Corporate Diversity Statements and Employees' Online DEI Ratings: An Unsupervised Machine-Learning Text-Mining Analysis

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Abstract

Following the deaths of many Black Americans in spring 2020, public consciousness rose around the societal mega-threat of racism. In response, many organizations released public statements to condemn racism and affirm their stance on diversity, equity, and inclusion (DEI). However, little is known about the specific thematic contents covered in such diversity statements and their implications on important organizational outcomes. Taking both inductive and deductive approaches, we conducted two studies to advance our understanding in this area. Study 1 employed structural topic modeling (STM)—an advanced unsupervised machine-learning text-mining technique—and comprehensively analyzed the latent semantic topics underlying the diversity statements publicly released by Fortune 1000 companies in late May and early June 2020. The results uncovered six underlying latent semantic topics: (1) *general DEI terms*, (2) *supporting Black community*, (3) *acknowledging Black community*, (4) *committing to diversifying the workforce*, (5) *miscellaneous words*, and (6) *titles and companies*. Furthermore, drawing from the identity-blindness and identity-consciousness theoretical frameworks and leveraging millions of data points of employees' DEI ratings retrieved from Glassdoor.com, Study 2 further tested and supported hypotheses that companies were more positively rated by their employees on organizational diversity and inclusion if they (1) released (vs. did not release) diversity statements and (2) emphasized identity-conscious (vs. identity-blind) topics in their diversity statements. Our findings shed light on important theoretical implications for the current research and offer practical recommendations for organizational scientists and practitioners in diversity management.

On February 23, 2020, a 25-year-old unarmed Black man, Ahmaud Arbery, was shot and killed by two people claiming to make a "citizen's arrest" (Fausset, 2020). Within the next 3 months, the murders of Breonna Taylor and George Floyd at the hands of police officers sent shockwaves through the USA (Cave et al., 2020; Oppel et al., 2021). These incidents exacerbated deeply entrenched racial tensions throughout the country. Nationwide protests and social media campaigns demanded accountability of those responsible and galvanized people to acknowledge the existence of systemic racism against Black Americans and its devastating consequences (Cave et al., 2020).

Indeed, the senseless deaths of Black Americans at the hands of law enforcement have reignited calls and movements for social justice across the globe. During this time, scholars across disciplines have sought to make sense of these sweeping events and their potential consequences. To better conceptualize such phenomena, Leigh and Melwani (2019) extended the construct of social mega-events (Tilcsik & Marquis, 2013) and proposed the concept of a *mega-threat*: a negative, large-scale, diversity-related episode that receives significant media attention, which occurs when an individual or group is targeted, attacked, or harmed because of their social identity group, and that event is then highly publicized (Leigh & Melwani, 2019).

Although there exist many forms of mega-threats in recent history, the current research specifically focuses on

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the mega-threat of racism as it is a large-scale phenomenon involving intergroup and inter-racial behaviors that have direct important theoretical and practical implications for organizational research. Within this nascent area of the research of mega-threats of racism, scholars have predominantly focused on the intra-psychic and group effects of mega-threats. For example, group members, who identify with the targeted social group, may experience cognitions and emotions that change the relationship between their identities and behaviors (Leigh & Melwani, 2019), and Black Americans may suffer vicarious trauma from exposure to police violence (e.g., Anthym & Tuitt, 2019; Boykin et al., 2020). As such, these lines of research suggest that mega-threats have lasting effects on individuals and groups.

Despite these important findings and theoretical advancements, however, little research has systematically explored how *organizations* respond to the mega-threat of racism or examined the corresponding implications for organizational outcomes. Indeed, following the mega-threat of racism in 2020, many organizations released diversity statements (aka "DEI statements"), designed to denounce racism and affirm their stance on values of diversity, equity, and inclusion (DEI). Scholars have previously examined how these public-facing messages are presented, as well as how they impact their public image and particular groups (e.g., Kaiser et al., 2013; Leslie, 2019; Nishii et al., 2018). However, to our knowledge, none of these lines of inquiry have examined diversity statements as a response to acute societal events, such as the mega-threat of racism.

This gap in the literature deserves closer inspection for several reasons. Under normal circumstances, organizational diversity statements may fly under the radar, alongside other public-facing communications. However, mega-threats represent potential sea changes within society, which consequently amplify the importance of these diversity statements. Indeed, the mega-threat of racism can influence how organizations perceive and brand themselves, communicate with their stakeholders, and ultimately conduct human resource management and business. Such a situation thus compels organizations to develop their diversity statements carefully, given higher stakes than ever before. Therefore, we are interested in how these highly visible corporate messages are characterized and perceived during tumultuous times.

In addition, as these corporate missives provide a fundamentally different type of organizational data with which to study long-standing issues of racism, thus, this wave of releasing corporate diversity statements has inherently created a novel opportunity for organizational research with societal impact. However, little is known about the specific content addressed by various diversity statements—particularly, how companies respond to a mega-threat of racism and consequently communicate their views on diversity vis-a-vis statements. More importantly, current literature has yet to explore the potential effects of both releasing (vs. not releasing) a diversity statement and emphasizing certain particular topics within the statement. Indeed, when the mega-threat of racism looms large in the public consciousness, what happens when organizations publicly respond to, or fail to acknowledge, larger societal issues? As such, scientifically analyzing the quantity (release) and quality (content) of diversity statements can help advance both organizational research and practices.

Therefore, the goal of the current research is to systematically examine corporate diversity statements as the most common form of organizational reactions to the mega-threat of racism, as well as the effects related to organizational outcomes, such as employees' perceptions on the organizations. Specifically, we conduct two studies in the current research, taking an inductive and a deductive approach, respectively. In Study 1, we collected and analyzed a massive body of corporate diversity statements publicly released by Fortune 1000 companies in response to the George Floyd protests in late May and early June 2020. We were thus able to investigate: What are the major topics/themes conveyed by these major corporations in their diversity statements responding to the mega-threat of racism? Then, in a follow-up study (Study 2), we drew from a well-established identity-consciousness theoretical framework and leveraged millions of data points of employees' online ratings on diversity and inclusion. We hypothesized and tested whether or not companies that released (vs. did not release) a diversity statement tended to be more favorably rated by their employees on organizational diversity and inclusion and how emphasizing different latent topics in a statement may differentially impact important organizational outcomes.

Across these studies, we make several key contributions to the diversity literature and theoretical advancement. First, we scientifically and systematically assess and identify the latent semantic topics underlying diversity statements, which enables us to better taxonomize how different organizations respond to the mega-threat of racism. This type of characterization provides an empirically based foundation for future research and practice. Second, and relatedly, by novelly applying the identity-conscious (acknowledging group identities) vs. identity-blind (minimization of intergroup differences; Leslie et al., 2020; Plaut et al., 2014) framework to the topics that emerged, we advance our current understanding of how diversity statement composition may provoke differing reactions within stakeholders. Although the identity-conscious vs. identity-blind theoretical framework has been widely used within the DEI literature to describe the nuances of and responses to diversity messaging, it has yet to be applied to systematically characterize different themes within organizations' diversity statements. Thus, the current research expands the theoretical understanding of the dichotomy framework.

Third, we examine how diversity statements may impact organizational stakeholders, specifically employees, in the immediate aftermath of a mega-threat. During a mega-threat of racism, these communications (or lack thereof) can shape employee perceptions, which may then influence their decisions to select into and remain engaged with their organization (Schneider, 1987). To this point, Glassdoor.com's recent addition of "diversity and inclusion" as a new metric of organizational satisfaction reflects its growing importance in the workforce. This study, therefore, examines how organizational treatment of diversity may result in measurable impact through large-scale assessment of unsolicited employee reactions. Thus, we provide scientific evidence in the diversity literature regarding important organizational effects of diversity management and advance the research in this area.

Finally, by investigating how employee ratings may reflect if and how organizations address diversity in their public-facing messages, our research clarifies which diversity messaging topics are positively associated with stakeholder perspectives (e.g., employees' ratings) and, thereby, offers practical recommendations for organizational scientists and practitioners on designing effective DEI communications.

