Diversity, Equity, and Inclusion Engagement Among Faculty: Impact on Promotion and/or

Tenure

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#### **ABSTRACT**

Universities value diversity and contributions to students from diverse backgrounds. However, limited research examines whether diversity contributions among faculty members contribute to more favorable promotion and/or tenure outcomes. Drawing from social categorization theory, this research examines whether contributions to diversity, equity, and inclusion efforts are being recognized in the promotion and/or tenure process. We focus on the impact of diversity contributions on career outcomes for faculty of color. Our evaluation involves a critical examination of the linguistic features of external review letters—the most critical component of most promotion and tenure applications. Our sample consists of 6,413 external review letters (ERLs) for 1,072 candidates who are seeking promotion and/or tenure from three universities to examine promotion and/or tenure decisions and further our understanding of the barriers to promotion and/or tenure for minority faculty. To test the effect of race on DEI language, I performed a linear mixed effect analysis to account for the nested structure of the data. Additionally, a multiple regression model was conducted to examine the relationship between DEI language and voting outcome with race as a moderator. The results indicate candidate race was linked to more DEI language in ERLs. Additionally, race significantly moderated the relationship between DEI language and promotion and/or tenure outcomes. Specifically, Hispanic candidates with low levels of DEI-related language in ERLs had similar chances of receiving unfavorable votes at the college level and negative Provost votes as White candidates, but the slopes are larger for Hispanic candidates, creating a larger disparity at higher levels of DEI language, and thus hurting their chance at promotion. Similar patterns emerged for Black candidates, such that higher levels of DEI-related language led to unfavorable votes at the department, and university levels, compared to White candidates. The findings further our understanding on how diversity contribution is perceived and evaluated within the promotion

and/or tenure system. Theoretically, the present research contributes to organizational diversity literature by furthering our understanding of how diversity efforts are linked to backlash behaviors within the academy and emphasizes the need for researchers to continue to examine faculty diversity contributions. Practically, this research highlights the shortcomings of the use of ERLs and the need for universities to implement formal policies to improve its validity.

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# Diversity, Equity, and Inclusion Engagement Among Faculty: Impact on Promotion and/or Tenure

Diversity, equity, and inclusion efforts are important for achieving academic excellence (Stewart & Valian, 2018). Specifically, a broad representation of students, faculty, and staff facilitates innovation—a hallmark of academic success (Armstrong et al., 2010). Students benefit from faculty diversity in various ways (Gurin et al., 2002; Hurtado et al., 2009b). Faculty are teaching increasingly diverse students (NCES, 2019) and students benefit from inclusive teaching practices (Aragon et al., 2017). To ensure effective diversity education and minority advocacy in higher education, faculty diversity in tenure and tenure track roles needs to be increased. Currently, within U.S. higher education, Hispanic and Black full professors each make up only 4% of all full-time faculty, while among assistant professors, these percentages were 6% and 8%, respectively (National Center for Education Statistics [NCES], 2020).

Tenured faculty have the ability to advocate for equity in their institutions through the facilitation of conversations about diversity, and through advocacy, mentorship, and other diversity-supportive work (e.g., service on diversity committees). When faculty members advocate for the representation of diverse perspectives in their teaching, students are able to learn and become more open to different points of view (Ryder et al., 2016; Quaye, 2012). Moreover, Dessel and colleagues (2017) found that diversity-related coursework was related to greater awareness of institutional discrimination and empathic perspective-taking behaviors among students (Muller & Miles, 2017)). The role of faculty in mentoring students of color is essential to student success, as they provide information and guidance outside of class (Gasman et al., 2017).

Universities have recognized the advantages associated with having a diverse faculty pool and are striving to recruit and retain diverse faculty members to serve as role models for a diverse population of students (Fleetwood & Aebersold, 2010), however, these efforts are faced with a host of challenges. The experiences of faculty of color, and particularly women of color in the promotion and/or tenure process has been described qualitatively, with limited quantitative and theoretical research contributing to our understanding of when, how and why criteria in promotion and/or tenure processes function as career progression barriers for faculty of color and women. The barriers experienced by faculty of color in the promotion and/or tenure process can ultimately stifle university efforts for a more diverse and inclusive campus. As a way to emphasize the growing importance of diversity competencies among all faculty, the University of California (UC) system pioneered efforts to include diversity contributions into the promotion and tenure process (Soucek, 2021). The guidelines and recommendations set forth by the UC system require diversity contributions to be recognized by peer review committees and evaluated and credited in the same way as other achievements in the voting process.

Promotion and/or tenure decision-making involves peer evaluations and voting occurs at two critical career stages - advancement from assistant professor to associate professor and from associate professor to full professor. The outcome for promotion and tenure is determined by votes made at the department, college, and university levels. There are different types of votes involved in the promotion and/or tenure decision-making process, specifically, a unanimous vote of approval suggests that, of those voting, 100% voted the same direction, a negative vote consists of a majority vote against awarding promotion/tenure, and a positive vote consists of a majority vote to support awarding promotion/tenure. The case of promotion and/or tenure originates in the department in which the candidate has a primary appointment, and each voting

member of the department will assess the candidate's overall record and address the question of whether the candidate merits promotion and/or tenure, specifying reasons for the recommendation. These recommendations are included in the candidate's dossier and are prepared after faculty have discussed the case and taken a vote. If the dean agrees with the recommendation made by the department faculty members, the candidate's dossier will be forwarded to the college committee for the next stage of review. The committee members then vote on the case and provide a written recommendation to the president and provost at the university level, who votes and subsequently passes their own recommendation to the Board of Trustees for final action.

The decision to award promotion and tenure is immensely important for both the faculty and the university. It is an acknowledgment of a faculty member's trajectory as a scholar and their national and international reputation. The quality of research output is surely impactful for the promotion and/or tenure evaluation process, but administrators in higher education also consider external review letters to be an important element of promotion and/or tenure decisions (Abbott et al., 2010). The purpose of the letters is to determine the impact of the candidate's contribution to the field; therefore, it is vitally important that this assessment is informed and impartial. The external review process is often managed by the department, which ensures that an appropriate pool of potential reviewers from whom review letters will be solicited. The letters are generally sought from distinguished scholars in the field that can assess the significance of the candidate's research in the discipline. The completed review letters are then placed within the candidate's dossier for evaluation at all subsequent levels.

Despite the proclaimed value of diversity contributions for broadening the participation of faculty from marginalized groups, very little is known about the actual effect diversity

contributions have on voting outcomes for faculty members, specifically, faculty of color. As it currently stands, there are virtually no studies that have evaluated the role of diversity contribution, and whether they are acknowledged within the promotion and/or tenure process or if they actually benefit faculty of color. Thus, the purpose of this study is to examine faculty diversity contribution through diversity-related language in external review letters to understand the impact of faculty diversity contribution on faculty career outcomes. By understanding how diversity contributions are being evaluated and the consequences it brings can better inform decision-makers within universities to achieve the goal of increasing marginalized faculty members.

This paper is organized as follows. The first section provides a review of relevant literature on the external review process and the role of diversity contributions in promotion and/or tenure decisions, followed by the use of social categorization theory and the Attributional Analysis of Persuasion (AAP; Eagly & Chaiken, 1975) to understand the processes by which diversity contribution is evaluated for promotion and/or tenure decisions.

# **Background**

Promotion and/or tenure decisions have critical long-term effects for both the candidate and the university. For the candidate, the promotion and/or tenure process can significantly influence the direction of their own career and scholarly progression. Although the promotion and/or tenure practices may vary across institutions, and affect disciplines, ranks, and institutions in different ways, common themes emerge. In general, candidates who are up for promotion and/or tenure are evaluated based on research output and publication, teaching effectiveness, and service (Abbott et al., 2010). Faculty members dedicate time toward mentoring students, applying, and reviewing grants, teaching, collaborating, advising, serving on committees and so

much more. It is unclear, though, which of the many duties that faculty spends countless hours on, will be rewarded (Abbott et al., 2010). Institutional P&T guideline documents provide lists that include research, teaching, and service requirements as factors that contribute to promotion and/or tenure evaluations. However, requirements for research and scholarship typically outweigh those pertaining to service contributions, even if not stated explicitly (Abbott et al., 2010; Green & Baskind, 2007). For instance, Harley and colleagues (2010) found from their study that service obligations and teaching "hold no weight" toward promotion and/or tenure in the absence of research and publication.

Given the emphasis placed on research and scholarship, it is critical that these components of the promotion and/or tenure portfolio are evaluated with fairness and equity in mind. The presence of faculty of color is undoubtedly beneficial for both the institution and students of color to advance and excel through shared experiences and backgrounds. Despite the importance of promotion and/or tenure process for faculty of color, little research has been conducted to examine the effects of one of the most influential components, external review letters (ERLs), on faculty outcomes. Therefore, it is both timely and relevant that we close this research gap by investigating the relationship between ERLs, linguistic features, specifically DEI-related language, and faculty outcomes, empirically and theoretically. A thorough understanding of this relationship will uncover the level of recognition (or lack thereof) faculty, specifically faculty of color, receive for their diversity contributions by examining (1) how their diversity work is being discussed in ERLs, (2) whether the discussions of their diversity contribution lead to positive career outcomes.

