Mega-Threats, Team Diversity, and the Impact on Performance

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INTRODUCTION

Mega-threats theory (Leigh & Melwani, 2019) proposes that exogenous events (i.e., **mega-threats: significant negative, large-scale, diversity-related societal events**) may make diversity more salient in the workplace.

In this study, we incorporate theory on strong events (e.g., Morgeson et al., 2015) and dynamic theory on team-based diversity (e.g., van Knippenberg et al., 2004) to expand the theoretical model of mega-threats to understand how large-scale societal events may influence diversity within a team. We test our hypotheses through the dynamic examination of teams' performance (i.e., county commissions racial diversity and their response to the onset of the COVID-19 pandemic) and the impact of a mega-threat event (i.e., the death of George Floyd). Our results suggest that the mega-threat event accentuates the diverging pattern of team performance between high- and low- diversity teams.

Hypothesis 1a: Team diversity is associated with decreasing team performance over time

Hypothesis 1b: Team diversity has a curvilinear (i.e., U-shaped) relationship with team performance over time.

Hypothesis 2: Relative to before the mega-threat event, teams with more diversity will experience a greater decrease in team performance over time, compared to teams with less diversity.

METHOD

Overview

We utilized publicly available data during the height of the COVID-19 pandemic (March 13th, 2020 to August 5th, 2020), we assessed how well counties were able to "flatten the curve" (Ferguson et al., 2020).

Why Counties?

County leaders pass emergency declarations, stay-at-home policies, and other restrictions on both public and private entities to mitigate the rise of COVID-19 cases (Gupta et al., 2020). They also allocate resources to schools, cities, special districts, and even townships within their jurisdiction (Benton, 2020). Thus, county leaders constitute teams with the ability to engage in actions that have true consequences at large.

Measures

Team Performance. *Ability to "Flatten the curve."* Using data from USAFacts.org, we developed a standardized indicator of how well county teams were able to slow the spread of COVID-19.

Mega-Threat Events. *Killing of George Floyd.* The killing of George Floyd was chosen as a mega-threat during the COVID-19 pandemic as reactions to this event were immediate, with nationwide protests highlighting frustration regarding racialized police brutality, and fits the three defining characteristics of a mega-threat: identity relevance, negativity, and broad impact (Leigh & Melwani, 2019).

Team Racial Diversity. *Blau index.* Racial demographic characteristics were coded by two independent coders for each county team (kappa = 76).

Analysis

Random-coefficient discontinuous growth modeling

RESULTS

Hypothesis 1a: Supported. Time * Racial Diversity (Model 2) = -25.47, $p < .01$

As seen in Figure 1a, there is a steeper linear trajectory associated with higher team racial diversity compared to no racial diversity.

Hypothesis 1b: Supported. Time^2 * Racial Diversity (Model 2) = 93.26, $p < .01$

As seen in Figure 1a, teams with high racial diversity experienced positive acceleration in team performance (i.e., U-shaped curvilinear effect).

Hypothesis 2: Supported. Post * Racial Diversity (Model 4) = -827.47, $p < .01$

As seen in Figure 1b, the pattern of performance is exacerbated (i.e., a reset and deepening of the U-shaped curvilinear effect) following the

Table 2

Standardized Team Performance Discontinuous Growth Model Analysis

	Pre-Mega-Threat Time Window				Full Time Window			
	Model 1		Model 2		Model 3		Model 4	
Variables	*Est.*	*SE*	*Est.*	*SE*	*Est.*	*SE*	*Est.*	*SE*
(Intercept)	.02	.06	.15*	.07	.03	.04	.15**	.05
Level 1 – Within County Team								
Stay at Home Order [a]	-.04**	.01	-.04**	.01	-.06**	.01	-.06**	.01
Time	-4.71*	1.83	-2.49	1.98	29.10	20.32	-24.27	22.01
Time^2	7.42†	4.28	-.50	4.71	16.52†	9.20	-10.99	9.89
Post					-51.20*	24.17	23.81	26.04
Level 2 – Between County Team								
Population Racial Diversity [b]	.00	.01	.00	.01	.00	.01	.00	.01
Population Density [b]	.04**	.01	.04**	.01	-.08**	.01	-.07**	.01
GDP (Billion) [b]	-.13**	.01	-.13**	.01	-.12**	.01	-.11**	.01
Age Diversity	-.01	.04	-.01	.04	-.03	.05	-.03	.05
Gender Diversity	-.06	.04	-.06	.04	.04	.05	.04	.05
Racial Diversity	-.02	.05	-1.47**	.25	-.06	.07	-1.35**	.17
Cross-level Interactions								
Time * Racial Diversity			-25.47**	8.79			587.83**	90.47
Time^2 * Racial Diversity			93.26**	19.21			302.91**	39.78
Post * Racial Diversity							-827.47**	101.05
Marginal R^2	.84		.86		.72		.75	
Conditional R^2	.02		.10		.04		.14	

Note: Time-covariates were calculated using the poly function in R. [a] Stay-at-home order is coded as "0" = no order, "1" = active order. [b] Variable was standardized. Pseudo-R^2 values calculated using Nakagawa & Schielzeth (2013). Marginal R^2 represents the variance explained by the fixed effects divided by the total variance in the model. Conditional R^2 represents the variance explained by both fixed and random effects divided by the total variance in the model. † $p < .10$; * $p < .05$; ** $p < .01$.

Figure 1a

Predicted Pre-Mega-Threat Team Performance Trajectory

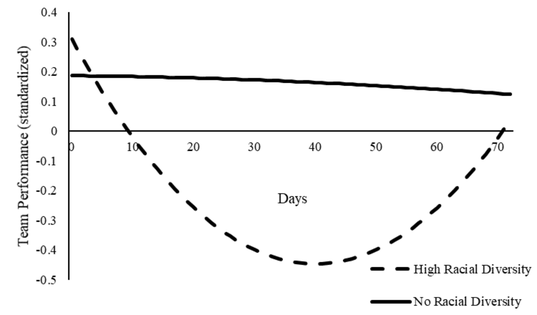
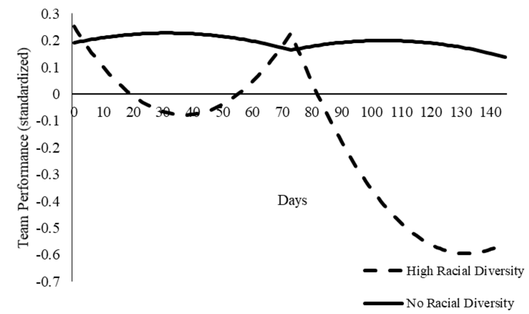


Figure 1b

Predicted influence of a Mega-Threat on Team Performance Trajectory



CONCLUSIONS

These results, which may paint a gloomy picture of diversity in teams, highlights the need to better understand the nature of dynamic diversity and its impact on team outcomes. Extant literature conceptualizes racial diversity as stable (Sveningsson & Alvesson, 2003), omitting that diverse teams and organizations operate in a larger societal environment (Tihanyi, 2020) with shifting boundaries (Katz & Kahn, 1978). Thus, teams must weather fluctuations imposed by events outside of the organizational context. Furthermore, Leigh and Melwani (2019) proposed that mega-threats may lead organizational members to adopt change-oriented behaviors aimed at improving their organizations. Our results suggest that such changes may not be immediate. Indeed, it is possible that reaction to mega-threats can elicit broader empathy to diversity issues that attenuate racial categorization.

Mega-threat events negatively disrupt the performance curve of diverse teams