Study 1

In our first study, we utilized unsupervised machine-learning models to text mine and analyze how organizations communicate about DEI topics in response to the mega-threat of racism. Given that this work is motivated by serious social and societal issues, we begin our literature review by outlining the real-life and evidence-based foundations for this research by highlighting the organizational motivations for releasing diversity statements in responding to the mega-threats of racism; then, we discuss the importance of understanding the text topics underlying the diversity statements is critical for organizational research.

Releasing Diversity Statements as an Organizational Response

The mega-threat of racism in current-day society has become unignorable, with many organizations experiencing mounting pressure to respond appropriately (Gupta & Briscoe, 2020) and confirm that they share their stakeholders' values. As a result, organizations have become increasingly motivated to respond through DEI initiatives, particularly by publicly releasing diversity statements—a type of official corporate document that emphasizes diversity-related practices, such as equal opportunity employment and/or values (Leslie, 2019). Such statements often go beyond mentioning affirmative action policies and speak more about how

diversity is valued and managed in the organization, tending to result in more positive attitudes among women and/or racial/ethnic minorities (e.g., Highhouse et al., 2009; McKay & Avery, 2006; Williams & Bauer, 1994). We believe that organizations' motivations to release diversity statements may be well understood through the lenses of impression management theory (Highhouse et al., 2009) and signaling theory (Connelly et al., 2011; Spence, 1973).

Organizations have a vested interest in cultivating a positive social image. Reputation has been thought to enhance many favorable organizational outcomes, including performance (e.g., Cable & Graham, 2000; Dowling, 2002; Fombrun, 1996; Fombrun & Shanley, 1990; Roberts & Dowling, 2002). To this end, impression management theory posits that organizations may engage in strategies in order to earn approval and respect (Highhouse et al., 2009). These tactics, which include advertising, public relations, and social responsiveness (Fombrun & Shanley, 1990), may be used to demonstrate that organizations value more than financial profit. One approach to earning general approval and respect is to release public statements condemning and/or supporting events in the public consciousness. According to signaling theory (Connelly et al., 2011; Spence, 1973), a company must send out a signal to resolve any information asymmetry between itself and its stakeholders. That is, the company (signaler) can provide necessary perspectives in their communications to the public (receivers). Once the receivers process and respond to the signal, they send potentially affectively charged feedback back to the signaler. In the case of the mega-threat of racism, companies can release a statement to make the stakeholders aware of the information they are unlikely to access on their own —that is, the company's stance on DEI issues. Corporate signals, such as those conveyed by releasing diversity statements, may be met with positive benefits, including increased customer loyalty and employee commitment (Riordan et al., 1997). Moreover, acknowledgment of the mega-threat of racism may demonstrate a company's investment in important societal questions and may therefore position organizations as responsible and responsive to mega-threats.

Identifying the Underlying Text Topics in Corporate Diversity Statements

Racism is a sensitive and complex issue that can mean many things to different parties; perspectives can be colored by unique experiences, relationships, salient group identity, political ideologies, the ability to empathize, and a multitude of other factors (Emerson & Murphy, 2014; Purdie-Vaughns et al., 2008). Given the sensitivity and misunderstanding around racial issues, as well as DEI broadly, conceptualizations of and statements about DEI may differ substantially from one organization to another. Therefore, it is helpful to

understand how organizations are conceptualizing DEI in their publicly released statements in response to the mega-threat of racism. Although there are several aforementioned theories that explain *why* organizations might release diversity statements, questions remain regarding the language and framing companies use to make these DEI communications. That is, it is essential to investigate not only *if* companies release statements, but also *how* they address such a multifaceted and complicated topic in their statements.

Indeed, the nuances of diversity statements play a critical role in the overall reception of the message and the reputation of the organization. Generally speaking, critics of social justice movements have responded to diversity initiatives with skepticism and even backlash. For example, color-blind approaches, which ignore differences between groups, often draw negative reactions (e.g., Cheng et al., 2019). Relatedly, diversity communications may treat racism in a vague manner in order to make unpleasant realities more palatable. During the most acute days of the mega-threat, diversity statements would vary in how they acknowledged racism, ranging from blatantly and explicitly to, at least, inadvertently and vaguely. In our research, we expand on this thread by examining to what extent diversity messages specifically address the groups targeted by the mega-threat of racism.

Indeed, the murders of 2020 made clear that Black Americans are especially marginalized and vulnerable to acts of violence and aggression—but how explicitly did organizations call attention to this? Did firms discuss these racism-related issues in broad strokes (e.g., as generic terms) or was leadership more explicit about their role in the maintenance of these systems? Were organizational statements identity-blind or identity-conscious (i.e., explicitly naming and discussing the discrimination faced largely by Black Americans)? Essentially, *how*, qualitatively, did organizations navigate and embody these socially sensitive topics in the public arena? These questions, and others, point to the ambiguity surrounding DEI framing, highlighting the lack of scholarship and empirical understanding in this sensitive time period. Therefore, as an initial step in this arena, we aim to text-mining analyze corporate operationalizations of DEI by exploring:

Research Question 1: What are the major latent topics/themes underlying the corporate diversity statements publicly released in response to the mega-threat of racism (e.g., George Floyd protests)?

Study 1 Method

Collecting Corporate Diversity Statements

Our research team manually searched and collected diversity statements from the Fortune 1000 companies.

Every year, in approximately July or August, *Fortune Magazine* ranks and publishes the largest US companies by revenue, known as the Fortune 1000. We focused on the Fortune 1000 metric as it included all major companies across all industries. For the current study, we first obtained a complete list of 2020 Fortune 1000 companies from https://fortune.com. The list ranked the companies from 1st to 1000th and provided important company information.

Using the Fortune 1000 list, we undertook extensive searches for diversity statements or open letters released by each company that addressed racial injustice. The goal of our search was to be as comprehensive as possible, with search strategies emphasizing the companies' statements that were motivated by the killing of George Floyd. Thus, all the collected statements were released by organizations *after* May 2020, in the context of the mega-threat of racism. To complete the search, two graduate research assistants were trained to separately search for statements by each company, one by one, on the list. They first searched by using the following terms, and then all possible combinations thereof: "racial equity," "diversity," "inclusion," "George Floyd," "open letter," "newsroom," "news press," and "press release." These were crossed with each company name, CEO name, and public relations department. The graduate research assistants performed searches using tools and websites that are publicly accessible, including Google, Bing, Yahoo, Twitter, and the company's own websites, particularly on the company's press release webpage. If a company released follow-up statements after their first one, we only included the first statement in order to preserve consistency. See an example of the statement released by Walmart's CEO Doug McMillon in Appendix 1. After each graduate assistant completed the search, they compared the lists and resolved any potentially different results. This process resulted in 511 statements from Fortune 1000 companies (see Table 1 for a summary).

Analytical Strategy: Topic Modeling

Topic modeling—a type of statistical model aiming to understand the hidden topics underlying a collection of documents—is a relatively new method developed in the machine learning (ML) and natural language processing (NLP) areas. Although it appears complex, the statistical logic behind topic modeling is rather straightforward. It calculates the probability of how different words occur together in a document, and, based on the probability of word co-occurrence, classifies words into different groups, which are then labeled as topics. For example, in a collection of documents, one may find that "doctor" and "nurse" more

