Development of a Faculty Transformative Ally Behavior Scale

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Given the pervasive and continuing impact of racism on all members of university communities (Misra, et al., 2022; Stockdill & Danico, 2012), it is critical to understand what constitutes effective ally behavior in the context of higher education. While racism has discriminatory and oppressive impacts on marginalized faculty, and interacts with other forms of oppression, a majority of faculty members are recipients of unearned racial advantages women faculty and are thus, potentially, racial justice allies. Allies are "members of dominant social groups who are working to end the system of oppression that gives them greater privilege and power based on their social group membership" (Broido, 2000, p. 3). In the higher education literature, practitoners and scholars have focused primarily on college students' ally behaviors (Broido, 2000; Johnson et al., 2019; Reason & Broido, 2005; Sumerau et al., 2021). While some studies address how faculty can serve as allies for their students (e.g., DeVita & Anders, 2018; Evans, 2002; Patton & Bondi, 2015), only a few studies examine how faculty can use their privilege to support marginalized faculty colleagues and dismantle inequitable work environments within academia (e.g., Anicha et al., 2015; Bilen-Green et al., 2013; LeMaire et al., 2020; Warren & Bordoloi, 2021; Warren et al., 2021).

Existing scholarship on faculty allyship primarily has used qualitative designs. A theory-based, quantitative, validated, parsimonious measure to assess the types of ally behaviors that faculty members enact to support their marginalized colleagues has not yet been developed. Furthermore, the current allyship literature has focused on white[1] men faculty members and has rarely included white women faculty members acting as racial allies for their colleagues. A

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[1] The use of the lowercase "w" for "white" or "whiteness" in this article aligns with our aim to decenter whiteness and to pursue racial justice in academia.

measure of faculty ally behaviors may aid in assessing and evaluating faculty efforts towards building more equitable higher education institutions.

The purpose of this article is to describe the development of the Faculty Transformative Ally Behavior (FTAB) scale and offer initial findings about the validity of the white faculty member participants' self-assessed racial allyship. We designed the FTAB scale based on Solórzano and Delgado Bernal's (2001) study of Chicana/o students' modes of resisting oppression. Chen and Rhodes (2016) adapted Solórzano and Delgado Bernal's framework to explore how university staff and faculty functioned as transformative allies to undocumented students; that is, allies who were working to change systems of oppression. We define transformative allyship in the context of this article as someone using their privilege as a white person to make individuals and systems less racist. This approach allows us to view and measure faculty allyship as a "transformative strategy of organizational change" (Erskine & Bilimoria, 2019, p. 319).

We followed standards for scale development articulated in 2014 by the American Educational Research Association (AERA), the American Psychological Association (APA), and the National Council on Measurement in Education (NCME). In this article, we focus on the FTAB scale's content and internal structure by measuring how white faculty who hold privileged racial identities enact allyship for their marginalized faculty colleagues. We asked two research questions: First, do the scale items reflect what has been defined as "faculty ally behaviors" (content-based evidence)? Second, do factors represent, as they are intended to, transformative faculty ally behaviors (internal structural-based evidence)? By answering these research questions, we offer an equity-minded, valid, and parsimonious measure to assess and enhance faculty members' ally behaviors.

Literature Review

Sumerau et al. (2021) argued that "although allyship . . . may be a lever toward greater social equity in theory, only systematic empirical analyses of the ways people construct allyship . . . will allow us to distinguish the theoretical potential from the actual, concrete impact of allyship" (p. 370). In the following paragraphs, we review both conceptual and empirical work on allyship, focusing, where possible, on faculty allyship for other faculty members.

What is Allyship

Sue et al. (2019) defined allies as "individuals who belong to dominant social groups (e.g., whites, males, heterosexuals) and, through their support of nondominant groups (e.g., people of color, women, LGBTQ individuals), actively work toward the eradication of prejudicial practices" (p. 132). This definition aligns closely with the one provided by Broido (1997, 2000), which we include in the introduction to this paper. While there is consensus on a general definition of allyship, how allyship manifests in different settings and for different populations is less clear. Erskine and Bilimoria (2019) noted that "the nature of white allyship, as conceptualized distinctly from sponsorship and mentorship, has not been fully developed to date" (p. 320).

Literature on allyship makes clear that prerequisites for effective allyship include critical awareness about one's privileged social identities and understanding of how oppression is experienced by marginalized groups (Anicha et al., 2015; Reason & Broido, 2005; Collins & Chlup, 2014). However, self-awareness and knowledge are not sufficient; allyship exists only when people take action, behaving in ways that support marginalized people and working to alter systemic oppression (Reason & Broido, 2005; DeVita & Anders, 2018; Salter & Migliaccio, 2019). Allyship, despite the term's misuse in many contexts, is a description of behavior rather

than an identity, a possession of content knowledge, or one of caring about minoritized group members. *Ally* is used in this context as a verb describing continuous social justice-driven actions supporting the success of marginalized groups (Broido, 2000; Carlson et al., 2019/2020; Collins & Chlup, 2014; Estrada et al., 2017; Ostrove & Brown, 2018). Therefore, in our instrument design, we have focused on behaviors of faculty allies, rather than awareness, knowledge, emotions, or values.