### External review letters for Promotion and/or Tenure Decision

External review letters are the most critical component of one's tenure application, as they are used to derive promotion and/or tenure decisions and ultimately influence who gets to continue their careers as professors and scholars and whose careers are abruptly and often irrevocably altered (Scholozman, 1998; Abbott et al., 2010). The purpose of ERLs is to assess a faculty's research accomplishments and scholarships. In most cases, the candidate prepares a list of outside reviewers and external letters are solicited from the reviewers proposed by the candidates as well as others that may be known to the committee as field experts. ERLs are typically solicited by the department administrative staff through email or phone calls, and once they have been obtained, ERLs and other components of promotion and/or tenure portfolios are then reviewed by the department and submitted for votes and consideration at the college level. College-level committee members then review the materials and evaluate them before voting. Then, the materials are submitted to the University committee members who evaluate and vote on the candidate. Lastly, the entire dossier is sent for review and evaluation by the Provost and eventual approval by the university's Board of Regents. Despite the ubiquitous nature of external reviews and their impact on faculty careers, their utility and contents are rarely studied (Schwartz & Schrowder, 1997). There is little evidence on what external review letters measure, whether they are subject to biases, and whether they predict performance metrics (e.g., citation, publications, research output). Although ERLs are assumed to be objective assessments, given that they are provided by evaluators outside of the institution (Sarode & Deore, 2017), external reviewers may fall prey to biases, and the linguistic features used to make employment decisions are also subject to biases (Madera et al., 2019). For instance, Steinpreis, Anders, and Ritzke (1999) examined the impact of candidate gender on hiring and tenure decisions in a psychology department and found that men faculty members were more likely to be hired than equally

qualified women faculty members. Furthermore, men candidates were evaluated more positively in terms of research, teaching, and service contribution in comparison to women with an identical record.

# **Diversity Contribution within Promotion and/or Tenure Process**

Each university experiences its own struggles with advancements toward diversity, equity, and inclusion. One of the approaches that universities have focused on as an evolving effort is incorporating diversity contributions into its evaluation of faculty members (Soucek, 2021). Diversity contribution is defined as the faculty members' contribution toward diversity, equity, and inclusion (DEI) efforts. There are various ways that candidates may contribute to DEI, including but not limited to, having a clear knowledge of, experience, with, and interest in the various dimensions of diversity (e.g., ethnic, racial, gender, disability, or socioeconomic), having a track record of involvement in activities that advance others' understanding of DEI and having clear and detailed plans for advocating DEI within the department/school/college and also their field (University of California, Berkeley, 2018). It is imperative to note that, contribution refers to actions taken, or honors received, by the faculty and not on their beliefs. The UC system has pioneered this effort and has explicitly perceived itself as a "national model for universities seeking to recognize and credit meritorious contributions that work to reconcile inequalities." The requirement for applicants to submit a statement on their past, present, and future contributions to DEI has been adopted by institutions all over the United States (C. S. V. Turner, 2002). Specifically, many universities, including University of Illinois and University of Oregon, have implemented guidelines that instruct reviewers to evaluate diversity contributions and equal opportunity in all three categories-research, service, and teaching-of the academic promotion and tenure process (Soucek, 2021). This provides an opportunity for candidates to showcase the

types of civic and scholarly engagement that align with the university's commitment to diversity, and also sends a message to the candidate that they will be a part of a community that values diversity and inclusion (Casad et al., 2021). Explicitly demonstrating faculty contribution to DEI also provides review committees with a method to consider diversity activities in the promotion and/or tenure process. The intention of establishing these criteria by the UC system is to ensure that contributions toward promoting equal opportunity and diversity are given due recognition and that diversity is evaluated and credited in the same way as other achievements.

The benefits of recognizing the diversity contributions of underrepresented minorities not only broaden the participation of faculty positions to include more individuals from marginalized groups (Kelsey, 2014) but is also beneficial for students of color. To highlight the importance of diversity-related backgrounds and experiences in faculty and their intention to support DEI in faculty representation, previous work has found that ethnic diversity of faculty contributes to increased graduation rates for both Hispanic and Black students, thereby increasing their likelihood of forming STEM identities and pursuing STEM careers (Gurin et al., 2002; Hurtado et al., 2009a), and ultimately contributing to innovation in research scholarship (Hofstra et al., 2020). Given the impact of faculty diversity on students, efforts follow to create inclusive climates that support faculty of color.

Despite the usefulness of highlighting DEI qualifications and in raising awareness of the need for DEI experience (Sylvester et al., 2019), minimal research has examined the diversity contributions of faculty members and how they impact reward systems and promotion and/or tenure outcomes. A qualitative study suggests that diversity contributions are not equally valued between minority and White faculty: a faculty of color recounts her experience with the chairman of her university, indicating that her diversity work does not count for tenure: "When I

came up for tenure, I had a service list that was long, that was largely devoted to minority issues... My chairman said, "You cannot discuss any of those things," I was told to not discuss them because you will not want to be placed as a known Affirmative Action supporter... I was forbidden from including that part in my tenure and promotion file." (p. 206), this faculty of color noted (Turner & Gonzalez, 2011). There is a reason to suspect that diversity contributions within ERLs are evaluated differently for faculty of color, given that they are often disadvantaged within current promotion and/or tenure systems as a result of implicit biases and the social and human capital faculty of color bring to their roles vis-a-vis their colleagues (Perna, 2001). Umbach (2006) reported that in comparison to their White counterparts, faculty of color are more likely to report commitments to community engagement, development of students, fostering experiences outside of the classroom, and goals for social change. Yet, research on reward systems shows that faculty who prioritize research over teaching and service receive higher salaries and accrue greater prestige (Fairweather, 1993). It is not the goal of this paper to critically examine the broader reward system policies of universities across the United States, but rather highlight the need to evaluate whether DEI contributions are being recognized in the promotion and/or tenure process. We address this research gap by examining the linguistic features of ERLs, through the theoretical framework of social categorization theory.

#### **Theoretical Framework**

Theories of social categorization (Taijfel & Turner, 1979) theoretically explain how, when, and why diversity contributions are acknowledged and accounted for in promotion processes. The social categorization theory is a framework to understand how individuals categorize themselves and those around them. The basic assumption of the theory is that it is dependent on the social comparison processes of comparing salient stimuli to each other (Turner,

1987). That is, people place themselves and others in social categories to make sense of the environment around them, displaying in-group favoritism in their social interactions and often basing such categorization processes on observable features or cues (Tajfel & Turner, 1986). The more frequently relied upon categories include race, gender, and age, but categories can also be based on features that are physical (e.g., tattoos, hairstyles; Jetten et al., 2001), vocal (e.g., accents; Maass et al., 2014), dispositional (e.g., anxious), or ideological (e.g., pro-life; Heit & Nicholson, 2010). Social categorization processes are more likely to occur when the category is easily accessible and salient (van Knippenberg et al., 2004) and race is likely to be highly accessible and salient in the context of higher education. In the context of workplace issues, social categorization theory is typically used as a theoretical basis to explain why demographic diversity is associated with low trust, cooperation, and cohesion (van Knippenberg & Schippers, 2007). Research has found that cues like race and skin tone may increase salience for applicants, specifically, applicants with dark skin tones received lower job suitability ratings than equally qualified applicants with a light skin tone (Derous, Pepermans, & Ryan, 2016). In contrast, less salient cues may result in individuals being more difficult to categorize, and weakly identified individuals consistently report experiencing less prejudice and discrimination (Branscombe et al., 1999; Kaiser & Wilkins, 2010).

In the promotion and/or tenure process, diversity contributions within portfolios may be perceived as cues to allow race to be more salient for faculty of color. Theories of social categorization examine social and psychological processes individuals undergo to categorize themselves and others, and salient cues such as race may be utilized by committee members to make important promotion and/or tenure decisions. In higher education, historically marginalized and underrepresented faculty such as women faculty, faculty of color, and faculty in the

LGBTQ+ community are more likely to incorporate diversity-related messaging in their curriculum and research due to an expressed solidarity on the value of diversity (Milem, 2001). Moreover, Milem (2001) found that faculty of color were at least twice as likely as White faculty to integrate diversity-related content into their courses. The inclusion of diversity-related content and research may be evaluated as diversity contributions and incorporated through DEI language as reflected in ERLs, which increases the salience of race, allowing faculty of color to be categorized more easily. Given that, we hypothesize as follows:

Hypothesis 1: External review letters for Asian, Black, and Hispanic faculty are more likely to include DEI language than external review letters written for White faculty.

Outward acts of advocacy for diversity by minority group members may result in differential outcomes for underrepresented minority groups. A framework that can be used to understand why minorities and women receive differential reactions when promoting diversity and inclusion is the Attributional Analysis of Persuasion (AAP; Eagly & Chaiken, 1975). The AAP posits that a source who takes on an unexpected position is perceived as more trustworthy and accurate than those who argue for an expected position, particularly one in which the individual appears to personally benefit. In a case where a source advocates for an expected position, persuasion is less likely to succeed as the perceiver questions the source's honesty (Priester & Petty, 1995) and bias (Eagly et al., 1978). Hence, when racial minorities and women propose diversity-related efforts, it may be less effective than majority-group members in persuasion, as the effort may be perceived as expected, given the perceived self-interest. Previous work has extended the AAP to diversity-relevant contexts, one of which suggests that when minority students disconfirmed self-interest by advocating for a cause that does not benefit him or herself, he/she was rated as more trustworthy by others (Petty et al., 2001).

Related research has focused on the differential outcomes of diversity-related efforts based on the demographics of the individual engaging in those behaviors. For example, Hekman and colleagues (2017) found that minority members who engage in diversity-supporting behaviors in the context of hiring and promotion are penalized through worse performance ratings. These diversity-advocating behaviors can be seen as socially competitive—which involves the improvement of one's own low-status category at the expense of high-status categories (e.g., making hiring decisions that favor minority members; Chattopadhyay et al., 2004). As a result, individuals with presumed social competition motivates, such as minority members engaging in diversity-advocating behaviors, are perceived unfavorably because they are seen as incapable of "making it on their own" in that they get ahead by advancing members of their group instead of competently performing their work (Chattopadhyay et al., 2004).

Additional support for considering this attributional mechanism in reactions to diversity advocacy stems from broader research on self-interest. Czopp and Monteith (2003) demonstrated that faculty of color receive lower student ratings when they teach diversity content because students perceive that faculty operate with bias or self-interest. In contrast, majority members who engage in diversity-supporting behaviors (and disconfirms expectation) are perceived more favorably. Research suggests that White students, specifically, White men, benefit from their engagement in diversity-related activities at greater rates than students of color or women (Engberg, 2004). Diversity contribution in ERLs acts as a form of advocacy toward diversity efforts and given the negative consequences of minority members who advocate for their own group, we anticipate that it will influence committee members' evaluation of faculty of color in promotion and/or tenure processes. Taken together, we hypothesize as follows:

Hypothesis 2: The relationship between DEI language and promotion and/or tenure outcomes is moderated by race, such that Asian, Black, and Hispanic faculty members are more likely to receive negative voting outcomes for having DEI language in their external review letters.