Table 1 Summary of the 2020 Fortune 1000 companies included in the study

Sector	N	Representative companies	Avg. rank	Avg. N of employee	Revenue[a]	Growth	CEO race	
							Non-White	White
Aerospace and defense	5	Boeing, Lockheed Martin	141.40	89,860	$41,450.22	3.22%	0	5
Apparel	13	Nike, Ralph Lauren	532.15	27,765	$8,425.35	3.16%	1	12
Business services	31	Visa, ManpowerGroup	478.74	33,921	$8,320.95	7.22%	2	29
Chemicals	12	PPG, Ecolab, Chemours	505.25	15,980	$7,124.58	0.36%	1	11
Energy	39	Chevron, Duke Energy	387.79	11,000	$14,803.62	-0.34%	2	37
Engineering and construction	8	AECOM, Granite Construction	522.75	26,838	$8,113.24	6.34%	0	8
Financials	96	Berkshire, JPMorgan, MetLife	382.72	30,332	$23,017.57	10.07%	6	90
Food and drug stores	5	Walgreens, Kroger, Publix	250.40	196,009	$64,271.48	-5.94%	0	5
Food beverage and tobacco	21	PepsiCo, Tyson, Coca-cola	327.71	40,851	$17,526.06	4.14%	1	20
Health care	42	Johnson & Johnson, Pfizer	366.67	54,295	$31,179.11	11.40%	6	36
Hotels, restaurants, and leisure	19	Starbucks, McDonalds, Hilton	493.89	108,895	$8,555.39	10.26%	0	19
Household products	15	P&G, Kimberly-Clark	568.27	25,119	$10,580.60	1.43%	1	14
Industrials	20	Caterpillar, Deere	445.25	40,188	$14,368.98	5.83%	0	20
Materials	13	International Paper, Westrock	484.15	24,167	$8,164.09	3.32%	0	13
Media	11	Disney, DBS, Discovery	560.45	30,891	$12,927.91	11.05%	0	11
Motor vehicles and parts	6	Ford, GM, Tesla	238.67	100,296	$58,135.25	-2.93%	0	6
Retailing	47	Walmart, Amazon.com	411.89	128,807	$34,419.81	0.97%	3	44
Technology	68	Apple, Alphabet, Microsoft	471.21	38,608	$21,127.10	7.27%	20	48
Telecommunications	7	AT&T, Verizon, DISH	265.29	92,432	$66,415.01	0.04%	0	7
Transportation	21	UPS, FedEx, Delta Airlines	423.10	65,697	$18,337.08	2.02%	0	21
Wholesalers	12	US Foods, Synnex	318.50	37,176	$15,289.88	14.27%	0	12
Sum (mean)	511	–	–	(58,054)	($23,454.92)	(4.44%)	43	468

Note..[a]In million USD

frequently appear in a medical document, and "dog" and "cat" appear more often in a document about animals.[1] Thus, in the collection of these documents, we may find two topics emerge: the medical topic and the animal topic.

In practice, topic modeling is guided by two general principles (Silge & Robinson, 2017): (1) every topic is a mixture of words—e.g., the medical topic includes the words doctor and nurse; and (2) every document is a mixture of topics— e.g., a document is 85% medical topic and 15% animal topic, while another document is 30% medical topic and 70% animal topic. As such, topic modeling categorizes words into different groups to form topics and calculates the probabilities of each topic in a document. Specifically, in the current study, topic modeling was used to statistically identify word groups underlying all the diversity documents released by the Fortune 1000 companies and also calculate how much each company's diversity statement emphasized each topic.

Although various methods have been developed for topic modeling, in the current study, we used Structural Topic Models (STM; Roberts et al., 2014),[2] an advanced text-mining technique that has been widely used in social sciences such as management and political science. Similar to the classic topic modeling methods such as Latent Dirichlet Allocation (LDA; Blei et al., 2003) and Correlated Topic Model (CTM; Blei & Lafferty, 2007), the STM method takes an unsupervised machine-learning approach to identify and organize latent topics based on the semantic structure in a textual corpus. In other words, the STM model statistically classifies similar words together to form a latent semantic topic—similar to the factor analysis (FA) method that classifies similar items together to form a latent factor and also estimates the probability that a document is associated with

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[1] Please note that the categorization is not mutually exclusive, as some words can be cross loaded on multiple categories. In other words, a word can be simultaneously related to more than one topic. For this "doctor"/ "dog" example, words such as "food" can be meaningfully associated with both medical and animal topics.

[2] More technical details can be found via the website http://www.structuraltopicmodel.com/

a certain topic (a.k.a., topic prevalence). However, comparing LDA and CTM, the major advantage and innovation of the STM method is its ability to further model the relationships between the topic prevalence and document-level variables (a.k.a., metadata; e.g., company size and CEO race). Please see such analyses in the Supplemental Materials.

The STM modeling involved four computational steps, and all the analyses were performed in R Statistical Programming version 4.1.0 (R Core Team, 2021). The first two steps were inputting the text data and document metadata, preparing and pre-processing the data, removing stop words (e.g., "a," "the," etc.) and punctuations, stemming words (e.g., converting words "diverse," "diversely," "diversity," "diversified," "diversification" to the stem "divers"; converting words "inclusion," "inclusive," "inclusiveness" to the stem "inclus"; etc.). Some words and documents were also removed in this pre-processing step because of extremely low frequency. For example, infrequent words that only appeared in one document were dropped for the subsequent analyses. A document with less than ten words was removed as well. This pre-processing step resulted in 469 documents/companies for the final text modeling analyses.

After preparing and pre-processing the text data, the third step was estimating STM models. In this step, we included metadata in the model, which included the company level variables such as industry sector, Fortune 1000 rank, the number of employees (company size), revenue growth from the previous fiscal year, CEO race and gender, and corporate political orientation. To normalize highly skewed variables and improve model convergence, the number of employees was logarithm-transformed and normal standardized, the rank variable was Z-scored, and the revenue growth was cube root transformed. The fourth and last step was evaluating and selecting models, in which we first ran models with a various number of topics ranging from 2 to 15. Then, following the guide by Roberts et al. (2014), we selected a model with the best model fit based on the criteria of semantic coherence and exclusivity. Semantic coherence is concerned with the maximum probability of a set of words in a given topic co-occurring together (Mimno et al., 2011). Exclusivity balances word frequency across topics based on the FREX metric—the weighted harmonic mean of the word's rank in terms of exclusivity and frequency, as shown in Eq. 1 below (Airoldi & Bischof, 2016):

$$\text{FREX}_{k,v} = \left(\frac{\omega}{\text{ECDF}\left(\beta_{k,v} \Big/ \sum_{j=1}^{K} \beta_{j,v} \right)} + \frac{1 - \omega}{\text{ECDF}\left(\beta_{k,v} \right)} \right)^{-1} \quad (1)$$

where ECDF is the empirical cumulative distribution function (CDF), ω is a prior-to-optimize exclusivity, $k \in K$ is the kth topic of all the K topics, and β is the topic-word distribution for the kth topic. After considering those criteria, we selected a final model with $K = 6$ latent topics.

After modeling the topics, we also computed the proportion of each topic and its overall prevalence across all the documents in our corpus. After all the computational steps, we labeled each topic by following the two-step procedure demonstrated by Stamolampros et al. (2019). First, the five authors reviewed the representative words in each group and created labels after reviewing the top keywords generated by the topic solution (Table 2) and thorough discussion. These labels were developed based on one important criterion: each could summarize the highly frequent and representative words in a group. The diversity statements that involved each topic at the highest probability were also referenced in this process. Second, we conducted a concordance study to make sure that people who were blind to our research questions were able to match the topic labels and representative words. To do so, we recruited a group of 10 graduate students who, after blindly reviewing the representative words and the scrambled labels, all showed a perfect match.