There is an extensive body of literature that describes two forms of ally behaviors. While the specific descriptions vary by author, the behaviors can be grouped as those providing emotional support to the target of oppression and those that address perpetrators of oppression. The second category is sometimes subdivided into educating or challenging individual perpetrators and working to rectify institutional and systemic forms of oppression. For example, Kutlaca et al. (2020) described ally behaviors that serve to challenge the current norms of an organization and behaviors that support the needs of a marginalized group. Similarly, Brown and Ostrove (2013) stated that they found that white allies have two overarching qualities: affirmation and informed action. Cheng et al. (2019) identified three domains of ally behaviors: advocacy (of structural change), instrumental support (e.g., helping target group members advance and succeed within existing structures), and emotional support.

While allies, by definition, are working to reduce injustice, which would seem an unequivocal good, there is substantial literature critical of allyship. As we designed this instrument, we took care to ensure the scale items we designed did not include behaviors that have been identified as problematic. Problematic behaviors include claiming an identity as an ally, and potentially gaining social benefits from relevant peers and those in power, without being willing to incur any of the costs of being an ally (Carlson et al., 2019/2020; Louis et al.,

2019; Mathew et al., 2021; Patton & Bondi, 2015; Sumerau et al., 2021). We addressed these criticisms of allyship by asking about ally actions (rather than identity) that challenged individual- and institutional-level racism, specifically in the context of the faculty workplace. Another criticism is that allies sometimes act in ways that are paternalistic or that shift focus from the targets of oppression to themselves (e.g., Estevan-Reina et al, 2021; Mathew et al., 2021; Nixon, 2019). Authors also have argued that allyship should be assessed from the perspectives of minoritized group members (e.g., Brown & Ostrove, 2013; Kutlaca et al., 2020; Warren, et al., 2021), a criticism we address in the future research section.

Allyship in the Workplace

In the last 10 years there has been significant growth in the research on allyship. Early studies were primarily in regard to allyship for LGB people (e.g., Washington & Evans, 1991) and published in the counseling and higher education literatures, with a particular focus on allyship by and for students. More recent literature is evident in the organizational behavior and management fields and tends to focus on workplace allyship supporting women (e.g., Cheng et al., 2019) and people of color (e.g., Erskine & Bilimoria, 2019).

Empirical literature on the outcomes of allyship in the workplace is limited, especially in the domain of faculty work. However, Warren and Bordoloi (2021) stated that "allyship is likely to be particularly consequential in workplaces where men make up a significant numerical majority and disproportionately occupy positions of power . . . one such context is the academic workplace" (p. 1). Allies can facilitate women's ability to ask for support in workplaces without being perceived as weak or needy, as when Warren, et al. (2021) wrote: "When women do not perceive men as allies, they are less likely to ask for and receive support, because seeking help

from men may be viewed as fitting dependency-related sexist stereotypes, even when the goal is to combat structural injustice" (p. 725).

Like Bilen-Green et al. (2013), we believe that faculty who practice allyship can serve as important "change agents" who help make structural changes for "institutional transformation" (p. 5) while also supporting minoritized faculty members' success within existing structures. Allies have the potential to make substantial improvements to campus climates (LeMaire et al., 2020). Thus, assessing faculty ally behaviors and, in the longer term, understanding what organizational factors support those behaviors, is essential for creating and sustaining equitable practices in academia.

A few studies have addressed allyship specific to faculty in higher education (e.g., Anicha et al., 2015; Bilen-Green et al., 2013, Hanasono et al., 2022; Warren & Bordoloi, 2021; Warren, et al., 2021). Much of the work on faculty allyship stems from the National Science Foundation (NSF) ADVANCE programs, which seek to improve gender equity in STEM disciplines (e.g., Anicha et al., 2015; Bilen-Green et al., 2013; Hanasono et al., 2022). These authors have explored the role of men faculty seeking to dismantle the gendered aspects of universities.

Survey Instruments on Allyship

Several measures of allyship have been developed in the last decade, although none has gained wide use. Jones et al. (2014) developed a measure of LBGT+ ally identity, identifying three factors: knowledge and skills, openness and support, and oppression awareness. Interestingly, none of those factors indicated if the allies engaged in actions to support LBGT+ people or worked to reduce heterosexism and cis-sexism. Although items measuring ally action were included in the initial instrument, these items were excluded after factor analysis. Jones et

al. provided extensive discussion of this finding, concluding that it is possible that their sample (largely college-educated white women in their 30s) may have demands on their lives that limit the potential for activism or that their scale items did not fully capture enough dimensions of activism.