# **The Current Study**

In this paper, we examined the linguistic feature, specifically diversity, equity, and inclusion (DEI) related language, used in ERLs and whether DEI-related language is related to promotion and/or tenure decisions. Our focus is on ERLs because it is a critical component of the promotion and/or tenure process and is weighed heavily by administrators and review committees as an objective measure of faculty productivity and performance. The final decision of whether an individual receives a promotion and/or tenure is heavily influenced by the content of the ERLs, and this decision may alter the career trajectory of the faculty researcher. Given the importance of promotion and/or tenure processes, we seek to address the following research questions with our research, 1) are contributions to diversity, equity, and inclusion reflected in ERLs? 2) Do DEI contributions in ERLs impact promotion and tenure committee voting? 1) Are faculty of color more likely to have DEI language in their ERLs in comparison to their White counterparts? 2) are faculty of color being penalized, reflected in voting outcomes, for having DEI language in their ERLs? In conditions under which faculty of color perform equally well, there should not be differences in promotion and/or tenure voting outcomes directed toward faculty of color and White faculty. However, with the presence of DEI language, which makes race a more salient cue, faculty of color may be penalized through negative voting outcomes.

# Methods

#### Sample and Procedures

Our team developed a consortium of three Carnegie R1 academic institutions (funded through NSF Grant #2100034, PI: Madera), and the data obtained from these universities are used to examine promotion and tenure decisions. Each higher education institution hired their own internal coders to code information from the promotion and/or tenure candidate dossiers—our main data source. Team members at each institution manually coded promotion candidates after obtaining access to the digital candidate portfolios. To ensure a seamless coding process, team members from each institution met on a weekly basis with research team members to clarify any questions and eliminate inconsistencies in coding the candidate and ERL background characteristics.

The total sample consists of 6,413 ERLs for 1,072 candidates seeking promotion and/or tenure. The ERLs contained 1,077.21 words, on average. Within our sample of candidates, 65% were Caucasian/White (n = 698), 25% were Asian (n = 272), 5% were Hispanic (n = 52), and 5% were Black/African American (n = 50).

ERL language was analyzed using Pennebaker et al's (2011) Linguistic Inquiry and Word Count (LIWC) software. The LIWC software was developed with the intention to process text samples, including the identification of emotions within texts (Pennebaker et al., 2003) and it uses a word count mechanism that calculates a percentage of words within a text sample that reflects terminology and phrases from a dictionary (Pennebaker et al., 2001, 2015; Tausczik & Pennebaker, 2010). In the current study, the LIWC software will be used to evaluate the linguistic features (i.e., DEI-related language) of the ERLs. To account for patterns within the letters that we may be unaware of at the onset of the study, a bottom-up approach using the Meaning Extraction Method (MEM; Chung & Pennebaker, 2008) was conducted to allow for themes to emerge from the data. The MEM operates on the key assumption that different words

that belong to a certain theme tend to be used in conjunction and, consequently, will co-occur in the same text segment. This method follows a dimension reduction technique referred to as Principle Component Analysis (PCA; Markowitz, 2021), which is similar to exploratory factor analysis, a common data reduction technique (Bryan & Yarnold, 1995). In its earliest form, the MEM required a considerable amount of manual work to complete, and more recently, the Meaning Extraction Helper (MEH; Boyd, 2015), a program that automates all of the front-end procedures of the MEM was developed and used in the current study. With the MEH, the user will only need to point the software to the location of text files, and the PCAs will run to extract as many themes as needed at their desired level of molecularity (Boyd, 2015). In the current dataset, the MEH was run for two institutions with the largest number of letters, and a PCA with varimax rotation was conducted using the binary data output from the MEH to extract themes. The MEM has been applied to a growing body of research, including examinations of self-expression (Kramer & Chung, 2011), values (Khan et al., 2020), and personality development (Chung & Pennebaker, 2008).

To obtain data on faculty research productivity, we retrieve from their publicly available Google Scholar profiles for each faculty to capture information such as candidate h-index and total citations.

#### Measures

ERL Linguistic Feature. For our analyses, the Linguistic Inquiry and Word Count program (LIWC) was used to analyze the linguistic features of the ERLs (Tausczik & Pennebaker, 2010). LIWC was used to measure the frequency of DEI language in the ERLs. The process of developing the DEI dictionary involved subject matter experts, including faculty and graduate students conducting workplace diversity research to create a list of words that were

associated with diversity. After the initial list was created, we eliminated duplicate words and words that were not fit through multiple iterations and consensus meetings. The final dictionary consisted of 121 DEI-related words. On average, about .23% of each letter contained DEI language. The final DEI dictionary includes phrases and terminology such as egalitarian, community, bias, institutional racism, and intersectionality (see Appendix A).

Unanimous Vote. A unanimous vote indicates that none of the committee members abstained from voting or provided a "no" vote. Unanimous votes were reported at the departmental, college, and university levels.

Negative Vote Percentage. This was calculated by dividing the number of "no" votes by the total number of votes. This percentage does not include abstentions. Negative vote percentages were reported at the departmental, college, and university levels.

Positive Vote. A positive vote indicates that the number of positive recommendations exceeded the number of negative recommendations. This variable does not include abstentions. Positive votes were reported at the departmental, college, and university levels.

Positive Provost Vote. A positive Provost vote (1) is derived when a candidate receives a positive vote at the final stage of their promotion and/or tenure process.

Candidate Race. Candidates were asked to identify their race as either White (1), Asian (2), Hispanic (3), Black (4), Native American, Native Alaskan or Pacific Islander (5), and Other (6).

Controls. Candidate h-index, candidate Classification of Instructional Program (CIP)

Code, action requested (e.g., promotion to associate professor, promotion to full professor), and university code were included as control variables—the inclusion of h-index controls for effects as a result of scholarly productivity. Candidate CIP Code, a national taxonomic standard of

instructional program titles developed by the U.S. Department of Education (Morgan & Hunt, 2002), was used to control for the effects of academic discipline. University code was included to control for the effect of specific universities.

## **Analytic Strategy**

To examine the effect of race on DEI language, we used the *lme4* function (Bates et al., 2012) in the R programming environment to perform a linear mixed effects analysis, accounting for the nested structure of the data. The level 1 variables contain the linguistic feature of the ERLs (i.e., DEI language), and are nested within 1,072 candidates, which is the level 2 variable. The candidate's h-index at the time of promotion and/or tenure (centered at the grand mean), the candidate's discipline coded as a CIP code, action requested, and the candidate's university were included as control variables. As fixed effects, we entered race and the control variables into the model. As random effects, we had intercepts for subjects, which characterizes idiosyncratic variation due to individual differences. By accounting for the by-subject variation, we assume that there are systematic differences between candidates in how DEI language is used. Before hypothesis testing, systematic within- and between- candidate variance was investigated to understand whether it existed in the hypothesized dependent variable (i.e., DEI language). The results of the unconditional (null) model indicated that 66% of the total variability in DEI language used in ERLs is attributable to differences among candidates. Thus, there is substantial between and within variance that warrants the use of multilevel modeling to examine level 1 and level 2 variables. A multiple regression model was tested to investigate whether the relationship between DEI language and promotion and/or tenure voting outcomes was moderated by candidate race. After computing the DEI-language-by-race interaction term, the two predictors and the interaction were entered into a simultaneous regression model.

#### Results

Means, standard deviation, and correlations are presented in Table 1. To allow for themes to emerge from our data, an inductive approach was used by running the MEM to extract relevant factors or themes. Words with a factor loading of at least 0.2 for a particular component are retained as part of the theme or topic. The factors that were identified from the MEM results relate to research/scholarship, teaching, specific research focus, STEM topics, methodology, and publication. None of the extracted themes from the MEM results pertained to diversity, and thus the MEM results were not included as a part of our final analyses.

To examine whether candidate characteristics (i.e., race) are related to DEI language, a linear mixed-effect model was run using R. For hypothesis 1, we predicted that ERLs for Asian, Black, and Hispanic faculty will have significantly more DEI language than ERLs written for White faculty. A breakdown of DEI-related words by candidate demographic shows that for each letter, there are .19% of DEI-related words for White candidates, .71% for Black candidates, .13% for Asian candidates, and .28% for Hispanic candidates. As shown in Table 2, ERLs contained significantly less DEI language for Asian candidates, b = -4.433e-02, t(2260) = -2.31, p < 0.05, and significantly more DEI language for Black candidates, b = 5.390e-01, t(2260) = 9.22, p < 0.001 and Hispanic candidates, b = .09, t(2260), p < .05, compared to White candidates. Hypothesis 1 was partially supported.

For hypothesis 2, we predicted that the relationship between DEI language and promotion and/or tenure outcomes is moderated by race, such that Asian, Black, and Hispanic faculty members are more likely to receive negative voting outcomes for having DEI language in their ERLs, compared to White candidates. To investigate this hypothesis, a moderation test was run using linear regression with DEI language as a predictor, subsequent promotion and/or tenure

votes at the department, college, and university-level as the dependent variable, and race as a moderator. The regression analyses in Table 3 showed a significant main effect found between DEI language and university-level negative voting percentage (b = .05, p < .001), department-level unanimous votes (b = -.12, p < .001), and university-level positive votes (b =-.05, p < 0.05). Main effects were also found between race and promotion and/or tenure outcomes. Specifically, Hispanic candidates received more negative votes at the department level (b = .10, p < .001) but less at the college level (b = .07, p < .01), less unanimous votes at the department level (b = -.15, p < .001), college level (b = -.11, p < .01), and university level (b = -.15, p < .00). -.50, p < .001), and less positive votes at the college level (b = -.07, p < .01), compared to White candidates. Asian candidates received more negative votes at the department level (b = .05, p <.001) and college level (b = .05, p < .001), fewer unanimous votes at the department level (b = .001) -.05, p < .05) and college level (b = -.10, p < .001), and more positive votes at the college level (b = .04, p < .001), but fewer at the department level (b = -.05, p < .001), and are less likely to receive promotion (b = -.02, p < .05), compared to White candidates. In comparison to White candidates, Black candidates received more negative votes at the university level (b = .10, p <.01). All other main effects were non-significant. Main effects of race are shown in Tables 4 through Table 7.