We further conducted exploratory analyses to examine how each of the topics was associated with company characteristics (i.e., metadata), including industry sectors, the number of employees, Fortune 1000 rank, revenue growth, CEO race and gender, and the corporation's political orientation. These additional results are presented in the Supplementary Materials.
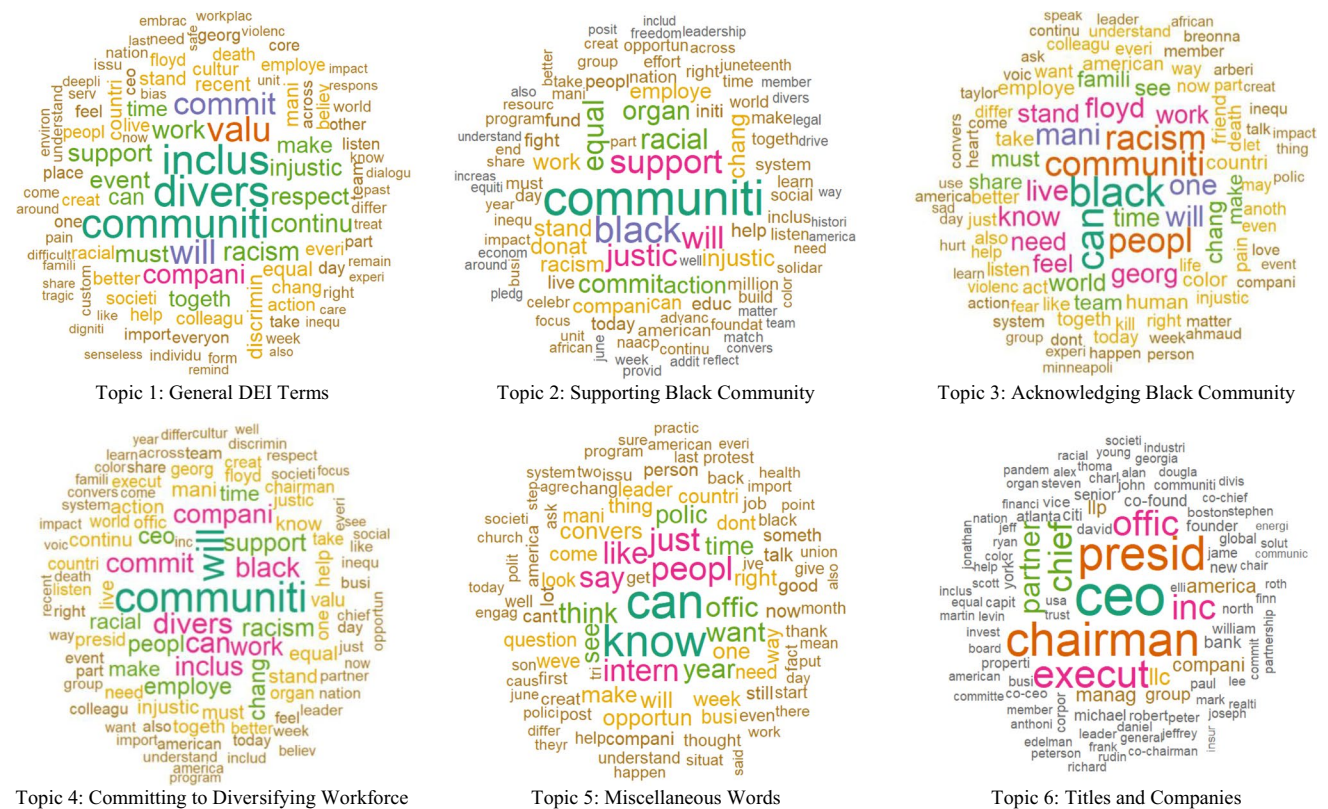
Study 1 Results and Discussion

Topic Solutions

The 6-topic solution, along with the corresponding representative word stems and topic labels, is presented in Table 2 and Fig. 1. Not surprisingly, the topic of *general DEI terms* (topic 1) was the most popular, occupying 36.32% of the diversity statements and entailing words with a positive and general connotation (such as "diversity" and "inclusion"). This was followed by three topics with terms that explicitly named the targeted group during the mega-threat of racism ("Black"). Topic 2, *supporting Black community* (24.63%), touched on terms like "NAACP" and "Juneteenth," demonstrating themes of community-building and social justice organizing. Topic 3, *acknowledging Black community* (20.73%), referred to concepts such as "communities" and "neighbors," as well as "racism" and "killing," describing the lived experiences of Black individuals. Topic 4, *committing to diversifying workforce* (10.97%), incorporated themes of organizational operations with regards to DEI, through its use of phrases including "companies," "talent," and "hire." The least popular topics involved *miscellaneous words* (topic 5; 5.46%) and *titles and companies* (topic 6;

Table 2 Topic solution from the structural topic modeling for the released documents

Topic	Topic label	Representative words (stems)	Proportion	Identity-conscious vs. identity-blind categorization
Topic 1	General DEI terms	Divers, inclus, communiti, valu, will, commit, respect, discrimin, event, core, treat, freely, maxim, teamwork	36.32%	Identity-blind
Topic 2	Supporting Black community	Communiti, black, support, justic, will, equal, racial, donat, naacp, fund, fight, juneteenth, celebr, accompani, acquisit, bet, disadvantag, long-tim, milestone	24.63%	Identity-conscious
Topic 3	Acknowledging Black community	Black, can, communiti, peopl, racism, mani, will, friend, heart, kill, hurt, neighbor, love, breath, feel, need	20.73%	Identity-conscious
Topic 4	Committing to diversifying workforce	Will, divers, employe, commit, black, compani, community, brand, talent, report, hire, market, expand, board	10.97%	Identity-conscious
Topic 5	Miscellaneous words	Can, know, peopl, just, like, intern, say, church, post, union, mayb, think, aliv, apartheid, BBC, birdwatch, compromis, downturn, want, actual, ken, year	5.46%	Identity-blind
Topic 6	Titles and companies	CEO, chairman, presid, execut, offic, Inc, chief, LLC, LLP, co-found, USA, co-chief	1.89%	Identity-blind

Topic 1: General DEI Terms

Topic 2: Supporting Black Community

Topic 3: Acknowledging Black Community

Topic 4: Committing to Diversifying Workforce

Topic 5: Miscellaneous Words

Topic 6: Titles and Companies

Fig. 1 Word clouds for the 6 topics derived by structural topic modeling

1.89%). These, respectively, involved commonly-used words across statements (e.g., "know" and "people") and terms describing functions within a company (such as "CEO" and "chairman").

We also calculated the correlation among the 6 topics, and presented the descriptive results in the upper panel of Table 3. The correlation results revealed that topic 1 (*general DEI terms*) was negatively related to topic 2 (*supporting Black community*;

Table 3 Descriptive statistics and correlations

Variable	M	SD	1	2	3	4	5	6	7	8
1.Topic 1 (general DEI terms)	0.36	0.31	1.00							
2.Topic 2 (supporting Black community)	0.25	0.30	− .52**	1.00						
3.Topic 3 (acknowledging Black community)	0.21	0.25	− .24**	− .39**	1.00					
4.Topic 4 (committing to diversifying workforce)	0.11	0.19	− .33**	− .04	− .25**	1.00				
5.Topic 5 (miscellaneous words)	0.05	0.13	− .17**	− .17**	− .04	− .04	1.00			
6.Topic 6 (Titles and companies)	0.02	0.10	− .09	− .11*	− .08	− .06	− .06	1.00		
Variables for study 2 only										
7.Diversity and inclusion	3.90	0.43	− .09	.06	.08	.01	− .01	− .12**	1.00	
8.Positive emotions	4.51	3.03	.26**	− .03	− .14**	− .09	− .10*	− .09	− .09	1.00
9.Negative emotions	2.02	1.80	.10*	− .19**	.31**	− .23**	− .03	− .06	.05	− .10*

Note. $N = 469$

$^*p < 0.05$; $^{**}p < 0.01$

$r = -0.52, p < 0.01$), topic 3 (*acknowledging Black community*; $r = -0.24, p < 0.01$), topic 4 (*committing to diversifying workforce*; $r = -0.33, p < 0.01$), and topic 5 (*miscellaneous words*; $r = -0.17, p < 0.01$). Similarly, topic 2 (*supporting Black community*) was also negatively related to topic 3 (*acknowledging Black community*; $r = -0.39, p < 0.01$), and topic 5 (*miscellaneous words*; $r = -0.17, p < 0.01$); topic 3 (*acknowledging Black community*) was negatively related to Topic 4 (*committing to diversifying workforce*; $r = -0.25, p < 0.01$).

Discussion

These analyses revealed six topics underlying the statements: *general DEI terms* (topic 1), *supporting Black community* (topic 2), *acknowledging Black community* (topic 3), *committing to diversifying workforce* (topic 4), *miscellaneous words* (topic 5), and *titles and companies* (topic 6). The identification of these topics allows us to understand how organizations respond to the mega-threat of anti-racism and operationalize DEI. For example, topics 2 and 3 both explicitly identify Black communities and acknowledge their lived experiences. This is an important first glimpse into the nature of diversity statement content but does not speak to the potential implications of this content. We will return to this finding and discuss the consequences of this explicit group identification for perceptions of diversity and inclusion in the following study.

Overall, Study 1 systematically uncovered how organizations communicate the sensitive DEI topics in their publicly released diversity statements in response to racism-related mega-threats. These findings laid a foundation for further investigation in Study 2.