Williams and Sharif (2021) developed the 10-item Interpersonal Racial Allyship Scale, in which respondents were presented with eight brief scenarios in which they would hypothetically interact with, depending on the scenario, a Black, mixed-race, or racially ambiguous peer. Participants were given three sample responses and were asked how likely they were to do or say something similar: one micro-aggressive response, one neutral, and one "demonstrate[ing] inclusion, advocacy, concern, and support toward Black people" (p. 3). Responses were found to have strong correlations with behavioral measures of anti-racist statements in a laboratory setting as well as expected negative correlation with commonly used measures of racism.

Sullivan's (2019) dissertation looked at how men enact allyship toward women in the workplace, although not specifically in higher education settings. Sullivan created a 15-item instrument measuring "men's supportiveness of women in the workplace" (p. v). He identified three factors in allyship: knowledge and awareness, action, and skills and capacity. His instrument showed appropriate convergent and divergent validity.

Brown and Ostrove (2013) conducted a multi-part study to investigate "what characteristics . . . people of color associate with an ally, how might these characteristics be perceived differently in white allies versus allies of color, and . . . to what extent . . . allies' self-perceptions match the perceptions of people of color with whom the allies interacted" (p. 2211). Most participants were undergraduate students attending a small, elite university in the Midwest United States. Responses indicated two theoretically grounded factors: informed action and

affirmation. White allies were rated as significantly less likely to address a racial issue than were allies of color and white allies rated themselves as better allies than did people of color.

Pieterse et al. (2016) designed the Anti-Racism Behavioral Inventory to assess what constitutes anti-racism. The instrument was tested on "white students drawn from counseling, counseling/clinical psychology, and counselor education programs" (p. 360), an overwhelmingly female population. The authors created an instrument with questions about anti-racism knowledge, awareness, and behavior. Review of potential items by content experts led to the development of a 55-item instrument using a Likert-type response measure. After a pilot study, their exploratory factor analysis and confirmatory factor analysis suggested a three-factor solution (1) individual advocacy; (2) awareness of racism; (3) institutional advocacy. Content validity was supported as scores correlated with multiple measures on related instruments and the instrument demonstrated strong three-week test-retest reliability. See Table 1 for sample items from each scale that we reviewed above. While these instruments are conceptually similar to the study we conducted, our intent was to design an instrument grounded in the unique dynamics of faculty work, necessitating our development of a separate instrument.

Table 1

Existing Scales Related to Allyship

Scale	Focus of Instrument	Factor(s)	Example(s)	Author(s)
Interpersonal Racial Allyship Scale	Racism	One factor solution	"Racism is a major issue in our country." "Invite the Black student to a future social engagement, like a lecture, group lunch, or party."	Williams & Sharif, 2021
Anti-Racism Behavioral Inventory	Racism	a) knowledge and awareness of racism; b) behaviors	"I actively seek to educate myself about the experience of racism." "I interrupt racist conversations and jokes	Pieterse et al., 2016

		associated with anti-racism	when I hear them in my family."	
Men's Allyhood Toward Women in the Workplace	Sexism	a) awareness and knowledge; b) action; c) skills and capacity	"I engage in conversations with others regarding the importance of women's equality at work." "If I see discrimination against a woman at work, I speak up against it."	Sullivan, 2019
Perception of Ally Characteristics scale	Racism	a) informed action items; b) affirmation items	"My friend is active in racial/ethnic communities other than his or her own." "My friend creates a feeling of connection with me."	Brown & Ostrove, 2013
LGBT Ally Identity Measure	Heterosexism/ homophobia	a) knowledge and skills; b) oppression awareness; c) openness and support	"I have developed the skills necessary to provide support if a sexual minority person needs my help." "I attend community activities in support of sexual minority groups."	Jones et al., 2014

Conceptual Frameworks

The primary conceptual framework for the Faculty Transformative Ally Behavior (FTAB) scale is Solórzano and Delgado Bernal's (2001) work on Chicana/o students' resistance to oppression. Solórzano and Delgado Bernal developed a four-quadrant typology of resistance that Chicana/o high school students enacted to challenge the racism they faced as students of color: reactionary behaviors, self-defeating resistance, conformist resistance, and transformative resistance. We excluded reactionary behavior and self-defeating resistance in our conceptual framework because these categories make sense only in relation to marginalized people's response to oppression and cannot be used to describe ally behaviors. While we see the value of conformist allyship, in this article our focus is on measurement of transformative allyship; that is,

assessing faculty ally behaviors that challenge structures that create racial inequities within academia (Solórzano & Delgado Bernal, 2001).

