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Data Brief

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Self-reported Impacts of the Climate of Racial Injustice on Faculty Stress Levels and Engagement in Social Protests and Demonstrations from the 2021 Enhance Diversity Study, Faculty Annual Follow-Up Survey

SUMMARY: The changing educational landscape and the rise in multifarious and nontraditional student populations invite campuses to adjust their programs and services to effectively meet student demands and compete with other campuses for top talent. Ensuring students have access to a diverse learning environment, one that includes a diversified pool of faculty is critical to meeting students' needs. Campuses that can adequately support faculty, ease or alleviate stress, and improve faculty retention fully understand faculty efforts to provide a diverse learning environment and the situational stress their faculty experience. This brief describes the self-reported impacts of heightened attention to racial injustices on faculty levels of stress, engagement in social protests, and modifications to classroom content in the Enhanced Diversity Study (EDS), during the 2021 Faculty Annual Follow-up Survey (FAFS) administration. Analyses presented in this brief highlight significant differences between men and women in reported stress, demonstration/ protest participation, and modifications to classroom content. Faculty varied significantly by racial/ethnic identity in their self-reported stress levels. By contrast, results suggest no significant difference in demonstration/ protest participation or modifications to classroom content when comparing respondents by race/ethnic identity, BUILD program participation, current faculty position, or institutional type.

HALLMARKS OF SUCCESS: FAC-17: Uses evidence-based practices in teaching and mentoring.

Background

The higher education landscape is changing. "Traditional" college student enrollments (full-time students, who are between the ages of 18-24 and financially dependent on their parents, living on campus) continue to decline while older, part-time, and more racially diverse students comprise increasing shares of enrollment on college campuses (Falk & Blaylock, 2010; Hanson, 2022; Pelletier, 2010). These shifts in enrollment patterns encourage campuses to adjust to not only effectively compete with other campuses (Falk & Blaylock, 2010), but to also create an equitable and socially just environment that improves the student experience and society as a whole (Brennan & Naidoo, 2008). Centeno argues that faculty's practices should be responsive to the

changing demographics and enrollments to ensure better outcomes for all students (Centeno, 2021). Campuses can incentivize and support faculty in making their classrooms and labs more welcoming to students, and part of this support includes helping to mitigate and manage faculty stress (Berebitsky & Ellis, 2018).

Faculty are impacted by a variety of personal stressors (e.g., managing household responsibilities, childcare, personal finances, lack of personal time) and professional stressors (e.g., the review and promotion process, committee work, faculty meetings, teaching load, research and publishing demands) (Berebitsky & Ellis, 2018; Hendel & Horn, 2008; Holme, 2021). Faculty within

marginalized groups often contend with added forms of stress such as “resolving attributional ambiguity, protecting self-esteem, and detecting and defusing stereotype threat environments” (LaFromboise et al., 1993). Added to these stresses are the disproportionately higher rates of participation by these same faculty in diversity and inclusion activities that improve campus environment, with little or no effect on their tenure or promotion rates (Jimenez et al., 2019). The social unrest that resulted from the racial injustices witnessed across the country in 2020 provides a unique opportunity to understand stress. A 2015 study highlights the importance of this knowledge, citing “stress due to discrimination had negative effects on faculty of color, but stress related to family obligations significantly and positively correlated with faculty’s adoption of student-centered teaching practices and participation in civic-minded activities” (Eagan & Garvey, 2015). Ultimately uncovering how societal pressures related to racial injustices may be changing or shaping the ways in which faculty experience stress and engage with their students is important.

In this brief we will examine the following questions using the DPC Enhance Diversity Study (EDS) 2021 Faculty Annual Follow-Up (FAFS) survey:

1. To what extent did faculty respondents at Building Infrastructure Leading to Diversity (BUILD) institutions experience stress related to the heightened attention to racial injustice and

associated social protests/demonstrations in the 2020-2021 academic year?

a. To what extent does stress vary by demographic subgroups (race/ethnicity, gender identity, BUILD program involvement, faculty position and campus characteristics)?