For interaction effects, I found that race moderated the relationship between DEI language and promotion and/or tenure outcomes. For Hispanic candidates, DEI language led to a larger number of unfavorable outcomes, namely, more negative votes at the college level (b = .14, p < .01; see Figure 1), fewer positive votes at the college level (b = .19, p < .01; see Figure 7), and are less likely to receive a favorable Provote vote (b = .21, p < .001; see Figure 8), but it resulted in more unanimous votes at the department level (b = .25, p < .05; see Figure 5), when

compared to White candidates. Interaction effects of race are shown in Table 4 through Table 7.

To better understand the interactions, I calculated the estimated marginal means and conducted a simple slope analysis for each significant interaction.

Simple slopes analysis show that for Hispanic candidates, compared to White candidates, each unit increase in DEI language is associated with 0.11 unit increase in college committee negative voting percentage (b = .11, 95% CI [0.004, 0.21]), 0.14 unit decrease in college committee positive votes (b = -.14, 95% CI [-0.26, -0.01]), and 0.20 unit decrease in favorable Provost Votes (b = -.20, 95% CI [-0.29, -0.11]). For White candidates, compared to Hispanic candidates, each unit increase in DEI language is associated with 0.15 unit decrease in department unanimous votes (b = -.15, 95% CI [-.23, -.07]), 0.05 unit decrease in college committee positive votes (b = .05, 95% CI [0.001, 0.10]). The slopes of DEI language on college committee positive votes for Hispanic candidates are significantly larger than for White candidates. All other simple slopes models were not interpreted given the values overlap with zero, indicating they were not statistically significant. Table 12-13, 18-19, and 22-25 contain summaries of the estimated marginal means and simple slopes model for Hispanic candidates.

The effects for Black candidates paint a similar picture, such that DEI language led to more negative votes at the university level (b = .11, p < .01; see Figure 3), fewer unanimous votes at the department level (b = -.15, p < .05; see Figure 4) and university level (b = -.31, p < .01; see Figure 6), when compared to White candidates. Simple slope analysis shows that for White candidates, compared to Black candidates, each unit increase in DEI language is associated with 0.44 unit increase in university committee unanimous votes (b = .44, 95% CI [0.08, 0.80]). All other simple slopes models were not interpreted given the values overlap with zero, indicating they were not statistically significant. Table 14-17 and 20-21 contain summaries

of the estimated marginal means and simple slopes model for Black candidates. None of the interactions were significant for Asian candidates. Hypothesis 2 was partially supported.

## Supplemental analyses

In the regression analyses that compare White candidates to all other groups (see Tables 30-33), we found that high levels of DEI language for non-White candidates are linked to a lower likelihood of college committee negative votes (see Figure 2), which is not reflected in other interactions where we see Black and Hispanic candidates receiving significantly higher likelihood of negative votes at the college level with DEI language in their ERLs. To tease apart the interaction, we compared White candidates and Asian candidates to determine if the majority of non-White candidates are Asian candidates, who have historically had better chances at receiving tenure and promotion in academia (Perna et al., 2000). We found that Asian candidates with DEI language received fewer college committee negative votes (b = -.08, p < .05; see Figure 9) and more favorable Provost votes (b = .08, p < .05; see Figure 10), compared to White candidates. However, the results favored White candidates at the university level. Compared to Asian candidates, White candidates with DEI language received fewer university committee negative votes (b = -.08, p < .05; see Figure 11) and more university unanimous votes (b = .22, p< .05; see Figure 12). Simple slope analysis shows that for Asian candidates, each unit increase in DEI language is associated with a 0.07 unit increase in Provost votes (b = .07, 95% CI [0.004, 0.13]). Tables 26-29 contain summaries of the regression analyses for DEI language predicting voting outcomes for the comparison between Asian candidates and White candidates.

In addition to race, we were also interested in examining the effect of gender. Within our sample of candidates, 35% were women and 65% were men. As shown in Table 2, ERLs contained more DEI language for women candidates, b = 9.735e-02, t(3405) = 4.02, p < 0.001.

The linear regression showed a significant main effect which suggested that women candidates were less likely to receive unanimous votes at the department level (b = -.08, p < .001) and more likely to receive positive votes at the department level (b = 04, p < .001). Gender was a significant moderator, such that women candidates with above-average DEI language received more unanimous votes at the college level (b = .12, p < .05; see Figure 13) and fewer at the university level (b = .27, p < .01; see Figure 14), and more positive votes at the university level (b = .08, p < .05; see Figure 15). Table 8-11 contains summaries of the regression analyses for DEI language predicting voting outcomes with gender as a moderator.

#### Discussion

This study seeks to advance the literature on the use of external review letters by integrating social categorization theory (Taijfel & Turner, 1979) to understand the processes by which linguistic features of external review, specifically, diversity contribution, are evaluated for promotion and/or tenure decisions. The evaluation of ERL in academia is critical due to the role it plays to derive promotion and/or tenure decisions and ultimately influencing the career trajectory of scholars (Scholozman, 1998; Abbott et al., 2010). Our findings uncovered the level of recognition (or lack thereof) faculty members receive for their diversity contributions by addressing the following questions: 1) how diversity contributions are being addressed in ERLs, and 2) whether the discussions of their diversity contribution led to positive voting outcomes and actual promotion.

Partially supported by social categorization theory (Taijfel & Turner, 1979), candidate race was predictive of DEI language in ERLs. Namely, the results showed that Black and Hispanic candidates received more DEI language in their ERLs, whereas Asian candidates received less DEI language in their ERLs, compared to White candidates. This may be explained

by the growing representation of Asian faculty in academia, with Asian faculty members making up the highest percentage of tenure-track positions in the entire minority faculty workforce, followed by Black, Hispanic, and Native American in order (Lee, 2011; Lin et al., 2009). This leads to Asian faculty often being grouped with White faculty members as being a part of the majority group, and thus, associated with less diversity-related language.

We also examined the role of gender on DEI language and found that gender predicted DEI language, such that women candidates received more DEI language in their ERLs when compared to men candidates. Theoretically, these social comparison processes of comparing salient stimuli such as race and gender strengthen our understanding of how written reviews in the promotion and tenure process are largely influenced by the letter writer. Specifically, when the letter writer is perceptive to the gender and racial cues, reflected by the candidate's diversity contribution, there is a higher likelihood of diversity-related language in the external reviews. This is in stark contrast with the expectation that external reviews of performance are objective assessments made by reviewers and that are driven exclusively by the accomplishments of the candidate.

The moderating effect of race on the relationship between diversity contribution and promotion and/or tenure decisions revealed findings that challenged the presumed objectivity of external evaluations. Consistent with our prediction, Hispanic candidates with above-average DEI-related language in ERLs received unfavorable votes at the college level and Provost level, when compared to White candidates. However, Hispanic candidates with above-average DEI-related language received favorable votes at the department level, when compared to White candidates. One explanation for this positive effect may be that department-level committee members are more familiar with Hispanic candidates' research agenda, publishing avenues, and

their progressive approach to teaching, which leads to fairer tenure evaluations at the department level. Most research has shown that the promotion and tenure process is one of the most challenging times for Hispanic faculties' careers (Gelmon & Agre-Kippenhan, 2002). Anecdotal and qualitative accounts suggest that Hispanic faculty who are committed to developing diversity awareness through scholarship, teaching, and service may experience more difficulties in the tenure and promotion process (Guanipa et al., 2003). Additionally, Hispanic faculty share their personal experience of mistreatment and express concern that their commitment toward multicultural awareness may jeopardize their chance for tenure and promotion (Aguirre, 2000; Midgette & Meggert, 1991).

For Black candidates, above-average DEI-related language led to unfavorable votes at the department and university levels, compared to White candidates. We suspect that diversity contributions may be viewed as efforts to insist on resource and power sharing, which may create conflict where colleagues may have had direct exposure to a candidate's support for and engagement with diversity (Thomas et al., 2013).

Contrary to our predictions, DEI-related language in ERLs did not lead to favorable outcomes for White candidates when compared to other groups combined, in fact, above-average DEI-related language in ERLs resulted in negative voting outcomes at the college level. This may be a function of college-level voting patterns due to conflicts derived from resource and power sharing, as above-average DEI language led to negative votes for White, Black, and Hispanic candidates.

The present research contributes to organizational diversity literature by extending our understanding of when promoting diversity through diversity contributions might connect to backlash behaviors within the academy. The Attributional Analysis of Persuasion theory

proposed that historically dominant groups (i.e., White candidates) are evaluated more positively for diversity-advocating behaviors than were out-groups (Tajifel & Turner, 1985). Additionally, Hekman et al. (2017) posited that diversity-valuing behaviors by women and minorities were evaluated negatively due to the inferred motives of self-interest and social comparison (i.e., improving the social standing of low-status group members at the expense of higher-status group members; Chattopadhyay et al., 2004). Theoretically and empirically, this was inconsistent with our findings, as our results revealed that all faculty members, regardless of their race, were discredited when promoting diversity through diversity contributions. This may be explained by the emphasis placed on research output in promotion and tenure decisions above all other forms of scholarship, including professional service, teaching, and diversity-related endeavors (Antonio et al., 2000). However, Black and Hispanic members fared worse. Specifically, Hispanic faculty members were penalized at a larger degree with similar levels of DEI language, reflected in substantially larger effect sizes and slope coefficients, when compared to White and Black faculty members. Our findings were not consistent with previous work focused on attitudes and behaviors related to diversity advocating efforts considering its negative effects on both minority and majority groups. However, it does demonstrate the conflicts between institutional rhetoric and the realities of reward structures in the promotion and/or tenure process.

