards model) |
|---|--|--|---|---|---|
| Student's ethnicity or gender | | | | | |
| African American | -0.394*** (0.118) | -0.083** (0.024) | -0.430*** (0.083) | -0.103*** (0.020) | -0.229*** (0.070) |
| Hispanic | -0.415** (0.160) | -0.087* (0.034) | -0.323*** (0.095) | -0.078** (0.023) | -0.209* (0.099) |
| Indian | -0.788*** (0.113) | -0.174*** (0.023) | -0.746*** (0.105) | -0.172*** (0.024) | -0.446*** (0.064) |
| Chinese | -0.573*** (0.114) | -0.123*** (0.023) | -0.556*** (0.085) | -0.131*** (0.020) | -0.302*** (0.071) |
| Female | -0.235* (0.112) | -0.049* (0.023) | -0.148 [†] (0.079) | -0.036 [†] (0.019) | -0.115 [†] (0.064) |
| African American × Female | 0.341* (0.158) | 0.072* (0.033) | 0.388*** (0.109) | 0.093** (0.026) | 0.208* (0.087) |
| Hispanic × Female | 0.472** (0.160) | 0.099** (0.034) | 0.192 [†] (0.100) | 0.047 [†] (0.024) | 0.241* (0.100) |
| Indian × Female | 0.540*** (0.137) | 0.120*** (0.029) | 0.432*** (0.138) | 0.098** (0.031) | 0.317*** (0.086) |
| Chinese × Female | 0.015 (0.142) | -0.003 (0.031) | 0.127 (0.095) | 0.031 (0.022) | -0.018 (0.077) |
| Primary predictors | | | | | |
| Request to meet that day | -0.242* (0.101) | -0.049* (0.020) | -0.499*** (0.034) | -0.119*** (0.007) | 0.005 (0.042) |
| Request to Meet That Day × Minority or Female Student | 0.353** (0.126) | 0.074* (0.026) | 0.433*** (0.078) | 0.104*** (0.017) | 0.170** (0.062) |
| Recipient characteristics | | | | | |
| Recipient's ethnicity or gender | | | | | |
| African American | -0.272 (0.291) | -0.061 (0.069) | -0.243 (0.327) | -0.054 (0.069) | -0.200 (0.158) |
| Hispanic | -0.090 (0.324) | -0.020 (0.073) | -0.369 (0.315) | -0.078 (0.064) | -0.045 (0.205) |
| Indian | -0.075 (0.224) | -0.016 (0.050) | 0.346 (0.237) | 0.084 (0.058) | -0.003 (0.153) |
| Chinese | -0.211 (0.139) | -0.047 (0.032) | 0.050 (0.192) | 0.012 (0.046) | -0.135 (0.096) |
| Other race | -0.140 (0.203) | -0.031 (0.046) | -0.045 (0.150) | -0.010 (0.034) | -0.136 (0.114) |
| Male | -0.101 [†] (0.054) | -0.022 [†] (0.012) | 0.167* (0.080) | 0.038 [†] (0.018) | -0.050 (0.033) |
| Recipient's School Ranking ^a × 10 | -0.010* (0.004) | -0.002* (0.001) | 0.008 (0.006) | 0.002 (0.001) | -0.005 (0.003) |
| Recipient's faculty rank | | | | | |
| Assistant professor | 0.224** (0.071) | 0.048** (0.015) | 0.437*** (0.076) | 0.104*** (0.018) | 0.128** (0.042) |
| Associate professor | -0.053 (0.090) | -0.012 (0.020) | -0.032 (0.078) | -0.007 (0.018) | -0.056 (0.054) |
| Other rank | -0.497** (0.173) | -0.116* (0.042) | -0.742*** (0.186) | -0.150*** (0.034) | -0.306* (0.136) |
| Racial match | | | | | |
| Student and recipient African American | 0.043 (0.295) | 0.011 (0.070) | 0.029 (0.334) | 0.005 (0.071) | 0.024 (0.164) |
| Student and recipient Hispanic | 0.109 (0.334) | 0.024 (0.075) | 0.414 (0.318) | 0.089 (0.065) | 0.013 (0.208) |
| Student and recipient Indian | 0.194 (0.228) | 0.044 (0.051) | -0.246 (0.257) | -0.062 (0.062) | 0.057 (0.157) |
| Student and recipient Chinese | 0.705*** (0.196) | 0.156** (0.044) | 0.500* (0.227) | 0.119* (0.054) | 0.420*** (0.125) |
| Model fit | | | | | |
| R^2 or pseudo- R^2 | .01 | .02 | .02 | .03 | — |
| Log pseudolikelihood | -4,145.29 | — | -4,262.85 | — | -35,847.89 |

Note: The table presents beta coefficients, with standard errors in parentheses. The dependent variable for Models 6 and 7 was whether the e-mail elicited a response; the dependent variable for Models 8 and 9 was whether the participant accepted the fictional student's request for a meeting; and the dependent variable for Model 10 was how quickly the participant responded to the e-mail (when a response was not received within 1 week, data were treated as censored). Sample weights were included in all analyses to adjust for oversampling of minority faculty and unequal assignment of participants to conditions; standard errors were clustered by student name.

^aThe highest possible ranking was 1; the lowest ranked schools were tied for a ranking of "Tier 4," or 225 (U.S. News & World Report, 2010).