2. How often did faculty respondents at BUILD institutions participate in social protests/demonstrations that occurred in 2020?

a. To what extent does social protest/demonstration participation vary by demographic subgroups (race/ethnicity, gender identity, BUILD program involvement, faculty position and campus characteristics)?

3. To what extent did faculty respondents modify their classroom content to make them more responsive to issues of racial injustice?

a. To what extent does classroom content modification vary by demographic subgroups (race/ethnicity, gender identity, BUILD program involvement, faculty position and campus characteristics)?

Data

The Coordination and Evaluation Center (CEC) analyzed responses to the 2021 Faculty Annual Follow-Up Survey (FAFS) from 10 BUILD programs. Survey participants responded to two items related to racial injustice and one item related to the social protests/demonstrations of 2020 (see Figure 1).

Figure 1
FAFS Survey Question 50

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In addition to the COVID-19 pandemic, multiple events prompted social protests focused on police brutality, systemic racism, and social injustice in the spring and summer of 2020. These next questions ask about your experiences during this time.

How often did you participate in any of the various social protests/demonstrations that have occurred in 2020?

Frequently Occasionally Not at all I choose not to answer

How much has the heightened attention to issues of racial injustice and the associated social protests/demonstrations been a source of stress for you?

1-Not at all 2 3 4-Somewhat 5 6 7-Extensive Can't Rate

I have modified content of my classes to make them more responsive to the issues of racial injustice and the associated social protests/demonstrations.

1-Not at all 2 3 4-Somewhat 5 6 7-Extensive Can't Rate

Is there anything further you would like to share or clarify about your experiences related to protests and social activism?

A total of 669 faculty responded to the 2021 FAFS, with 526 completing the three items of interest. The first and third items utilized a seven-point scale ranging from 1 (Not at All) to 7 (Extensive). For subsequent analyses and ease of interpretation, responses in the 1-7 range were merged into the following levels: None at All (1), Low (2, 3), Medium (4, 5), and High (6, 7). For the second item, the three-point scale included response options: Not at All (1), Occasionally (2), and Frequently (3). A “Can’t Rate” or “Choose not to Respond” option was available for all three items. Only substantive responses (i.e., not at all to extensive or not at all to frequently) are included in analyses for this brief, resulting in a maximum of 430 respondents available for analyses. Overall percentage distributions were produced and differences by subgroups were examined using Chi-square analysis.

Roughly 18% of the respondents identified as Asian, 8% Black/ African American, 13% Hispanic, Latino/a, or Spanish origin, 5% Other and 55% as White. Due to small numbers, the “Other” category combines those who identify as multi-Racial (n=14), preferred racial category not listed (n=6), Middle Eastern/ North African (n=2)¹. Men comprised nearly 44% of total respondents, women 54%, and other identities 3% (those who identify as Transman, Transwoman, Gender queer/ Gender non-conforming, a different identity, or choose not to answer).

Respondents to these survey items were also classified by campus type. These classifications, generated from the US Department of Education, consist of Historically Black College and University (HBCU); Hispanic-Serving Institution (HSI); and “Other Campus Type”, a combination of Asian American and Native American Pacific Islander-Serving Institutions (AANAPISI) and institutions with a student population composition that did not meet the minority-serving institution classifications as outlined (National Academies of Sciences, Engineering, and Medicine, 2019). Approximately 15% of faculty responded from HBCUs, 50% from HSIs, and 35% from institutions designated as “Other Campus Type”.

Approximately 63% of survey respondents were classified as “BUILD” due to their participation in program activities. The remaining 37% were classified as “non-BUILD.” BUILD program involvement included faculty who mentored students; participated in mentor or pedagogical training.

Lastly, respondents self-reported their position at the institution through several items and we grouped them as follows in sub-group analyses: Professor (31%), Associate Professor (32%), Assistant Professor (28%), Lecturer or Instructor (10%). Respondents to the faculty survey who indicated they were in non-faculty or administrative positions, Retired or Emeritus, or no rank/Adjunct Faculty were excluded from analyses (n=67). For this brief, we focused on those most likely to interact with students in the classroom or as mentors through their research.