With the best intentions, universities establish official policies that include the evaluation of multiple forms of scholarship (e.g., diversity contributions), but conscious and unconscious values and beliefs held by promotion and/or tenure promotion and/or tenure committees continue to prevent alternative forms of scholarly work from being rewarded. Researchers should continue to examine faculty diversity contributions in the context of promotion and/or tenure processes and higher education due to the ways these efforts shape student experiences, staff, and members

of the campus community. Further examination of diversity statements and diversity contributions may provide considerable insights into how diversity is conceptualized and rewarded within each institution. As such, the implications of the current study apply both to diversity contribution and diversity work more broadly.

# **Practical implications**

Faculty members who commit their time and resources to service, scholarship, teaching, and efforts toward diversity should have the same opportunity to achieve respect, recognition, and standing in the academy that faculty involved in other scholarly work are afforded.

Unfortunately, promotion and tenure systems consistently show that faculty who emphasize research over teaching and service receive higher salaries and accrue greater prestige (Fairweather, 2005).

Our analyses of the ERLs paint a somewhat similar picture, such that faculty who dedicate effort to diversity, equity, and inclusion are not rewarded for their efforts, with the exception of Asian candidates. All candidate racial groups, apart from Asian faculty, were penalized through unfavorable voting outcomes in the promotion and/or tenure process. The differences among Asian and non-Asian faculty members in terms of outcomes are demonstrated in previous work that examined racial differences in tenure, salary, and rank. Specifically, Perna et al (2000) found that Asian/Pacific Islander faculty generally had higher salaries and were more likely to be tenured and to be full professors than White, Black, or Hispanic faculty.

Our findings further demonstrate that the fairness and objectivity of external evaluations of promotion candidates may be largely influenced by letter writer perceptions and biases. One of the shortcomings of the use of ERLs within the tenure and promotion process is a lack of structure in how they are solicited. To add structure to the solicitation process, questions that

map onto specific competencies, skills, and knowledge should be considered to improve the validity and the strength of the relationship observed between the ERLs and performance metrics. The relationship between structure and improved validity is found consistently for interviews, particularly with structured interviews having greater validity than unstructured interviews (Campion, 1994). Thus, universities may improve the validity for ERLs through formal policies such as adding the requirement for diversity statements or through promotion and/or tenure committee training as a mechanism to standardize the rating process.

#### **Limitations and Future Research**

The current study leveraged a large, multi-institution data and ERLs, one of the most influential components in the promotion and tenure process that assess faculty promotability and potential within the academy. We derived results from three universities to reveal that ERL linguistic features, specifically DEI-related language, predict promotion and tenure decisions. Given our relatively small sample of underrepresented minority faculty within each institution, we recommend extending our research around promotion and/or tenure processes to generate a larger multi-institutional dataset to replicate and extend our findings.

Diversity-related language within external review letters was included as a proxy for faculty diversity contribution in this study. This is another limitation because the diversity dictionary we created that was processed through LIWC does not differentiate between the letter writer's description of the candidate's diversity-related attributions or characteristics and actual diversity contributions. Therefore, it is possible that candidates' characteristics are responsible for some of the systematic differences that were found since the dictionary does not directly focus on diversity-related service. For example, DEI-related language in ERLs for Hispanic faculty may reflect the letter writer's descriptions of the faculty's demographic background as

opposed to the candidate's experiences with furthering diversity initiatives. To address this limitation, future work should examine the words used to describe faculty and correlate them to actual DEI-related services and contributions. Another opportunity for future research is to examine the effect of institutional policies and practices on actual faculty diversity contributions and its subsequent influence on voting outcomes within the promotion and/or tenure process.

Future research should also consider ERL letter writer characteristics as it relates to the linguistic features of ERLs. Literature on language use (e.g., Pennebaket et al., 2003) suggest that the linguistic feature of written language being a function of the writer rather than the person being described is higher for ERLs than for other forms of evaluative language (e.g., performance appraisal, letter of recommendation) because, in the absence of interpersonal interaction between the letter writer and candidate, letter writer characteristics such as gender, age, and personality is likely to be influential in the language used. The interaction between letter writer and candidate characteristics should also be considered in future work. Specifically, does a match in demographic characteristics between the letter writer and candidate influence the type of language used in ERLs? Lastly, our investigation of diversity contribution does not extend past an academic context. Future research might examine the impact of diversity-related competencies and experiences in other industries (e.g., sports, law, etc.) and its effect on personnel decisions.

#### Conclusion

The implications of the current study on linguistic expressions within the external review are particularly important because of its ubiquitous use in the tenure and promotion process (Johnson et al., 1998). It is with caution that we suggest the way in which diversity contributions within external reviews are evaluated for promotion candidates is potentially flawed and not as

objective as we presume them to be, especially considering our findings that suggest candidates' involvement in diversity led to unfavorable career outcomes. As such, we recommend faculty members, administrators, and decision-makers modify the reward systems in place within their institutions to support and adequately acknowledge and reward DEI engagement. Furthermore, to improve the validity of external review letters, institutions must make a concerted effort to educate committee members and letter writers on various biases, assumptions, and stereotypes that influence their perceptions, judgements, and decisions.

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**Appendix A.** Diversity, equity, and inclusion dictionary

ability	diversity	indigenous	performative
ableism	egalitarian	institutional racism	person of color
advocate	emotional tax	intergroup	power to voice
african american	equality	intersectionality	prejudice
aging	equity	justice	privilege
ally	ethnic	latin*	promotion
appreciation of			
differences	ethnicity	legacy	pronouns
asian	euro-centric	lesbian	queer
background	expand pool	LGBT	race
belonging	fair	LGBTQ	racial
bias	fairness	LGBTQA+	racis*
big tent	favor	LGBTQIA+	salary
bipoc	female	marginalized	sex
black	feminis*	microaggression	sexism
		minoritized	
chican*	feminism	underrepresented	sexual orientation
cisgender	gaslighting	minority	social justice
coalition	gay	multicultural	stereotype
color	gender	multi-racial	systematic bias
colorblind	gender bending	neurodiversity	systemic racism
colorism	gender identity	neurodiversity	transgender
community	gender neutral	non-binary	twice-exceptional
critical race theory	gender non-confirming	non-conforming	unconscious bias
culture	heterosexism	non-white	under represented
culture	heterosexual	norms	under-representation
denial	hispanic	old	undocumented
disabilities	homosexual	older	white privilege
disability	human rights	opportunities	women
discriminat*	identity	oppression	work-family balance

**Table 1.** Mean, standard deviation, and correlation for level 1 and level 2 variables

	M(SD)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. DEI	0.21 (0.41)	1															
2. University code	2.42	0.027	1														
3. CIP code	28.55 (16.57)	.124*	.134*	1													
4. h-index	15.87 (10.09)	160*	103*	100*	1												
5.Candidate ethnicity	1.56 (0.92)	.125*	.024*	.044*	138*	1											
6.Candidate gender	1.34 (0.47)	.208*	044*	031*	042*	-0.014	1										
7.Department negative vote percentage	0.08 (0.19)	-0.011	-0.02	099*	.056*	037*	.053*	1									
8.College committee negative vote percentage	0.09 (0.24)	0.001	038*	036*	0.018	-0.019	.096*	.586*	1								
9.University committee negative vote percentage	0.07 (0.22)	-0.05	-0.008	075*	-0.026	0.017	.123*	.710*	.611*	1							
10.Department unanimous vote	0.64 (0.48)	109*	-0.012	.036*	046*	-0.014	063*	551*	318*	161*	1						

11.College committee unanimous vote	0.73 (0.44)	0.005	.069*	.115*	0.011	-0.007	067*	414*	682*	271*	.304*	1					
12.University committee unanimous vote	0.71 (0.45)	.114*	-0.026	-0.004	.115*	057*	-0.046	331*	271*	511*	0.049	.165*	1				
13.Department positive vote	0.94 (0.24)	.033*	.033*	.083*	033*	0.019	-0.022	861*	553*	672*	.340*	.377*	.266*	1			
14.College committee positive vote	0.91 (0.29)	-0.003	.035*	-0.004	-0.017	.028*	067*	529*	914	629*	.259*	.534*	.234*	.531*	1		
15.University committee positive vote	0.93 (0.25)	0.05	0.004	.099*	0.021	-0.019	087*	699*	524*	94*	.154*	.229*	.427*	.677*	.565*	1	
16.Provost votes	0.95 (0.22)	.037*	0.017	.088*	0.022	.031*	085*	440*	526*	690*	.205*	.321*	.326*	.372*	.458*	.604*	1

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

 Table 2.

 Summary Multilevel Analyses for Race and Gender Predicting DEI language

Outcomes	Estimate	S.E.	<i>p</i> -value
Asian candidates	-4.433e-02	1.923e-02	.02
Hispanic candidates	.09	.04	.03
Black candidates	5.390e-01	5.845e-02	<.001
Women candidates	9.735e-02	2.425e-02	<.001

Table 3.