Study 2

Leveraging millions of data points on employee ratings and the latent semantic topics, Study 2 aims to further extend our understanding of the effects of releasing diversity statements and the emphasis of different types of text topics in a statement. Specifically, Study 2 investigates if the companies that released diversity statements are rated more favorably on organizational diversity and inclusion by their employees than by the companies that did not release such statements. In addition, for organizations that did release a diversity statement, we further examine if the companies emphasizing certain topics (e.g., identity-conscious topics such as *Black community*) were rated more favorably by their employees than those highlighting other topics (e.g., identity-blind topics such as *general DEI terms*).

Releasing vs. Not Releasing a Diversity Statement

Not only are the qualitative framings of diversity statements understudied, but their effects are also poorly understood. Scant research has investigated the specific outcomes of the corporate release of anti-racist or diversity-minded messages in response to mega-threats. It bears repeating that reactions to diversity statements may even be negative, given the aforementioned research surrounding DEI-related movements and initiatives (Brown et al., 2006; Carnes et al., 2019; Kidder et al., 2004; Windscheid et al., 2016). The mega-threat of racism has often been politicized; for example, the anti-racist Black Lives Matter campaign has been met with reactionary Blue Lives Matter and All Lives Matter movements. Organizations, therefore, may not want to comment on such social and societal issues, given beliefs that work and politics should not mix (Swigart et al., 2020).

Indeed, stakeholders who do not agree with a company's decision to release diversity statements may react with an overall backlash. Existing research and journalism have documented the push against diversity statements and DEI-related efforts. For example, substantial swaths of the American

population perceive anti-racism as counterproductive, threatening, and even dangerous. To these individuals, activism against the mega-threat of racism invokes negative concepts like "cancel culture" and "the liberal or woke agenda" (Cohen, 2021). In this view, corporations that release diversity statements may be legitimizing and advancing racial division. When organizations choose to take a stance against the mega-threat of racism, they thus touch upon a hot-button issue that can result in polarizing emotions among stakeholders.

Nonetheless, although DEI messaging may not align universally with specific consumer bases, a large body of research does suggest that diversity statements may have net positive societal and organizational benefits (Avery et al., 2013; Stevens et al., 2008). As previously mentioned, signaling theory suggests that organizations can resolve informational asymmetry by publicly communicating their stance on important issues, such as anti-racism (Connelly et al., 2011; Spence, 1973). When organizations release diversity statements, they may be communicating information with positive connotative associations, such as care for organizational culture and community well-being. The subtext in these signals may lead to more favorable perceptions among stakeholders, especially during a mega-threat.

Altogether, these findings point to the fact that diversity statements may enhance organizational perceptions among minoritized employees and their allies and colleagues. Given these theoretical rationales, we begin our investigation by comparing perceptions of organizations that do not speak out against racism with those that do release diversity statements and establish the baseline effect of releasing a diversity statement:

> Hypothesis 1: Companies that released a diversity statement tended to be rated more favorably on diversity and inclusion by their employees than companies that did not release a statement.

Identity-Conscious vs. Identity-Blind Topics

Next, we return to the specific latent semantic topics identified in Study 1, conducting deeper analyses of their effectiveness on organizational outcomes of employee ratings. Not all diversity statements may be perceived equally. According to social information processing theory (SIP; Salancik & Pfeffer, 1978), individuals construct meaning based on contextual cues, including relevant information from work and social environments (Fulk et al., 1987). When a diversity statement is released by their organization, employees may take the contents—more specifically, the underlying topics—conveyed in the statement as relevant social cues. They then make inferences regarding the corporation (e.g., values and culture) based on the valence and strength of those cues. As such, diversity statements

with certain types of topics may provide more positive and stronger social cues regarding anti-racism than other topics, thus forming more powerful impressions on employees. In the rest of this section, we elaborate on how different topics in a diversity statement may contain cues of varying strengths that, when processed by employees, form the basis for organizational evaluation.

There is reason to believe that the nature of diversity statements could have a differential impact. For example, organizations that explicitly and publicly address racism (e.g., using phrases like "anti-racist") may be seen as more committed to DEI compared to those who release diversity statements with more generic emphases (e.g., "equal opportunity employment"). Indeed, these organizations may be perceived as taking a stronger stance against racism, given the cues of clear and definitive language. One way to increase the assertiveness of diversity statements is to "name names" or specify the identities of stakeholders. How clearly do diversity statements identify the at-risk populations? Indeed, scholars have studied how diversity management practices differentially acknowledge identity, distinguishing between identity-blind and identity-conscious framings (e.g., Plaut et al., 2018; Wolsko et al., 2000). *Identity-blind* policies focus on minimizing differences, with the goal of promoting equality and fairness between groups. Proponents argue that a "color-blind" approach avoids making stereotypes salient and highlighting unequal power dynamics between majority and minority groups (Cheng et al., 2019). Conversely, *identity-conscious* approaches acknowledge and value differences in order to promote diversity. Those in favor of identity consciousness argue that it is critical to acknowledge the systematic disadvantages faced by minorities (see Leslie et al., 2020, for a review). With regard to diversity statements, one particularly strong identity-conscious cue is the "calling out" of groups and their differences.

However, a large body of research and policy lends support to identity consciousness as a more effective approach. A recent meta-analysis of the relationship between diversity ideologies and intergroup/policy outcomes found that identity-consciousness (i.e., multiculturalism) was associated with high-quality intergroup relations and support for diversity policies, regardless of group membership (Leslie et al., 2020). In the same meta-analysis, identity-blind framings led to notably mixed outcomes. Furthermore, in practice, the American Psychological Association has stated that we "cannot be nor should we be color-blind" since 1997 (Neville et al., 2000)—a sentiment that has been echoed by other diversity scientists and practitioners (e.g., Cheng et al., 2019). Overall, these pieces of evidence demonstrate that DEI initiatives may be more readily received and enacted when there is transparency regarding intergroup differences, i.e., identity-consciousness.

Taken together, these results suggest that DEI management practices that are in response to mega-threats, including diversity statements, must be approached with appropriate sensitivity and specificity. Per SIP theory, identity-conscious framings may provide stronger cues that organizations value diversity and may more directly address these issues, especially if they are explicitly relevant to the group experiencing the mega-threat. We would therefore expect the presence of identity-conscious topics in the statements to have a stronger impact on employees' perceptions of organizational diversity and inclusion, compared to identity-blind topics. We also anticipate this result regardless of the racial composition of the organization given that (1) the statements are in response to a group-specific mega-threat (i.e., racism towards Black people in society) and (2) we are examining organizational diversity and inclusion perceptions, not overall perceptions of the company. Although scholarship is growing in the area of identity-blindness and identity-consciousness, this duality has typically been applied to diversity research broadly (both as individual and organizational ideologies) but has yet to be applied to corporate statements in particular. We thus put forth:

Hypothesis 2: Identity-conscious text topics (e.g., supporting Black community, acknowledging Black community, committing to diversifying workforce) covered in a corporation diversity statement tended to be more strongly associated with employees' organizational diversity and inclusion ratings than identity-blind topics (i.e., general DEI terms).

Study 2 Method

Data Collection and Preparation

Topic Probability Scores

Based on the STM text-mining analysis, we computed topic probability scores for each company's statement on the six topics. These scores represented the odds that a company's statements fell into a given topic category. For example, one company's statement may have 16% odds of including topic 1, 25% odds of including topic 2, 38% odds of including topic 3, 12% odds of including topic 4, 8% odds of including topic 5, and 1% of including topic 6. In contrast, another company's statement may have odds of 9%, 45%, 14%, 13%, 11%, and 8% on the six topics, respectively. Mathematically, the sum of a company's probability scores across all the 6 topics has to be 1.

Employee Ratings

To retrieve employee ratings for each of the Fortune 1000 companies, we turned to Glassdoor.com, one of the most popular job-listing websites and "the most dominant

company review website by far" (Winkler & Fuller, 2019). Glassdoor is free to use, allowing current and former employees to anonymously review their companies. As the massive number of reviews provides valuable insights for potential job seekers, the website attracts about 60 million users per month.