Findings

Most faculty experienced some level of stress (Table 1) related to racial injustice and associated social protests (74%), with over one-quarter experiencing high stress levels (29%). Gender was associated with significant differences in reported levels of stress. More than one-third (37%) of women respondents reported extensive amounts of stress related to racial injustice and associated social protests/ demonstrations compared to about one-fifth of men (19%). Conversely, only 6% of women reported not feeling any type of stress compared to 19% of men. Significant differences were also seen by race/ethnicity with 45% Hispanic and 44% Black/ African American respondents reporting high levels of stress related to racial injustice and associated social protests/ demonstrations compared to 20% of White respondents. No significant difference was found in feelings of stress among respondents when comparing BUILD and non-BUILD, position on campus, or campus type. Only significant findings are represented in Table 1.

¹ Although no faculty selected these options, American Indian and Native Hawaiian were possible response choices.

Table 1: Percent of Faculty Reporting Stress as a Result of Racial Injustice and Associated Social Protests/ Demonstrations, Overall and by Subgroups

	Stress Level				
	n	None At All %	Low %	Moderate %	High %
Overall	430	12	14	45	29
Gender*					
Man	188	19	20	43	19
Woman	233	6	10	47	37
Other	9	22	0	56	22
Race/Ethnicity*					
Asian	78	14	4	50	32
Black/African American	36	6	14	36	44
Hispanic, Latino/a, Spanish Origin	55	15	5	35	45
Other	22	5	5	50	41
White	239	12	21	47	20

*p-value <0.0001 for gender and racial/ethnic subgroup sub-group differences by Chi-square

Participation in social protests and demonstrations underscored additional gender differences among faculty. Women participated in social protests/ demonstrations in some capacity at higher rates than men (Table 2, 41% “occasionally” or “frequently” for women versus 26% for men). No significant difference was found in social protest/ demonstration participation when comparing respondents by race/ethnicity, BUILD and Non-BUILD status, current position, or status type.

Table 2: Percent of Faculty Reporting Participating in Social Protests/Demonstrations, Overall and by Gender Identity

	Degree of Participation			
	n	None At All %	Occasionally %	Frequently %
Overall	392	66	30	4
Gender*				
Man	173	74	24	2
Woman	214	60	36	5
Other	5	80	20	0

*p-value <0.0001 for gender sub-group differences by Chi-square

Women reported frequently modifying the classroom content to increase responsiveness to issues of racial injustice at more than two times the rate of men (35% versus 15%, Table 3). No significant difference was found in modifications to classroom content when comparing respondents by race/ethnicity, BUILD and Non-BUILD, current position, and campus type.

Table 3: Percent of Faculty Reporting Modification of Classroom Content to be More Responsive to Issues of Racial Injustice, Overall and by Gender Identity

	Level of Classroom Content Modification				
	n	None At All %	Low %	Moderate %	High %
Overall	397	22	14	39	26
Gender*					
Man	171	33	15	37	15
Woman	220	13	13	39	35
Other	6	17	0	67	17

*p-value <0.0001 for gender sub-group differences by Chi-square

Conclusion

This brief highlights analysis of faculty self-reported stress levels and modifications to classroom content related to racial injustice, as well as participation in 2020 social protests, as reported in the Spring 2021 FAFS. Results underscore significant differences by race/ethnicity and between men and women in reported stress levels. No statistically significant differences in stress levels were found based on BUILD program involvement, current position on campus, or campus type. Further study on faculty stressors is needed to understand the depth and breadth of stress reported by respondents.

Although the survey prefaced the item on participation in social protests with reference to racial injustice, it is possible that respondents answered with respect to other types of social protest that may have been going on in their local area (“Incidents and protests,” 2023). Nonetheless one-third of the respondents reported participating in the 2020 social protests/demonstrations. These reports did not differ significantly by race/ethnicity, current position, campus type, or BUILD program involvement. The only significant difference was by gender identity. Women participated in protests, either frequently or occasionally, at greater rates compared to men. Further study is needed on the role gender plays in decisions faculty make to participate in social demonstrations. Tangentially, further research should also explore what external and internal pressures exist that sway these decisions.