Chen and Rhoads (2016) adapted Solórzano and Delgado Bernal's model to the study of university faculty and staff allyship for undocumented college students, focusing solely on transformative allyship. In adapting these prior works to the study of faculty members' allyship for their peers, transformational faculty allyship refers to actions that work toward disrupting and replacing oppressive structures with equity and social justice-driven practices that fundamentally alter the dynamics of academic units and institutions. A desire for institutional change grounds transformative ally behaviors. Transformative actions aim to effect deep-rooted structural and/or cultural changes necessary for genuine social justice in faculty members' work experience.

The second conceptual framework grounding the design of our instrument is Hardiman et al.'s (2007) model of oppression. They described oppression, including racism, as functioning on three levels: individual, institutional, and societal/cultural. Each level manifests in conscious and unconscious attitudes and behaviors. Individual, or interpersonal, oppression refers to the attitudes and behaviors of individuals who enact oppression. Behaviors experienced by oppressed people can include harassment, micro-aggressions, hypersurveillance, being overlooked, exclusion, and marginalization.

Institutional oppression refers to the ways that the policies and practices of organizations and institutions serve to oppress historically excluded groups. These policies and practices are, of course, enacted by individuals, and as Hardiman et al. (2007) acknowledged, the distinction between these levels is porous and "institutions such as the family, government, industry, education and religion are shapers of, as well as shaped by, the other two levels" (p. 19). Examples of institutional oppression in higher education include decreasing proportions of

faculty of color as rank increases, racial bias in teaching evaluations, devaluation of research on race and racism, and "racial taxation from excess faculty service" (Museus et al., 2015, p. 61). Societal/cultural oppression includes dynamics such as "philosophies of life, definitions of the good, normal, health, deviance, and sickness" (Hardiman et al., 2007, p. 19) and are beyond the scope of this study.

We sought to design a scale to measure transformative ally behaviors among white faculty aimed at challenging racism in the academic workplace. In doing so, we focused on educating privileged faculty peers, a form of disrupting individual/interpersonal racism, and challenging racist policies and practices in academia, to challenge institutional oppression.

Methods

Positionality

The authors of this paper are cis-gender women faculty members and doctoral students with diverse social identities (race, citizenship, sexual orientation, and disability) and disciplinary backgrounds (biology, communication, geology, and higher education). We are part of a larger team that has implemented an ADVANCE Adaptation grant (funded by the National Science Foundation) to create a more equitable work environment for women and other minoritized faculty at a regional, public university located in a rural midwestern area of the United States. As part of this grant, we have worked to transform institutional norms that sustain sexism and other forms of oppression and we have trained almost 150 faculty in STEM and social science disciplines in allyship for other faculty. Most members of the research team also have many years of experience conducting racial and gender equity training for campus audiences. Thus, we are committed to transformational forms of allyship, while through our training we recognize that many faculty new to allyship are more likely to engage in individual-

level allyship without challenging current systems, especially if they are not tenured. These experiences significantly influenced how we developed scale items, as we supplemented questions used in prior survey instruments with examples we have observed in our own work.

Survey Item Development

We developed the Faculty Transformative Ally Behavior (FTAB) scale through an iterative process that included several rounds of refinement and one survey administration. We began by reviewing existing literature on allyship for racially minoritized groups and women in general and faculty allyship in particular. We also reviewed and adapted items from validated survey instruments that measure activism, advocacy, and allyship (e.g., Corning & Myers, 2002; Miller et al., 2009; Nilsson et al., 2011; Sullivan, 2019; Torres-Harding et al., 2012). Given that this instrument focuses only on faculty ally *behaviors*, we excluded items that measured attitudes, motivation, or perceptions.

In addition to reviewing instruments measuring allyship and related constructs, in the fall of 2020 and spring of 2021, we also reviewed literature about allyship, activism, and solidarity for racial and gender equity. We drew on both this literature and the instruments described above to develop items measuring transformative allyship in the areas of educating privileged groups and changing systematic barriers in academia. Some initial items of the FTAB instrument included, "I have reformed hiring, promotion, tenure, or merit standards or practices that privilege whiteness or dominant norms," and "I have been involved in the reform of university practices that center whiteness."

Expert Review of Instrument

To confirm content validity, in the summer of 2021 we approached six well-known faculty in the United States who research allyship and social justice and asked them to review the

draft survey items. These faculty members came from the disciplines of higher education, women and gender studies, and psychology, and have diverse racial and gender identities. We shared the pilot survey items and Solórzano and Delgado Bernal's (2001) framework and asked four questions (1) Do the items match with the conceptual framework? (2) Are the items clear and unambiguous? (3) Do you suggest any items for deletion? (4) Are we missing any important items of ally behaviors? Four content reviewers provided extensive written feedback on the overall structure and specific items and one provided more generalized feedback about the concept of allyship and measurement challenges.