At the time of writing, Glassdoor allows current and former employees to anonymously rate companies on ten dimensions, including seven dimensions rated on a 1–5 star rating scale (e.g., *diversity and inclusion*, *overall rating*, *culture and values*, *work/life balance*, *senior management*, *compensation and benefits*, *career opportunities*). Most importantly, the diversity and inclusion rating dimension was not implemented on Glassdoor until September 2020, which meant that diversity and inclusion were rated after the companies released their diversity statements. This created a temporal separation that enabled us to test whether the text topics conveyed in diversity statements might potentially impact employees' anonymous ratings on organizational diversity and inclusion. In contrast, all other dimensions of organizational rating were implemented far before the release of the diversity statement. Given this and its relevance to the mega-threat of racism, we chose to focus on the diversity and inclusion rating as the relevant criterion in the current study. As such, we manually retrieved each company's scores on the diversity and inclusion ratings that were aggregated across all the full- and part-time employees' ratings for the time period of September 2020 to June 2021. For example, as of June 28, 2021, Apple's average diversity and inclusion rating was 4.4 out of 5.0.

Categorizing Identity-Conscious vs. Identity-Blind Topics

As a team of subject matter experts, we independently reviewed the topics identified in Study 1 and achieved a consensus when categorizing them under either identity-blind or identity-conscious ideologies. Topic 1, general DEI terms, was categorized as identity-blind, given that its common and representative terms did not explicitly address anti-racism. Conversely, topics 2 and 3, supporting Black community and acknowledging Black community, specifically named the minorities vulnerable in the face of the racism mega-threat; these topics are thus inherently identity-conscious. Topic 4, committing to diversifying workforce, does not have a titular emphasis on race but qualifies as identity-conscious for two reasons. First, analyses of the topic's representative and common terms include identity-conscious words, as shown in Fig. 1. Second, a commitment to diversifying the workforce inherently involves acknowledging differences within a labor pool; one must attend to intergroup differences in order to make sure that employee composition is representative demographically. Finally, topics 5 and 6, miscellaneous

words and titles and companies, do not discuss identity-related differences meaningfully. Therefore, although they appear in our analyses, they are less frequently occurring in diversity statements and cannot be theoretically sorted into the identity-conscious vs. identity-blind dichotomy. These categorizations are presented in Table 2.

Control Variables

In order to test the robustness of the text topic effect on employees' ratings, we also text analyzed the affectivity reflected by the word choice in the diversity statement. Research suggests that positive (and negative) emotion words impact recipients' evaluations and attitudes (Bernat et al., 2001). Accordingly, it is important to clarify that employees' favorable ratings on diversity and inclusion were solely associated with the text topics covered in the diversity statement rather than the positive words written in the diversity statement.

To analyze the text affectivity, we utilized the Language Inquiry and Word Count (LIWC; Pennebaker et al., 2015) technique, which has been widely adopted for psychological and organizational research (e.g., Wang et al., 2016). The LIWC method calculates the percentage of positive and negative words in a document based on its built-in dictionaries. The positive emotions dictionary included 620 words (e.g., "love," "nice," "sweet," etc.), and the negative emotions dictionary included 744 words (such as "hurt," "ugly," "nasty," etc.). Our data found that, on average, the corporate diversity statements used more positive emotion words (4.51%) than negative emotion words (2.02%).

Analytical Strategy

To examine the first hypothesis, we ran independent *t*-tests to compare diversity and inclusion ratings between companies that released vs. did not release a diversity statement. We also visualized the differences with boxplots, which not only showed the medians and first and third quartiles (i.e., the box), but also the distributions of the individual observations (the dots).

To test the second hypothesis, we focused on the companies that released diversity documents. We first calculated the descriptive statistics and correlations, and then we performed two regression models to examine the effects of the text topics. The first model only included topics 1 to to 5[3] as the predictors; in the second model, we controlled for the

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[3] Topic 6 was excluded in the analysis, as the prevalence of topic 6 was perfectly related to the first five topics. That is, the prevalence of topic 6 equals to 1 minus the sum of the prevalence of the other five topics (because the prevalence of the six topics is summed to be 1). Thus, topic 6 would be redundant when other five topics were included.

positive and negative emotions in the diversity statements to examine the robustness of the topic effects. In addition, we also analyzed the relative importance weights of each predictor in the two models by using the method by Tonidandel and Lebreton (2015), with a recommended 10,000 iterations for the bootstrapping procedures.

Study 2 Results and Discussion

### Effects of Releasing vs. Not Releasing Diversity Statements

The results of *t*-tests that compared employees' ratings on diversity and inclusion between companies that released vs. did not release a diversity statement were statistically significant ($t(944) = 8.27$, $p < 0.0001$; $d = 0.53$, medium size). Specifically, the analyses revealed that companies that released a diversity statement tended to be rated more favorably on diversity and inclusion by their employees ($M = 3.90$, SD = 0.43) than companies that did not release a diversity statement ($M = 3.64$, SD = 0.54), supporting Hypothesis 1. We visualized the rating distributions and differences among the two groups of companies in Fig. 2.

Effects of Emphasizing Identity-Conscious vs. Identity-Blind Topics

We presented the correlates in Table 3 and the results of regression models and relative importance in Table 4. To confirm our findings regardless of the effect of affective content, we present our findings with and without controls. Without controlling for positive and negative emotions (model 1, Table 4), topic 3 (*acknowledging Black community*; $b = 0.65$, $p < 0.01$; relative importance = 48.09) and topic 2 (*supporting Black community*; $b = 0.59$, $p < 0.01$; relative importance = 34.80) were mostly predictive of the diversity and inclusion ratings, followed by topic 4 (*committing to diversifying workforce*; $b = 0.54$, $p < 0.01$; relative importance = 8.09) and topic 1 (*general DEI words*; $b = 0.44$, $p < 0.05$; relative importance = 8.04). Topic 5 (*miscellaneous words*; $b = 0.45$, n.s.; relative importance = 0.98) was the least important in the prediction.

The effect of text topics on diversity and inclusion ratings showed a similar pattern after the positive and negative emotions were controlled (model 2, Table 4). Specifically, the effects of topic 3 (*acknowledging Black community*; $b = 0.66$, $p < 0.001$; relative importance = 34.07) and topic 2 (*supporting Black community*; $b = 0.51$, $p < 0.01$; relative importance = 29.80) were still the two strongest predictors for the diversity and inclusion ratings, followed by topic 4 (*committing to diversifying workforce*; $b = 0.46$, $p < 0.05$; relative importance = 7.02) and topic 1 (*general DEI words*; $b = 0.32$,

Fig. 2 Employee ratings on diversity and inclusion on Glassdoor.com between companies releasing vs. not releasing statements
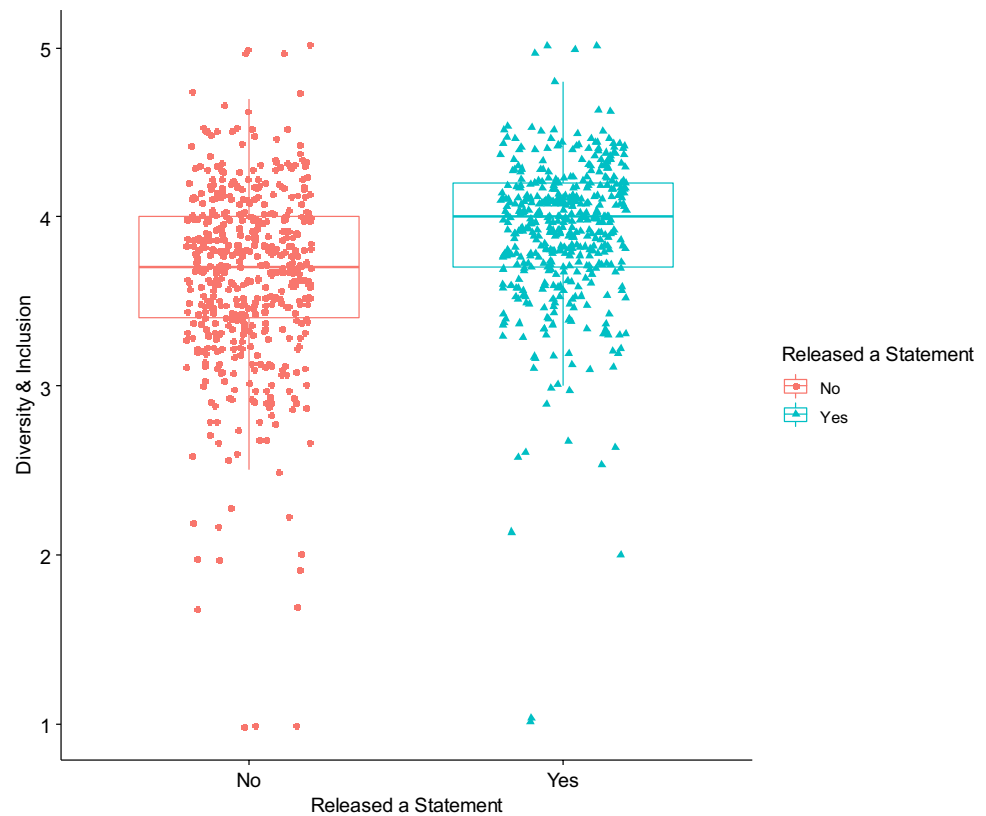
n.s.; relative importance = 6.52). Again, topic 5 (miscellaneous words; $b = 0.43$, $p < 0.05$; relative importance = 0.82) was the least important predictor. More importantly, the effects of positive and negative emotions were not statistically significant. These findings not only support Hypothesis 2, but also indicate the robustness of the effect of text topics in predicting employees' diversity and inclusion ratings.