Classroom content modifications varied significantly among respondents by gender identity. Women were more likely to modify their classroom content than men. Additional research exploring reasons behind classroom modification on a more granular level would be helpful to understand why these types of decision are made, how they were made, what they include, and the impact these types of changes have on student outcomes.

Additional research exploring the reasons behind the significant differences between subgroups in these and other critical areas is necessary to both understand the faculty experience and seek viable solutions for their support.

About BUILD

Building Infrastructure Leading to Diversity (BUILD) consists of a set of 10 linked awards granted to primarily undergraduate institutions, each of which developed approaches intended to determine the most effective ways to engage and retain students from diverse backgrounds in biomedical research, and to prepare students to become future contributors to the NIH-funded research enterprise.

BUILD is one of three initiatives within the Diversity Program Consortium (DPC). Further information can be found here: <https://www.diversityprogramconsortium.org/pages/nih>

Publication and Contact Information

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References

- 1 Berebitsky, D., Ellis, M.K. (2018). Influences on personal and professional stress on education faculty. *The Journal of the Professoriate*, 9 (2), 88-110.
- 2 Bernal, G., Trimble, J. E., Bulew, A.K., & Leong, F.T.L. (2003). *Handbook of racial & ethnic minority psychology*. Sage Publications.
- 3 Centeno, J. (2021, May 12). Why we need more faculty of color in higher education. *Forbes*, Civic Nation Brandvoice. <https://www.forbes.com/sites/civcnation/2021/05/12/why-we-need-more-faculty-of-color-in-higher-education/?sh=7aad595264f2>
- 4 Eagan, K. J., & Garvey, J. C. (2015). Stressing out: Connecting race, gender, and stress with faculty productivity. *The Journal of Higher Education*, 86(6), 923-954.
- 5 Falk, C.F., & Blaylock, B.K. (2010). Strategically planning campuses for the "newer students" in higher education. *Academy of Educational Leadership Journal*, 14(3), 15-38.
- 6 Hanson, M. (2022, July 26). College enrollment & student demographic statistics. *EducationData.org*. <https://educationdata.org/college-enrollment-statistics>
- 7 Hendel, D. D., & Horn, A. S. (2008). The relationship between academic life conditions and perceived sources of faculty stress over time. *Journal of Human Behavior in the Social Environment*, 17(1-2), 61-68.
- 8 Holme, A. (2021). Framing Student and Faculty Stress in Education: A Proposed Science Analogy. *Journal of Chemical Education*, 98(5), 1473-1475. <https://doi.org/10.1021/acs.jchemed.1c00430>
- 9 LaFromboise, T., Coleman, H.L.K., & Gerton, J. (1993). Psychological Impact of biculturalism. Evidence and theory. *Psychological Bulletin*, 114, 395-412.
- 10 List of incidents and protests of the 2020-2023 United States racial unrest. (2023, February 8). In Wikipedia. https://en.wikipedia.org/wiki/List_of_incidents_and_protests_of_the_2020-2023_United_States_racial_unrest
- 11 Mulzac, A. C. (2022). Preserving the mental health of black and brown professors in academia. In A.M. Allen & J.T. Stewart (Eds.), *We're not ok* (pp.128-144). *Black Faculty Experiences and Higher Education Strategies*.
- 12 National Academies of Sciences, Engineering, and Medicine (2019). *Minority Serving Institutions: America's Underutilized Resource for Strengthening the STEM Workforce*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/25257>.
- 13 Pelletier, S. G. (2010). Success for adult students. *Public Purpose*, 12, 2-6.
- 14 Trolian, T.L., & Parker, E.T. (2022). Shaping students' attitudes toward diversity: Do faculty practices and interactions with students matter?. *Research in Higher Education* 63, 849-870. <https://doi.org/10.1007/s11162-021-09668-2>
- 15 White, G.E., Proulx, C.N., Rubio, D.M., Thakar, M.S., Morone, N.E., Mitchell-Miland, C., Althouse, A.D., & Murrell, A.J. (2022). The impact of social unrest due to systemic racism on underrepresented post-doctoral fellows and early-career faculty. *Journal of Clinical and Translational Science*, 6: e112, 1-7. <https://doi.org/10.1017/cts.2022.445>



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