Summary Regression Analyses for DEI Language Predicting Promotion and/or Tenure Outcomes

DEI Language

		DEI La	nguage		
Outcomes	В	S.E.	<i>p</i> -value	R2	F
Dept negative vote %	.01	.01	.43	.03	18.72
College negative vote %	01	.01	.63	.02	10.83
University negative vote %	.05***	.01	<.001	.06	9.36
Dept unanimous vote (abstentions included)	12***	.03	<.001	.01	7.99
College unanimous vote (abstentions included)	.04	.02	.12	.05	27.26
University unanimous vote (abstentions included)	.03	.05	.52	.07	10.83
Dept positive vote	01	.01	.66	.03	17.19
College positive vote	.01	.02	.71	.02	10.15
University positive vote	05*	.02	.01	.03	5.23
Provost vote	01	.01	.59	.02	9.43

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 4.**Summary Regression Analyses for DEI Language Predicting Negative Voting % with Race as a Moderator (White as reference group)

	Departme	Department Negative Voting %			Negative Vo	oting %	University Negative Voting %			
	b	S.E.	t	b	S.E.	t	b	S.E.	t	
Intercept	.13***	.02	6.47	.15***	.02	6.07	36***	.08	-4.30	
DEI	.02	.02	1.34	01	.02	73	.01	.02	.68	
Hispanic candidat e	.10***	.02	6.30	07**	.02	3.07	.03	.04	.82	
Asian candidat e	.05***	.01	6.17	.05***	.01	4.36	007	.01	49	
Black candidat e	01	.02	52	003	.03	11	.10**	.03	3.24	
DEI x Hispanic	02	.04	61	.14**	.05	2.92	12	.10	-1.33	
DEI x Asian	05	.03	-1.82	07	.04	-1.78	02	.06	27	
DEI x Black	.003	.02	.13	.03	.03	.85	.11**	.03	3.17	

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 5.**Summary Regression Analyses for DEI Language Predicting Unanimous Votes with Race as a Moderator (White as reference group)

	Departme	Department Unanimous Votes			Jnanimous	Votes	University Unanimous Votes			
	b	S.E.	t	b	S.E.	t	b	S.E.	t	
Intercept	.87***	.05	17.54	.51***	.04	11.39	1.44***	.28	5.18	
DEI	11**	.04	-2.70	.05	.05	1.34	.13*	.06	2.10	
Hispanic candidat e	15***	.04	-3.59	11**	.04	-2.93	50***	.14	-3.58	
Asian candidat e	05*	.02	-2.54	10***	.02	-5.52	.09	.05	1.93	
Black candidat e	.09	.05	1.79	04	.05	73	.07	.10	.70	
DEI x Hispanic	.25*	.10	2.56	17	.09	-1.95	.53	.31	1.71	
DEI x Asian	.06	.08	.82	.10	.07	1.45	.10	.21	.49	
DEI x Black	15*	.06	-2.35	04	.06	72	31**	.12	-2.71	

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 6.**Summary Regression Analyses for DEI Language Positive Votes with Race as a Moderator (White as reference group)

	Departme	Department Positive Votes			Positive Vot	tes	University Positive Votes			
	b	S.E.	t	b	S.E.	t	b	S.E.	t	
Intercept	.85***	.02	34.14	.83***	.03	28.17	1.18***	.11	10.63	
DEI	01	.02	42	.01	.02	.30	03	.02	-1.44	
Hispanic candidat e	07**	.02	-2.90	04	.03	-1.50	.02	.06	.28	
Asian candidat e	05***	.01	-4.57	.04***	.01	-3.40	01	.02	67	
Black candidat e	.03	.03	1.02	01	.03	18	07	.04	-1.69	
DEI x Hispanic	07	.05	-1.41	19**	.06	-3.22	.07	.12	.58	
DEI x Asian	.04	.04	1.05	.09	.05	1.90	.06	.08	.71	
DEI x Black	01	.03	44	0002	.04	004	04	.05	80	

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 7.**Summary Regression Analyses for DEI Language on Provost Votes with Race as a Moderator (White as reference group)
Provost Votes

	1101050 10	tes	
	b	S.E.	t
Intercept	.94***	.02	46.96
DEI	.03	.02	1.50
Hispanic candidate	.005	.02	.28
Asian candidate	02*	.01	-2.27
Black candidate	01	.02	39
DEI x Hispanic	21***	.04	-5.05
DEI x Asian	.004	.03	.12
DEI x Black	04	.03	-1.34

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 8.**Summary Regression Analyses for DEI Language Predicting Negative Voting % with Gender as a Moderator

	Departme	Department Negative Voting %			Negative Vo	oting %	University Negative Voting %			
	b	S.E.	t	b	S.E.	t	b	S.E.	t	
Intercept	.17***	.02	8.63	.18***	.02	7.30	12	.08	-1.53	
DEI	.005	.01	.32	.01	.02	.26	.04*	.02	2.24	
Women candidat e	01	.01	-1.85	01	.01	85	02	.01	-1.48	
DEI x Gender	.01	.02	.53	02	.03	59	.03	.03	.95	

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 9.**Summary Regression Analyses for DEI Language Predicting Unanimous Votes with Gender as a Moderator

	Department Unanimous Votes			College U	Jnanimous	Votes	University Unanimous Votes			
	b	S.E.	t	b	S.E.	t	b	S.E.	t	
Intercept	.86***	.05	17.51	.46***	.04	10.46	1.39***	.26	5.36	
DEI	13***	.04	-3.62	03	.04	85	.14*	.06	2.29	
Women candidat e	08***	.02	-4.01	03	.02	-1.52	01	.05	26	
DEI x Gender	.06	.05	1.15	.12*	.05	2.53	27**	.10	-2.76	

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 10.**Summary Regression Analyses for DEI Language Positive Votes with Gender as a Moderator

	Departme	Department Positive Votes			Positive Vot	tes	University Positive Votes			
	b	S.E.	t	b	S.E.	t	b	S.E.	t	
Intercept	.81***	.02	33.12	.80***	.03	27.56	.95***	.10	9.36	
DEI	001	.02	03	01	.02	40	08**	.02	-3.25	
Women candidat e	.04***	.01	3.56	.02	.01	1.90	01	.02	44	
DEI x Women	02	.03	82	.02	.03	.53	.08*	.04	2.11	

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 11.**Summary Regression Analyses for DEI Language on Provost Votes with Gender as a Moderator Provost Votes

	b	S.E.	t
Intercept	.93***	.02	46.56
DEI	02	.02	-1.21
Women candidate	.02	.01	1.92
DEI x Women	.02	.02	.78

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 12.**Summary Estimated Marginal Means for DEI Language on College Committee Negative Voting Outcome with Race as a Moderator (Hispanic candidates)

(Thispanic Canarate			95% CI for Mean Difference		
DEI Language	Candidate Race	Marginal Mean	Lower	Upper	SE
1 SD Below the Mean	White	.09	.06	.13	.02
Mean	White	.08	.05	.11	.01
1 SD Above the Mean	White	.07	.04	.10	.01
1 SD Below the Mean	Hispanic	.13	.07	.20	.03
Mean	Hispanic	.18	.13	.22	.02
1 SD Above the Mean	Hispanic	.22	.16	.28	.03

**Table 13.**Summary Simple Slopes Model for DEI Language on College Committee Negative Voting Outcome with Race as a Moderator (Hispanic candidates)

			95% CI for Mean Difference	
Candidate Race	b	SE	Lower	Upper
White	03	.02	08	.01
Hispanic	.11	.05	.004	.21
Simple Slope Difference	e b	SE	T	p
	14	.05	-2,92	.004

**Table 14.**Summary Estimated Marginal Means for DEI Language on University Committee Negative Voting Outcome with Race as a Moderator (Black candidates)

Moderator (Brack et	,		95% CI for Mean Difference		
DEI Language	Candidate Race	Marginal Mean	Lower	Upper	SE
1 SD Below the Mean	White	.06	.003	.12	.03
Mean	White	.04	.007	.07	.02
1 SD Above the Mean	White	.01	03	.06	.02
1 SD Below the Mean	Black	.14	.05	.23	.05
Mean	Black	.16	.10	.23	.03
1 SD Above the Mean	Black	.18	.11	.25	.04

**Table 15.**Summary Simple Slopes Model for DEI Language on University Committee Negative Voting Outcome with Race as a Moderator (Black candidates)

			95% CI fo	95% CI for Mean Difference	
Candidate Race	b	SE	Lower	Upper	
White	06	.06	17	.05	
Black	.05	.06	08	.18	
Simple Slope Differer	nce b	SE	T	p	
	11	.03	-3.17	.002	

**Table 16.**Summary Estimated Marginal Means for DEI Language on Department Unanimous Voting Outcome with Race as a Moderator (Black candidates)

<u>eandidates)</u>			95% CI for Mean Difference		
DEI Language	Candidate Race	Marginal Mean	Lower	Upper	SE
1 SD Below the Mean	White	.55	.48	.61	.03
Mean	White	.56	.52	.61	.02
1 SD Above the Mean	White	.58	.52	.65	.03
1 SD Below the Mean	Black	.67	.53	.80	.07
Mean	Black	.63	.52	.73	.05
1 SD Above the Mean	Black	.59	.48	.70	.06

Table 17.
Summary Simple Slopes Model Means for DEI Language on Department Unanimous Voting Outcome with Race as a Moderator (Black candidates)

			95% CI for Mean Difference		
Candidate Race	b	SE	Lower	Upper	
White	.05	.06	06	.16	
Black	10	.07	26	.06	
Simple Slope Difference	, b	SE	T	p	
	.15	.06	2.35	.02	

**Table 18.**Summary Estimated Marginal Means for DEI Language on Department Unanimous Voting Outcome with Race as a Moderator (Hispanic candidates)

(Thispanic canadate)	,		95% CI for Mean Difference		
DEI Language	Candidate Race	Marginal Mean	Lower	Upper	SE
1 SD Below the Mean	White	.71	.64	.77	.03
Mean	White	.65	.59	.70	.03
1 SD Above the Mean	White	.59	.53	.64	.03
1 SD Below the Mean	Hispanic	.51	.38	.63	.07
Mean	Hispanic	.55	.46	.64	.05
1 SD Above the Mean	Hispanic	.59	.47	.70	.06

**Table 19.**Summary Simple Slopes Model Means for DEI Language on Department Unanimous Voting Outcome with Race as a Moderator (Hispanic candidates)

			95% CI for Mean Difference		
Candidate Race	b	SE	Lower	Upper	
White	15	.04	23	07	
Hispanic	.10	.11	11	.30	
Simple Slope Difference	e b	SE	T	p	
	25	.10	-2.56	.01	

**Table 20.**Summary Estimated Marginal Means for DEI Language on University Committee Unanimous Voting Outcome with Race as a Moderator (Black candidates)