We deleted any items the experts suggested did not belong as a concept of transformative allyship and we revised the draft items based on the feedback. The content experts also offered new items we had not initially included (e.g., adding an item about ameliorating the heavier advising and service loads that racially minoritized faculty often carry).

Pilot Item Testing

The pilot instrument underwent an initial review by the University of North Texas Institutional Review Board and was granted exemption from a full review. White faculty took the three-part self-assessment that addressed (1) transformative ally behaviors (14 items); (2) individual characteristics (nine items); (3) institutional characteristics (three items). Individual demographic characteristics included citizenship, race/ethnicity, gender, first year of faculty position at the current institution, academic discipline, tenure status, academic rank, length of contract (if non-tenured track was selected), and in what kinds of work they primarily engaged (teaching, research, service/administration). The instrument contained questions about institutional characteristics such as type, size, and location.

Study Participants

We piloted the items in a survey of white faculty members who work full-time at four-year institutions in the United States. To recruit survey participants, we used our personal and professional networks. All authors shared the names and email addresses of their colleagues who might have been willing to participate in the pilot survey. We distributed the pilot to 105 white faculty (41 white cis-gender men and 64 white cis-gender women). We also distributed the survey to an additional 67 white women faculty who participated in a conference for faculty gender equity and faculty allyship related workshops. We sent the potential participants a Qualtrics survey via an emailed link and sent two reminders to non-respondents over the three weeks the survey was open. Of the 172 potential participants, 84 faculty members completed the survey, for a response rate of 49%. This is a high response rate given that response rates are usually low for emailed surveys (Porter, 2004), especially when surveying faculty.

Table 2 shows the demographics of faculty participants. The majority of the pilot study participants were women (77%), U.S. citizens (96%), tenured (61%), and faculty members at public institutions (80%). Given that we used our personal networks to collect the pilot data, we acknowledge that the characteristics of the study participations are not generalizable to the population of faculty at four-year institutions in the United States. It is worth noting that respondents were concentrated in two disciplines: education (n=20, 25%) and physical sciences (n=18, 23%). We address this limitation in the Discussion section.

Table 2

Demographics of Survey Participants (n = 84)

Characteristics	N	%
Individual Characteristics		
Gender: Woman (cis-gender)	65	77
Gender: Man (cis-gender)	19	23
Citizenship: U.S. citizen	78	96
Citizenship: Non-U.S. citizen	3	4
Year of first appointment: 1950 or earlier-1999	15	19
Year of first appointment: 2000-2009	30	37
Year of first appointment: 2010-2021	36	44
Academic Discipline: Education	20	25
Academic Discipline: STEM	34	42
Academic Discipline: Non-STEM and Non-Education	26	33
Tenure or not: Institution does not have tenure system	3	4
Tenure or not: Not tenure track, but institution has tenure system	7	8
Tenure or not: Tenure track, but not tenured	10	12
Tenure or not: Tenured	61	75
Academic Rank: Assistant Professor	10	14
Academic Rank: Associate Professor	24	34
Academic Rank: Full Professor	37	52
Primary Role: Administration	8	10
Primary Role: Research only	5	6
Primary Role: Research and teaching	49	60
Primary Role: Teaching	19	25
Institutional Characteristics		
Institution type: Private non-profit	17	20
Institution type: Public	68	80
Institution size: 1,000 to 4,999 students	13	15
Institution size: 5,000 to 19,999 students	36	42
Institution size: 20,000+ students	37	43
Region of United States: West	15	18
Region: Midwest	34	41
Region: South	14	17
Region: Northeast	19	23

Note. STEM includes Biological and Biomedical Sciences, Engineering, Health Professions and Related Clinic, Mathematics and Statistics, Natural Resources and Conservation, Physical Sciences, and Science Technologies/Technicians. Non-STEM and Non-Education includes Business, Management, Marketing, and Related Fields; Communication, Journalism, and Related Programs; English Language and Literature/Letters; Ethnic, Cultural, and Gender Studies; Foreign Languages, Literature, and Linguistics; Multi/Interdisciplinary Studies; Psychology; Sociology/Social Sciences; Theology and Religious Studies; Visual and Performing Arts.

Data Analysis: Validity Tests

We assessed two forms of validity as recommended by AERA, APA, & NCME (2014). Evidence for content validity included building upon the allyship literature and previously validated instruments. To check content validity, we asked for written feedback from content experts on allyship and social justice scholarship and collected qualitative data (open-ended survey questions) from faculty members within the pilot instrument. Evidence of internal structure (construct validity) included statistical analyses to evaluate the consistency between the survey items and our theoretical framework (e.g., whether the items are grouped as transformative ally behaviors).