Discussion

Extending the findings of six latent semantic topics from Study 1, Study 2 made use of both theory and empiricism: applying the identity-blindness and consciousness theoretical framework and analyzing big data on employees' ratings on the company's diversity and inclusion. We hypothesized

Table 4 The effect of topic prevalence covered a statement in predicting employee ratings on diversity and inclusion on Glassdoor.com

Variable	Model 1				Model 2			
	b	SE	Scaled RelWeight	C.I. for raw weights	b	SE	Scaled RelWeight	C.I. for raw weights
Constant	3.38***	0.20			3.31***	0.16		
Topic 1 (general DEI terms)	0.44*	0.21	8.04	[0.0001, 0.0047]	0.32	0.17	6.52	[0.0002, 0.0044]
Topic 2 (supporting Black community)	0.59**	0.21	34.80	[0.0015, 0.0320]	0.51**	0.17	29.80	[0.0015, 0.0331]
Topic 3 (acknowledging Black community)	0.65**	0.21	48.09	[0.0014, 0.0406]	0.66***	0.17	34.07	[0.0012, 0.0364]
Topic 4 (committing to diversifying workforce)	0.54*	0.22	8.09	[0.0004, 0.0109]	0.46*	0.18	7.02	[0.0004, 0.0115]
Topic 5 (miscellaneous words)	0.45	0.25	0.98	[0.0000, 0.0004]	0.43*	0.20	0.82	[0.0000, 0.0003]
Positive emotion					−0.01	0.01	15.04	[0.0002, 0.0226]
Negative emotion					0.01	0.01	6.74	[0.0002, 0.0128]
R^2	.029*				.035*			

Note. RelWeight, relative weights calculated by using Tonidandel and Lebreton (2015)

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

and tested if companies that released a diversity statement tended to be more favorably rated by their employees than companies that did not release a diversity statement, and if companies whose diversity statement emphasized identity-conscious topics (vs. identity-blind topics) were more favorably rated on diversity and inclusion. Our results consistently showed that the release of a diversity statement was associated with enhanced employees' ratings on diversity and inclusion.

Moreover, for those companies that did release a statement, we found that diversity statements that focused on identity-conscious topics (e.g., *supporting Black community*, *acknowledging Black community*, *committing to diversifying workforce*) were more strongly associated with employees' favorable ratings compared to identity-blind topics (e.g., *general DEI terms*). We found that our prediction still held even after controlling for the affective content of the statements. We believe this finding provides valuable evidence in favor of explicit anti-racist communication.

Although these findings offer important practical implications, we need to be cautious in drawing causal effects, as the effect could be confounded with third variables. For example, it is possible that companies who publicized their stance on DEI also possessed other characteristics that helped them earn higher diversity and inclusion ratings from their employees. In addition, identity-conscious diversity statements might be a signal that organizations had authentic, inclusive, and healthy organizational climates and were thus rated more favorably by their employees. Organizations might therefore consider calling attention to Black communities in their diversity statements as a step towards creating these positive working cultures. Further studies are needed to parse apart these potentially confounding effects.

General Discussion

The current research utilizes STM for the first time in organizational research on DEI to comprehensively analyze the public diversity statements released by Fortune 1000 companies and important organizational outcomes. Our research revealed that companies operationalized and embodied DEI from six perspectives. More importantly, we found that companies that released a diversity statement were evaluated more favorably by their employees than their peers who did not, and that identity-conscious topics included in the company diversity statements were more strongly associated with employee diversity and inclusion perceptions than identity-blind topics included in the statements. We believe these findings have important implications for both theoretical advancements and practical recommendations.

Theoretical Contributions

Altogether, this research makes several theoretical contributions to the literature. First, our research work calls upon multiple theoretical perspectives, including mega-threat (Leigh & Melwani, 2019), signaling (Connelly et al., 2011), corporate image (Highhouse et al., 2009), and social information processing (Salancik & Pfeffer, 1978) theories, and identity-consciousness vs. identity-blind frameworks (Plaut et al., 2018; Wolsko et al., 2000), to understand the phenomenon of organizations releasing diversity statements. Notably, our research questions and hypotheses regarding diversity statements cannot be sufficiently described by a single theory. Indeed, an inductive approach was necessary given the dearth of relevant science around how corporate diversity statement topics are used in response to mega-threats. Accordingly, we invoked many literatures in order to explain the interplaying drivers of diversity statement publication and design. Not only do these theoretical components describe why organizations release statements, but they can also explain *how* organizations publicize their stances on DEI. By calling upon these bodies of research, we are able to answer key questions, including those related to the overall and topically differentiated effectiveness of diversity statements used in response to mega-threats.

Notably, we also found that an identity-blind topic in the diversity statements, i.e., employing *general DEI terms*, was less strongly associated with diversity and inclusion perceptions than topics that more explicitly referenced the plight of Black people. It is possible that companies with higher status and growth may be stable (e.g., resistant to backlash) and thereby more motivated to take a stronger stance against racism through identity-conscious diversity statements. Another explanation could be that these companies may be better positioned in the DEI space, such that their human resources, public relations, and other relevant departments are more aware of identity-conscious ideologies. We pose this as one of many potentially interesting relationships that emerge as a result of our paired studies and that may be explored in future studies.

Finally, as previously mentioned in the literature review, this is the first study that applied the latest advanced text mining technique, STM (Roberts et al., 2014), in this organizational diversity research content area, to our knowledge. Our research has demonstrated the utility and capability of powerful text mining analytical tools in diversity research. As text data have become increasingly popular in organizational research, particularly in the diversity management arena, we expect more applications of the STM technique will emerge in this area to help develop and advance theory.

Practical Implications and Recommendations

In the wake of the Black Lives Matter movement, organizations have had to grapple with sensitive DEI concepts as

never before. However, different organizations do not necessarily understand the mega-threat of racism in the same way, nor is there consensus regarding their roles in improving the position of Black Americans (Ray & Purifoy, 2019). This research draws directly on phenomena in the real world, thus holding importance for organizations in practice.

First, this research creates a taxonomy of DEI communication in response to mega-threats, based on evidence from the field, that can help begin to organize public dialogue around these sensitive issues. Given that the DEI aspect of company visions is relatively novel (particularly when under the strain of mega-threats), leadership and public relations firms may be unaware of the nuances and possibilities of anti-racist messaging. This work uses existing data to provide a tested palette of topics and themes that can be used to develop intentional and accurate communication. For example, organizations can consider their DEI goals and the extent to which they need to improve perceptions of diversity and inclusion among their employees. They can then choose to bolster their messages by incorporating specific language. Leadership should engage in reflective exercises and, given the array of DEI topics, understand why they are (or are not), including specific emphases in their company vision and public communications.