	,		95% CI for Mean Difference		
DEI Language	Candidate Race	Marginal Mean	Lower	Upper	SE
1 SD Below the Mean	White	.34	.14	.53	.10
Mean	White	.52	.41	.62	.05
1 SD Above the Mean	White	.70	.54	.86	.08
1 SD Below the Mean	Black	.47	.17	.78	.16
Mean	Black	.52	.31	.73	.11
1 SD Above the Mean	Black	.58	.34	.81	.12

**Table 21.**Summary Simple Slopes Model for DEI Language on University Committee Unanimous Voting Outcome with Race as a Moderator (Black candidates)

			95% CI fo	for Mean Difference	
Candidate Race	b	SE	Lower	Upper	
White	.44	.18	.08	.80	
Black	.13	.22	30	.55	
Simple Slope Difference	b	SE	T	p	
	.31	.12	2.7	.01	

**Table 22.**Summary Estimated Marginal Means for DEI Language on College Committee Positive Voting Outcome with Race as a Moderator (Hispanic candidates)

(Trispanie canarates)			95% CI for Mean Difference		
DEI Language	Candidate Race	Marginal Mean	Lower	Upper	SE
1 SD Below the Mean	White	.90	.87	.94	.02
Mean	White	.93	.89	.96	.02
1 SD Above the Mean	White	.95	.91	.98	.02
1 SD Below the Mean	Hispanic	.90	.83	.98	04
Mean	Hispanic	.85	.79	.90	.03
1 SD Above the Mean	Hispanic	.79	.72	.86	.04

**Table 23.**Summary Simple Slopes Model for DEI Language on College Committee Positive Voting Outcome with Race as a Moderator (Hispanic candidates)

			95% CI for Mean Difference			
Candidate Race	b	SE	Lower	Upper		
White	.05	.03	.001	.10		
Hispanic	14	.06	26	01		
Simple Slope Difference	b	SE	T	p		
	.19	.06	3.22	.001		

Table 24.

<u>Summary Estimated Marginal Means for DEI Language on Provost Vote with Race as a Moderator</u> (Hispanic candidates)

95% CI for Mean Difference

DEI Language	Candidate Race	Marginal Mean	Lower	Upper	SE
1 SD Below the Mean	White	.95	.92	.98	.01
Mean	White	.96	.94	.98	.01
1 SD Above the Mean	White	.96	.94	.98	.01
1 SD Below the Mean	Hispanic	.03	.95	1.05	.03
Mean	Hispanic	.02	.88	.95	.02
1 SD Above the Mean	Hispanic	.84	.79	.89	.03

Table 25.

Summary Simple Slopes Model for DEI Language on Provost Vote with Race as a Moderator (Hispanic candidates)

95% CI for Mean Difference

Candidate Race	b	SE	Lower	Upper
White	.01	.02	03	.05
Hispanic	20	.05	29	11
Simple Slope Difference	b	SE	T	p
	.21	.04	5.05	<.001

**Table 26.**Summary Regression Analyses for DEI Language Predicting Negative Voting % with Race as a Moderator (Asian Candidate vs. White Candidate)

	Department Negative Voting %			College N	legative Vo	ting %	University Negative Voting %		
	b	S.E.	t	b	S.E.	t	b	S.E.	t
Intercept	.19***	.02	8.65	.22***	.03	8.11	20*	.08	-2.39
DEI	003	.02	20	001	.02	04	.10***	.02	3.99
Asian candidat e	005	.01	37	03	.02	-1.57	02	.02	-1.05
White candidat e	06***	.01	-4.45	08***	.02	-4.80	02	.02	79
DEI x Asian	03	.03	-1.02	08*	.04	-2.08	1	.07	-1.5
DEI x White	.03	.02	1.18	006	.03	21	08**	.03	-2.61

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 27.**Summary Regression Analyses for DEI Language Predicting Unanimous Votes with Race as a Moderator (Asian Candidate vs. White Candidate)

	Department Unanimous Votes			College Unanimous Votes			Universit	University Unanimous Votes		
	b	S.E.	t	b	S.E.	t	b	S.E.	t	
Intercept	.80***	.06	14.53	.40***	.05	8.00	1.23***	.28	4.48	
DEI	12**	.04	-2.98	.02	.04	.43	07	.08	88	
Asian candidat e	.003	.03	.09	.003	.03	.11	.12	.08	1.59	
White candidat e	.06	.03	1.92	.11	.03	3.84	.01	.07	.20	
DEI x Asian	.07	.08	.93	.13	.07	1.85	.29	.22	1.34	
DEI x White	01	.06	10	.02	.05	.44	.22*	.10	2.1	

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\* indicates p < .001.

**Table 28.**Summary Regression Analyses for DEI Language Positive Votes with Race as a Moderator (Asian Candidate vs. White Candidate)

	Department Positive Votes			College Positive Votes			University Positive Votes		
	b	S.E.	t	b	S.E.	t	b	S.E.	t
Intercept	.81***	.03	29.53	.76***	.03	23.30	1.09***	.11	10.04
DEI	01	.02	60	.004	.03	.14	06*	.03	-2.02
Asian candidat e	02	.02	93	.03	.02	1.26	01	.03	24
White candidat e	.03*	.02	2.04	.07	.02	3.85	.01	.03	.25
DEI x Asian	.04	.04	1.14	.09	.05	1.93	.09	.09	1.02
DEI x White	.003	.03	.11	01	.03	16	.02	.04	.61

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\* indicates p < .001.

**Table 29.**Summary Regression Analyses for DEI Language Provost Votes with Race as a Moderator (Asian Candidate vs. White Candidate)
Provost Votes

	b	S.E.	t				
Intercept	.93***	.02	40.51				
DEI	04*	.02	-2.42				
Asian candidate	01	.02	59				
White candidate	.01	.01	.88				
DEI x Asian	.08*	.03	2.18				
DEI x White	.07**	.03	2.79				

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

Table 30.

Summary Regression Analyses for DEI Language Predicting Negative Voting % with Race as a Moderator (All groups combined)

	Department Negative Voting %			College Negative Voting %			University Negative Voting %		
	b	S.E.	t	b	S.E.	t	b	S.E.	t
Intercept	.10*	.04	2.55	.42***	.05	7.89	37***	.09	-4.18
DEI	.01	.06	.11	24**	.08	-2.88	.005	.05	.12
Hispanic candidat e	.13**	.06	.11	20***	.05	-3.97	.05	.05	.90
Asian candidat e	.07*	.04	1.97	22***	.05	-4.66	.004	.03	.14
Black candidat e	.01	.04	.24	27***	.05	-5.07	.11**	.04	2.65
White candidat e	.02	.04	.58	27***	.05	-5.75	.01	.03	.38
DEI x Hispanic	01	.07	13	.36***	.09	3.91	12	.10	-1.13
DEI x Asian	04	.07	61	.15	.09	1.76	01	.08	15
DEI x Black	.02	.06	.27	.25**	.09	2.90	.12*	.05	2.13

DEI x .02 .06 .25 **.23\*\*** .08 2.72 .01 .05 .17 White

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\* indicates p < .001.

Table 31.
Summary Regression Analyses for DEI Language Predicting Unanimous Votes with Race as a Moderator (All groups combined)

	Department Unanimous Votes			College Unanimous Votes			University Unanimous Votes		
	b	S.E.	t	b	S.E.	t	b	S.E.	t
Intercept	.66***	.11	6.25	.28***	.10	2.9	1.56***	.30	5.28
DEI	.18	.16	1,15	.26	.15	1.73	02	.15	16
Hispanic candidat e	.06	.10	.60	.10	.09	1.11	62***	.17	-3.63
Asian candidat e	.16	.09	1.72	.11	.09	1.29	02	.11	21
Black candidat e	.31**	.10	2.94	.18	.10	1.87	04	.14	31
White candidat e	.22*	.09	2.37	.22*	.09	2.55	13	.10	-1.22
DEI x Hispanic	04	.18	23	29*	.17	-2.26	.68*	.34	1.99
DEI x Asian	23	.17	-1.32	11	.16	70	.25	.25	1.00
DEI x Black	44*	.16	-2.65	25	.16	-1.62	16	.18	90

DEI x -.30 .16 -1.87 -.22 .15 -1.43 .17 .17 1.04 White

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Table 32.**Summary Regression Analyses for DEI Language Positive Votes with Race as a Moderator (All groups combined)

	Department Positive Votes			College Positive Votes			University Positive Votes		
	b	S.E.	t	b	S.E.	t	b	S.E.	t
Intercept	.86***	.05	16.36	.50***	.06	7.75	1.18***	.12	10.03
DEI	01	.08	15	.28**	.10	2.80	01	.06	19
Hispanic candidat e	07	.05	-1.42	.28***	.06	4.59	.01	.07	.21
Asian candidat e	06	.05	-1.24	.28***	.06	4.84	01	.04	33
Black candidat e	.02	.05	.34	.32***	.06	4.90	07	.06	-1.26
White candidat e	01	.05	20	.33***	.06	5.72	001	.04	-1.26
DEI x Hispanic	06	.09	72	46***	.11	-4.09	.05	.14	.35
DEI x Asian	.04	.09	.52	18	.11	-1.73	.04	.10	.37
DEI x Black	01	.08	12	27**	.10	-2.61	06	.07	82

DEI x .003 .08 .04 **-.28**\*\* .10 -2.75 -.03 .07 -.41 White

<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

Table 33.