Qualitative Data Analysis. Instead of cognitive interviews, we used open-ended survey questions to receive feedback about all survey items. Given that our study did not include faculty members in a wide variety of disciplines and institutional types, cognitive interviews with a few faculty members may not have reflected the diversity of faculty experiences. We presented our pilot survey items in Qualtrics, displaying four to seven items on each page. Each page ended with two questions (1) Please provide any suggestions to improve the clarity or usefulness of items [on this page]; (2) Please describe any additional actions (not addressed above) that white faculty have taken to reduce racism at your institution. Forty respondents provided feedback; most of those provided feedback on multiple items or instrument structure.

Two authors reviewed all feedback, highlighting concerns raised more than once, additional forms of allyship mentioned more than once, and all individual substantive concerns. Three authors then reviewed and revised survey items in light of the feedback.

Quantitative Data Analysis. Through exploratory factor analysis, we assessed evidence about the scales' internal structures and the extent to which the items reflect the underlying

construct (AERA, APA, & NCME, 2014). Exploratory factor analysis is commonly employed to

find the factor structure of a scale (Fabrigar et al., 1999), potentially enhancing the scale's

reliability by eliminating unsuitable items. In this study, we used exploratory factor analysis as a

validity test to scrutinize the inherent factor structure of the scales. The primary aim in using

factor analysis was not to enhance the reliability of the scales. Moreover, we refrained from

conducting confirmatory factor analysis, as it falls outside the scope of this manuscript, which

predominantly centers on presenting the pilot instrument's results.

Before we conducted factor analysis, we checked the descriptive statistics for each item

that we asked in the FTAB scale (Table 3). Two items (#5, #6) had substantially more missing

responses than other items. Two respondents indicated in open-ended questions that these items

were not applicable because they had no influence on these matters due to their institution's

faculty union. We deleted these items from further analysis. We address these items in the future

research portion of the Implications section of this article.

Table 3

*Initial Transformative Faculty Allyship Items: Item Descriptions, Count, Means, Standard
Deviations, Minimum, and Maximum*

Transformative Allyship Items	N	Mean	SD	Min	Max
1. Worked to reform hiring standards or practices that privilege whiteness.	68	2.71	1.48	0	4
2. Worked to reform tenure standards or practices that privilege whiteness.	63	2.24	1.57	0	4
3. Worked to reform promotion standards or practices that privilege whiteness.	66	2.26	1.56	0	4
4. Worked to reform merit standards or practices that privilege whiteness.	52	2.21	1.55	0	4
5. Challenged practices that give white faculty more resources for teaching (e.g., more teaching assistant support, better teaching schedules, fewer advisees).	38	2.13	1.61	0	4
6. Challenged practices that give white faculty more resources for research (e.g., more professional development funds, larger labs, more research assistant support).	39	2.23	1.61	0	4
7. Challenged the greater recognition of white faculty's scholarly contributions.	56	2.45	1.48	0	4

8. Challenged practices that give white faculty more rewarded or less time-consuming service work.	53	2.62	1.46	0	4
9. Challenged other white faculty to "step back" when they dominate faculty meetings.	64	1.97	1.44	0	4
10. Asked for feedback about their efforts to challenge systemic racism from colleagues doing anti-racist work.	67	2.18	1.47	0	4
11. Found ways to reduce the expectation that Faculty of Color do all the work related to challenging racism and supporting Students of Color.	70	2.76	1.21	0	4
12. Participated in official, organized activities that seek to reduce racism in academia.	79	3.20	1.18	0	4
13. Engaged in informal conversations with other white colleagues challenging racism.	77	3.23	1.13	0	4
14. Educated other white colleagues about racism by leading a formal program.	74	1.73	1.79	0	4

Note. Question Stem: In the past 3 years, how often have you taken the following actions at your institution? SD: standard deviation, Response Option: 0 = never and 4 = almost always.

We conducted principal-axis factor (PAF) analysis with oblique rotation (direct oblimin with Kaiser normalization) on the remaining 12 items measuring white faculty members' self-evaluated transformative ally behaviors. Maximum-likelihood (ML) factor analysis would not have been a good approach because item responses were not normally distributed. Mean scores ranged from 1.73 to 3.23 (response options from 0 as "never" to 4 as "almost always"; see Table 3). PAF is popular in scale development because it is free of distributional assumptions and less prone to improper solutions than ML (Fabrigar et al., 1999).

De/Limitations

Our focus solely on ally *behavior* is a delimitation of this study; we believe the development of ally knowledge and values is important as well and encourage other researchers to address those topics. Limitations include a limited range of institutional types and faculty roles; our sample does not include faculty at community colleges or part-time faculty members. Given that we used our personal network, the pilot results are not representative of full-time faculty at four-year institutions in the United States. Our data also contains a higher proportion of certain academic disciplines (e.g., education and physical sciences). We also have more

associate/full professor faculty than assistant professor and non-tenure track faculty. We have more white women participants than white men. Our statistical findings likely are influenced by these characteristics and other demographics of the survey respondents.