[†] $p < .10$. * $p < .05$. ** $p < .01$. *** $p < .001$.

Construal-level theory also encompasses an alternative dual-systems account of our findings. Decisions about the near future tend to involve more instinctive, emotional thinking than decisions about the distant future, which are more cognitive (McClure, Laibson, Loewenstein, & Cohen, 2004). Thus, decisions about the near future may be driven by emotions (e.g., guilt), and decisions about the distant future may be driven more by cognitions (e.g., stereotype-based calculations of the probability of a minority student's success in academia; Loewenstein, 1996; Shiv & Fedorikhin, 1999). This account is consistent with construal-level theory because increased cognition is likely to fuel faculty members' assessments of why they should interact with a student, which is the process through which discrimination was increased in the later condition, according to our account.

Another alternative explanation for our findings is that faculty in the now condition were too constrained to respond to students at all. This explanation rests on the premise that faculty in the now condition were so unwilling to accept requests for meetings on short notice that response rates and acceptance rates in that condition were essentially at a floor level, which prevented the emergence of discrimination. If this floor-effect explanation were valid, we would have seen lower response rates in the now condition than in the later condition. However, response rates were similar in the two conditions. In fact, although response rates for e-mails from Caucasian males were somewhat lower in the now condition than in the later condition, e-mails from minorities were more likely to elicit a response if they requested a meeting now rather than later (Fig. 1a). Further, response speed did not significantly differ across conditions (Table 1, Model 5), which suggests that participants were no more rushed in the now condition than in the later condition. (For more details about results from supplementary analyses ruling out the floor-level effect, see Analysis in the Supplemental Material.)

A third alternative account of our findings is that last-minute requests to meet "today" may have been perceived as particularly rude or irresponsible, and that Caucasian males were punished more for such wayward behavior than minorities and females were. This explanation is inconsistent with past research showing that women and minorities are punished more harshly and perceived more negatively than Caucasian males for deviations from social norms (LaFrance, 1992; Skiba, Michael, Nardo, & Peterson, 2002). It is also inconsistent with research showing that minorities are perceived less positively than Caucasians when the causal attribution for their behavior is unclear, particularly if the perceiver's implicit biases mirror common stereotypes of the minority group (Dovidio & Gaertner, 2000; Greenwald, Oakes, & Hoffman, 2003; Hugenberg & Bodenhausen, 2003). Because a vast literature has demonstrated that stereotypes are likely to influence perceivers' judgments and behavior in ambiguous situations (Bodenhausen & Macrae, 1998), this alternative explanation seems unlikely. Interestingly, past research has indicated that politeness activates abstract construals (Stephan, Liberman, & Trope, 2010); thus, the temporal

discrimination effect may have been magnified in the later condition if requests in that condition were perceived as being more polite than requests in the now condition.

Two theories predict an effect opposite to that revealed by our results. First, aversive-racism theory (Dovidio & Gaertner, 2000) predicts that discriminatory behavior increases when people can justify such behavior on the basis of factors other than race or gender. The inconvenience of a last-minute request in the now condition of our experiment may have provided recipients with a nondiscriminatory rationale for declining to meet with students, so our finding that discrimination was dampened in the now condition contradicts the predictions of an aversive-racism account. Second, research showing that temporal distance increases decision makers' focus on what they *should* do, as opposed to what they want to do (Milkman, Rogers, & Bazerman, 2008), might also predict greater discrimination in the now condition. Our findings contradict these predictions.

We studied faculty members' responses to students from diverse groups to demonstrate the robustness of the temporal discrimination effect, not to investigate specific stereotypes or the magnitude of the effect as a function of gender or ethnicity. However, each group studied is associated with unique stereotypes relevant to applying to doctoral programs; the size of the effect therefore naturally varied by group (Fig. 2). Notably, our data revealed discrimination against Asians, a group associated with some positive academic stereotypes,³ perhaps because Asians face negative lay beliefs regarding their mastery of English, the reliability of their qualifications, and their cultural fit. Our findings suggest that positive stereotypes associated with Asians may not generalize to all contexts, particularly contexts involving a high degree of ambiguity, like that of our study.

Many people in academia are striving to equalize access to valued opportunities. Our research highlights the importance of understanding the meaningful role that subtle contextual factors can play in determining whether access to valued opportunities is equitably granted to all students, regardless of their race or gender.

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Declaration of Conflicting Interests

The authors declared that they had no conflicts of interest with respect to their authorship or the publication of this article.

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Supplemental Material

Additional supporting information may be found at <http://pss.sagepub.com/content/by/supplemental-data>

Notes

1. Observations are sample weighted (similarly, all regressions include sample weights) to adjust for oversampling of minority faculty and inflated proportions of matched-race faculty-student pairs, so summary statistics and regression results can be interpreted as representative of the faculty population in the United States (Cochran, 1963).
2. Although it would have been ideal to examine whether construal-level mind-set mediated the observed effects, because we used the content of participants' e-mails as a measure of their mind-sets, we were unable to assess the mind-sets of participants who did not respond to meeting requests. Because the temporal discrimination effect was driven by nonrespondents, mediation analysis was not possible.
3. The temporal discrimination effect for Asians was smaller for e-mails sent to faculty members in science and engineering than for e-mails sent to faculty members in other fields, but this difference was statistically insignificant.

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