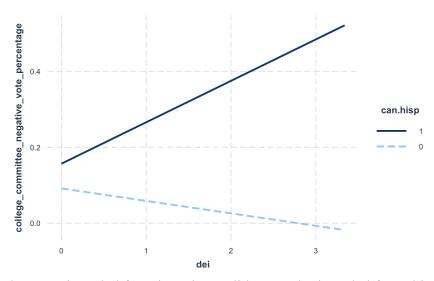
Summary Regression Analyses for DEI Language on Provost Vote with Race as a Moderator (All groups combined)

Provost Vote

	Provost v	ole	
	b	S.E.	t
Intercept	.94***	.02	46.96
DEI	.03	.02	1.50
Hispanic candidate	.005	.02	.28
Asian candidate	02*	.01	-2.27
Black candidate	01	.02	39
White candidate	NA	NA	NA
DEI x Hispanic	21***	.04	-5.05
DEI x Asian	.004	.03	.12
DEI x Black	04	.03	-1.34
DEI x White	NA	NA	NA

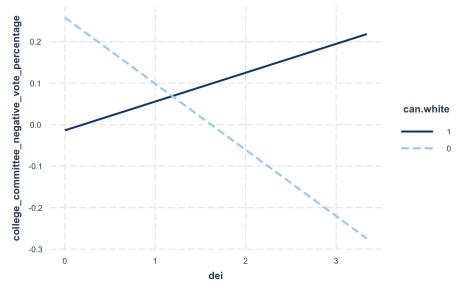
<sup>\*</sup> indicates p < .05.\*\* indicates p < .01. \*\*\*indicates p < .001.

**Figure 1.**Interaction Effect for DEI Language on College Committee Negative Votes with Race as a Moderator (Hispanic Candidates vs. White Candidates)



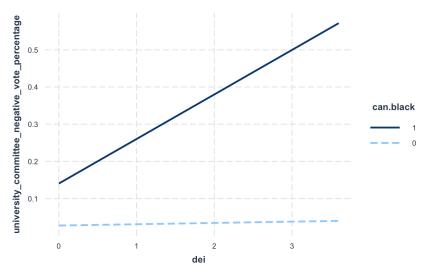
<sup>\*</sup>Note. 1 is coded for Hispanic candidates and 0 is coded for White candidates.

**Figure 2.**Interaction Effect for DEI Language on College Committee Negative Votes with Race as a Moderator (White Candidates vs. All)



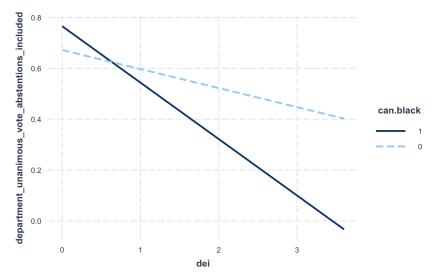
<sup>\*</sup>Note. 1 is coded for White candidates and 0 is coded for non-White candidates.

**Figure 3.**Interaction Effect for DEI Language on University Committee Negative Votes with Race as a Moderator (Black Candidates vs. White Candidates)



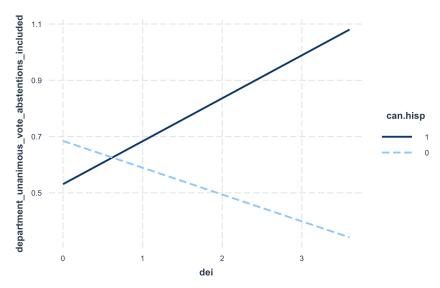
<sup>\*</sup>Note. 1 is coded for Black candidates and 0 is coded for White candidates.

**Figure 4.**Interaction Effect for DEI Language on Department Unanimous Votes with Race as a Moderator (Black Candidates vs. White Candidates)



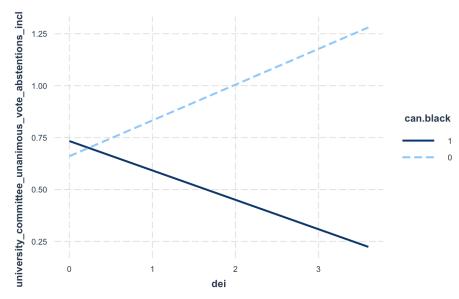
<sup>\*</sup>Note. 1 is coded for Black candidates and 0 is coded for White candidates.

Figure 5.
Interaction Effect for DEI Language on Department Unanimous Votes with Race as a Moderator (Hispanic Candidates vs. White Candidates)



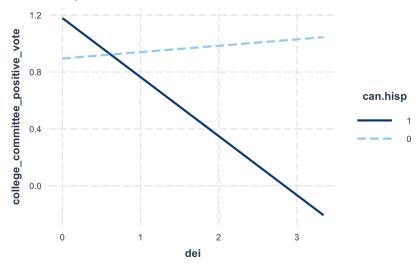
<sup>\*</sup>Note. 1 is coded for Hispanic candidates and 0 is coded for White candidates.

**Figure 6.**Interaction Effect for DEI Language on University Committee Unanimous Votes with Race as a Moderator (Black Candidates vs. White Candidates)



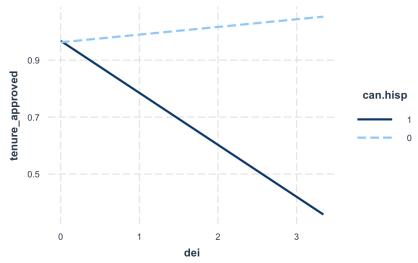
<sup>\*</sup>Note. 1 is coded for Black candidates and 0 is coded for White candidates.

**Figure 7.**Interaction Effect for DEI Language on College Committee Positive Votes with Race as a Moderator (Hispanic Candidates vs. White Candidates)



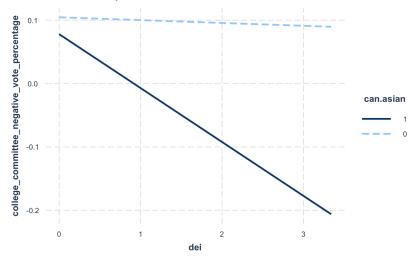
<sup>\*</sup>Note. 1 is coded for Hispanic candidates and 0 is coded for White candidates.

**Figure 8.**Interaction Effect for DEI Language on Provost Vote with Race as a Moderator (Hispanic Candidates vs. White Candidates)



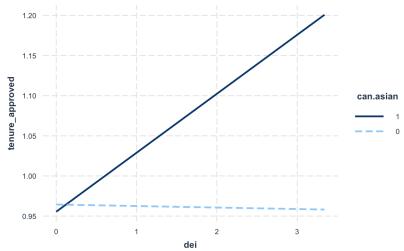
<sup>\*</sup>Note. 1 is coded for Hispanic candidates and 0 is coded for White candidates.

**Figure 9.**Interaction Effect for DEI Language on College Committee Negative Voting Outcome with Race as a Moderator (Asian candidates vs. White candidates)



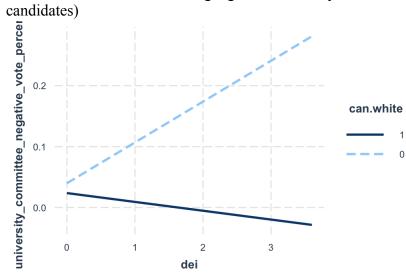
<sup>\*</sup>Note.1 is coded for Asian candidates and 0 is coded for White candidates.

**Figure 10.** Interaction Effect for DEI Language on Provost Vote with Race as a Moderator (Asian candidates vs. White candidates)



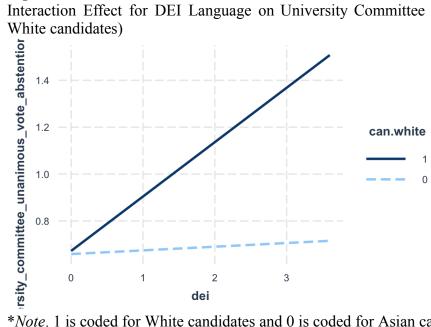
<sup>\*</sup>Note. 1 is coded for Asian candidates and 0 is coded for White candidates.

**Figure 11.**Interaction Effect for DEI Language on University Committee Negative Votes with Race as a Moderator (Asian candidates vs. White candidates)

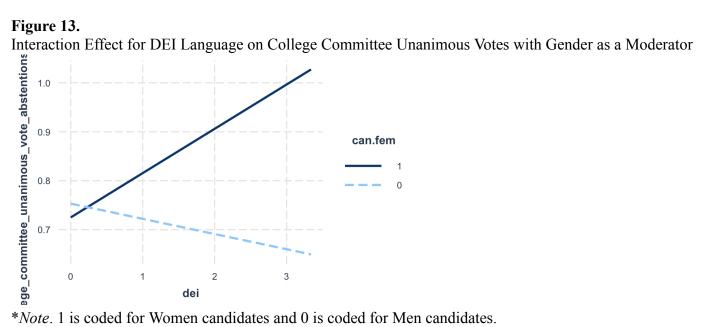


<sup>\*</sup>Note. 1 is coded for White candidate and 0 is coded for Asian candidates.

Figure 12. Interaction Effect for DEI Language on University Committee Unanimous Votes with Race as a Moderator (Asian candidates vs.

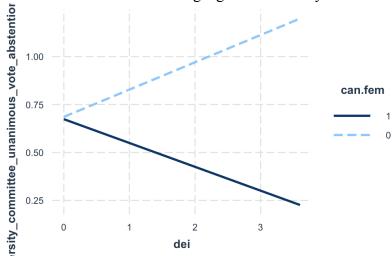


<sup>\*</sup>Note. 1 is coded for White candidates and 0 is coded for Asian candidates.



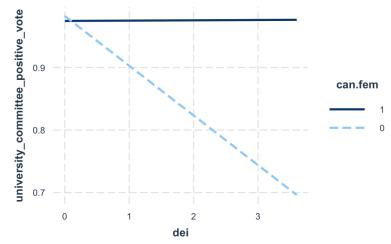
<sup>\*</sup>Note. 1 is coded for Women candidates and 0 is coded for Men candidates.

**Figure 14.** Interaction Effect for DEI Language on University Committee Unanimous Votes with Gender as a Moderator



<sup>\*</sup>Note. 1 is coded for Women candidates and 0 is coded for Men candidates.

**Figure 15.** Interaction Effect for DEI Language on University Committee Positive Votes with Gender as a Moderator



<sup>\*</sup>Note. 1 is coded for Women candidates and 0 is coded for Men candidates.