Parsimony, balanced with measurement detail, is a common goal of scale development (DeVellis, 2003). The parsimoniousness of the FTAB may be beneficial; however, it also precludes the use of FTAB for purposes that require measurement of more nuanced forms of faculty allyship. Specifically, we treat allyship for racial minorities as a single dynamic and do not differentiate between allyship on behalf of, for example, Black colleagues versus Latinx colleagues. Additionally, we do not address the nuances of allyship for faculty having multiple minoritized identities (e.g., LGBTQ faculty of color). Given the lack of survey instruments that measure faculty allyship, we hope this study offers a starting point for future measures that will extend beyond the binary way in which we operationalized race. We suggest future research efforts based on this limitation in the Implication section.

Results

Qualitative Findings

Forty participants offered written feedback about the questions in the pilot instrument. First, many faculty asked for clarification about what level of the university each question referred to (e.g., department, college, entire university). Their comments made it clear that responses would differ depending on levels as dynamics with colleagues differ between departments, colleges, and the university as a whole.

Second, some participants shared why they answered, "not sure," "not applicable," or skipped certain questions. We found that item #5 (challenged practices that give white faculty more resources for teaching) and #6 (challenged practices that give white faculty more resources

for research) had substantially more missing responses than other items (see Table 3). Two

participants indicated in the feedback portion that these items were not applicable because their

faculty union, rather than individual faculty members, determined those issues. Because of the

high number of missing responses, we did not include these items in further analyses. We also

found that item #12 (participated in official, organized activities that seek to reduce racism in

academia) gave ambiguous results; feedback indicated participants thought this question might

refer to institutionally mandated training rather than individually chosen behavior. Thus, we also

deleted item #12.

Second, to limit survey fatigue, we had not included demographic items about sexual

orientation and disability status. Pilot participants repeatedly asked why these characteristics

were not included.

Third, participants suggested many minor changes such as clarifying ambiguous wording

and deleting questions that did not apply to all faculty across institution type. For example, the

question asking about participants' primary role was noted as unclear. Other respondents asked

what response was expected if they had done something in only one of the three years we asked

them to consider in their responses. Another respondent pointed out that that many of our

questions would not apply to clinical faculty members.

Finally, several instrument design experts took part in this pilot study and they offered

written feedback to improve the format of the survey instrument. They suggested changing the

response scale from a five-point Likert-type scale (1 = strongly disagree to 5 = strongly agree,

with additional response options of Not Sure and Not Applicable) to "To what degree does your

institution/do you do the following?" with response options of Very much, Quite a bit, Some,

and Very little. They also suggested a visual indicator between Very Little and the Not Sure and
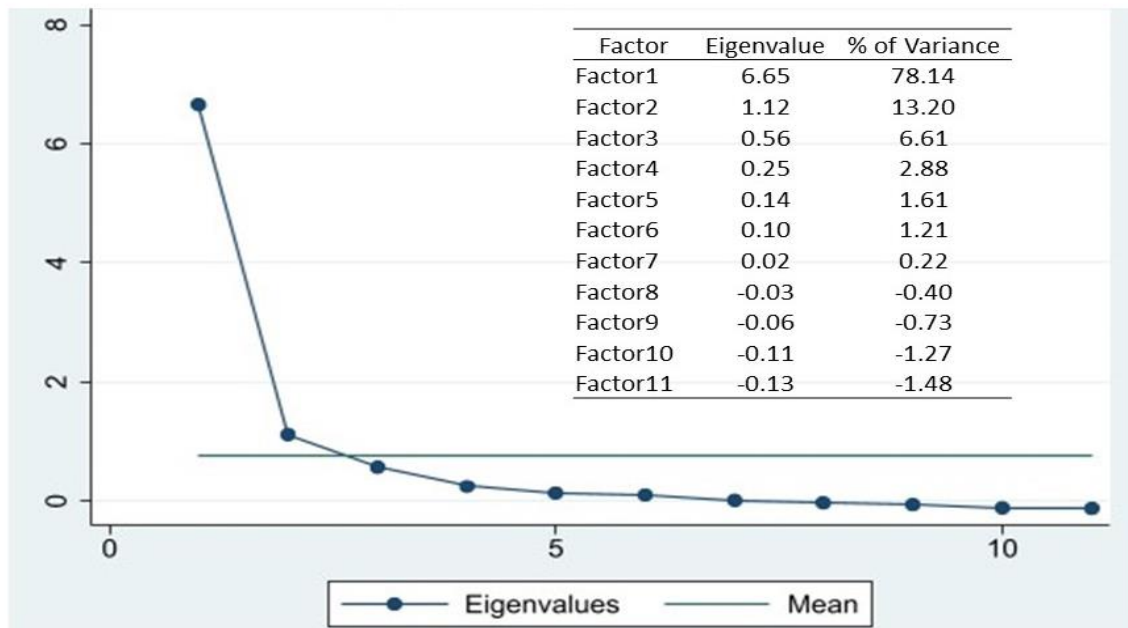
Not Applicable responses.