Importantly, we find that companies who released diversity statements were more favorably rated by their employees compared to those who did not. Although these analyses were correlational and not causal, it bears repeating that employees' ratings of an organization's diversity and inclusion, specifically, were collected after the release of their diversity statements. This suggests that the presence of diversity statements may have had an impact on internal assessments of an organization's DEI climate. As previously mentioned, organizations may shy away from publicizing their stances on societal issues, especially given the potential for backlash and the politicization of social justice movements. However, this research demonstrates that releasing diversity statements as a whole does not hamper employee perceptions (and likely other stakeholders' perceptions) of organizational quality.

In fact, being explicitly identity-conscious, i.e., calling attention to Black communities and communicating anti-racist policies, is most strongly associated with positive diversity and inclusion ratings. Indeed, this research draws clear distinctions between statement types by applying the identity-blind and identity-conscious dichotomization. Perhaps one of the most compelling takeaways from this research is the stronger link between identity-conscious diversity statements and higher employee ratings of DEI, relative to identity-blind diversity statements. This underscores trends in both literature and practice: more explicit, identity-conscious approaches to diversity are linked to stronger outcomes. This should encourage organizations to take not just public, but also assertive, stances on important societal issues. During a time when Black Americans are fighting for real, actionable change (e.g., McCluney et al., 2020), our findings suggest that organizations can and should rise to the challenge and be vocal advocates for anti-racism.

Importantly, this research is not meant to position diversity statements in response to mega-threats as a standalone diversity management practice. Organizations should also consider how their statements are only one part of a much larger company image and vision. Research shows that diversity management programs fail when processes are not set up that will allow for effective follow-through on policies (Dobbin et al., 2011). In light of this, companies should avoid appearing to be "all talk and no action" by continuing to follow through on their voiced commitments. Sustaining these statements can take a variety of forms, including continuing to be vocal about anti-racism, developing plans at multiple levels and durations, and executing interactions. It is especially impactful when these initiatives are driven by non-minorities, given that White Americans have historically possessed the power and propensity to implement lasting policies and impress cultural values and standards on others (which has also resulted in their group retaining higher status in US society compared to racial and ethnic minorities; Nkomo & Al Ariss, 2014). In particular, creating long-term initiatives can convey to stakeholders that organizations are not only speaking up about DEI, but are genuinely invested in effecting change and potentially disrupting long-standing hierarchies.

Overall, companies play a large role in shaping societal dynamics, given their importance and status (Cobb, 2016). US companies are largely operated by and employ White Americans, who have tended to not always acknowledge racism (Goren & Plaut, 2014; Opie & Roberts, 2017; Ray & Purifoy, 2019; Ray, 2019), especially institutional- and cultural-level racism. This pattern of overlooking persists, even after prior events that reflect blatant societal racism. Therefore, the discussion of events like the George Floyd protests by major US companies is notable. As power holders in society, if firms show support for issues that directly impact the lives and wellbeing of Black Americans, they would be bringing attention to issues that may not get consideration otherwise. Further, if they propose and implement policies and procedures that increase career opportunities provided to Black Americans, there could be positive impacts on Black communities that would begin to combat some of the ills that years of multi-level racism have produced. We therefore strongly encourage organizations to use their platform to take a strong stand against racism, not only through diversity statements in response to racism-related mega-threats but through multi-pronged and sustained efforts.

Limitations and Future Directions

This research canvasses the Fortune 1000 landscape, characterizing the ways in which organizations have responded to demands for DEI. Although we made every effort in searching for such statements, our text mining analyses were only limited to the companies that publicly released such statements, leaving unknown the companies that did not choose to make public (e.g., only internal) statements. In addition, the ratings

on Glassdoor might not be a representative sample of a company, as the reviews were likely filled out by highly happy or angry employees. Also, as Glassdoor.com did not disclose the specific number of ratings on diversity and inclusion for each company, as this rating was implemented after September 2020. Although we reasonably believed that the number of diversity and inclusion ratings were sizable, nevertheless, if they were small sample sizes, they could have easily been biased.

Moreover, just as anti-racism is an ongoing process, so is a program of investigation such as this. Future research may need to explore how these statements translate into actual actions in terms of managerial practices and organizational interventions. How is this lip service used to effectively transform organizations and society (if at all)? This is a critical question that may be focused on in future research. For this research agenda, organizational researchers will likely need access to comprehensive, longitudinal, and internal data about the firms. We, therefore, encourage transparency from organizations regarding their DEI efforts; although it may be uncomfortable to share their practices, it can lead to high-level improvements. Furthermore, given that organizations place varying emphasis on DEI topics, it would be interesting to see if these yield-differing interventions and longer-term outcomes downstream.

One particularly interesting question is that of historical organizational advocacy. That is, many companies have been silent in the face of prior police violence and brutality. We would like to briefly consider the timing of these diversity statements. The year 2020 saw unprecedented unrest, such that it may have become politically unwise to stay silent. However, race-motivated violence is entrenched in the history of the USA. Indeed, the deaths of George Floyd, Breonna Taylor, and Ahmaud Arbery were not the first to attain recent renown, but they did strike a chord of unmatched pitch. Given this, it is interesting to consider if corporations would frame themselves as being continually invested in questions of race and racism or if they would acknowledge their failure to discuss DEI in the past.

Conclusion

In summary, by leveraging multiple theories and applying novel text-mining analytical techniques, our study has advanced the current understanding of how companies are addressing DEI in response to the mega-threat of racism. Our research identified six latent semantic topics underlying a sizeable body of diversity statements publicly released by Fortune 1000 companies. Perhaps more importantly, by taking advantage of millions of employee rating data points, we tested and confirmed that companies that released (vs. did not release) a diversity statement was more favorably rated on diversity and inclusion by their employees, and that companies whose diversity statement emphasized identity-conscious (vs. identity-blind) topics were more positively rated by their employees. As a whole, our

work suggests that it is beneficial for corporations to respond to anti-racism by releasing diversity statements—and emphasizing identity-conscious topics in the diversity statement can help maximize that positive impact. We hope our research sheds meaningful light on the current diversity research and offers practical recommendations for organizations to develop effective public stances and policies.

Appendix 1

An Example of Racial Equity Statement Released by the CEO of Walmart

June 5, 2020

Making a Difference in Racial Equity

To: Walmart associates

From: Doug McMillon, President and CEO – Walmart

In our 50-plus years as a company, it rings true more each year that the world's challenges are our challenges. The global health crisis has tested all of us in recent months, and the racial violence in the U.S. – in particular, the murder of George Floyd – is tragic, painful and unacceptable

Today, on what would have been our Associate and Shareholder Celebration, we'll come together during our Friday Afternoon Meeting to talk about a number of things. But I didn't want to wait until then to share with you some important decisions we've made about how we will move forward – together – in the fight for greater racial equity inside and outside Walmart

Inside the company, our work to recruit, develop and support African Americans and other people of color will be even more of a priority. We need each of you to actively partner to identify and work with your leaders to bring in great talent to the company. We want all of you to exercise your voice to make every part of our company even better

To influence and lead change in society more broadly, we are going to invest resources and develop strategies to increase fairness, equity and justice in aspects of everyday life. We will find the natural overlaps between Walmart's core business and society's larger needs that perpetuate racism and discrimination. Specifically, we're going to focus the power of Walmart on our nation's financial, healthcare, education and criminal justice systems

In addition to leveraging our business to drive these outcomes, Walmart and the Walmart Foundation are committing $100 million over five years through a new center on racial equity. The goal of the center will be to address systematic racism in society head-on and accelerate change. Through the $100 million commitment, the center will support philanthropic initiatives that align with the four key areas noted above. The center will seek to advance economic opportunity and healthier living, including issues surrounding the social determinants of health, strengthening workforce development and related educational systems, and support criminal justice reform with an emphasis on examining barriers to opportunity faced by those exiting the system

As an associate at Walmart, you are expected to truly, authentically and more deeply embrace inclusion. We must work together to actively shape the culture to be more inclusive and not just accept our differences but celebrate them – all the time – within every team

We've made a difference in the world in so many ways. We can make a meaningful, lasting difference in racial equity, too

Note. The statement was posted from Walmart's corporate newsroom section, available on web page: https://corporate.walmart.com/newsroom/2020/06/05/making-a-difference-in-racial-equity

Declarations

Conflict of Interest The authors declare no conflict of interest.

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