Factor Analysis: Faculty Transformative Allyship Scale

We used exploratory factor analysis to determine the underlying latent structure of white

faculty members' transformative ally behaviors. Specifically, we designed questions addressing

two types of transformative allyship in faculty work (1) changing institutional policies and

practices that privilege white faculty; (2) challenging individual-level racism. We conducted

principal-axis factor analysis with oblique rotation (direct oblimin with Kaiser normalization) on

the 11 survey items.

We first checked the scree plot (Figure 1). A scree plot shows the factors to retain—the

factors on the steep curve and the elbow—and the factors to discard—those that form the scree,

or horizontal portion of the curve (Kim & Mueller, 1978). It appears that factor two was the last

point in the elbow and factor three was the first point in the scree. We also used the Kaiser-

Guttman Rule method, in which factors with eigenvalues of one or greater are retained and

factors with eigenvalues less than one are discarded (Kim & Mueller, 1978). Factor one and

factor two showed eigenvalues greater than one. The two factors together explained 91.3% of the

variance. With an eigenvalue of 6.65, the first factor included five items and accounted for

78.1% of the variance. The second factor accounted for 13.2% of the variance and consisted of

six items (eigenvalue=1.12). We retained two factors based on the agreement between the point

of inflexion on the scree plot and Kaiser's criterion of two factors.

Figure 1

Scree Plot for the Faculty Transformative Allyship Scale

Factor	Eigenvalue	% of Variance
Factor1	6.65	78.14
Factor2	1.12	13.20
Factor3	0.56	6.61
Factor4	0.25	2.88
Factor5	0.14	1.61
Factor6	0.10	1.21
Factor7	0.02	0.22
Factor8	-0.03	-0.40
Factor9	-0.06	-0.73
Factor10	-0.11	-1.27
Factor11	-0.13	-1.48

We re-ran the factor analysis with a two-factor solution with oblique rotation and retained items with loadings above 0.5 (Table 4). Given that we had a small sample size (n=30) after we used listwise deletion (entire record is excluded from factor analysis if any single value is missing), we checked the Kaiser-Meyer-Olkin (KMO). The KMO measure verified a "meritorious" level of sampling adequacy for the analysis with an overall KMO=0.827 (MacCallum et al., 1999). Communalities for individual items also supported adequate sampling size (mean=0.774, range 0.585–0.933), which indicate at least a 99% chance of convergence on the correct factors given the data set size of 30 responses (MacCallum et al., 1999).

We labeled the first factor *Reforming Institutional-level Policy and Practice* as most items reflected the white faculty's self-evaluation of how often they worked to reform policies to enhance racial equity through hiring, tenure, promotion, and merit standards or practices. One

item, "educate other white colleagues about racism by leading a formal program" initially

seemed an unexpected part of this factor but because the question focuses on a *formal* program,

it aligns with the focus on institutional practice. The *Reforming Institutional-level Policy and*

Practice subscale had a Cronbach's alpha of 0.91. We refer to the second factor as *Challenging*

Individual-level Racism given that the six items address how white faculty challenge practices

that harm faculty of color and how white faculty help other white colleagues and themselves to

challenge racism. The subscale had a Cronbach's alpha of 0.90.

Table 4

Factor Analysis: White Faculty Members' Transformative Ally Behaviors (n = 30)

Item	Factor 1	Factor 2
Reforming Institutional-level Policy and Practice (Alpha = 0.91)		
1. Worked to reform hiring standards or practices that privilege whiteness.	0.67	
2. Worked to reform tenure standards or practices that privilege whiteness.	0.86	
3. Worked to reform promotion standards or practices that privilege whiteness.	1.02	
4. Worked to reform merit standards or practices that privilege whiteness.	1.00	
14. Educated other white colleagues about racism by leading a formal program.	0.64	
Challenging Individual-level Racism (Alpha=0.90)		
7. Challenged the greater recognition of white faculty's scholarly contributions.		0.77
8. Challenged practices that give white faculty more rewarded or less time-consuming service work.		0.75
9. Challenged other white faculty to "step back" when they dominate faculty meetings.		0.71
10. Asked for feedback about their efforts to challenge systemic racism from colleagues doing anti-racist work.		0.68
11. Found ways to reduce the expectation that Faculty of Color do all the work related to challenging racism and supporting Students of Color.		0.78
13. Engaged in informal conversations with other white colleagues challenging racism.		0.61

Note. Question Stem: In the past 3 years, how often have you taken the following actions at your institution? SD: standard deviation, Response Option: 0 = never and 4 = almost always. Blanks represent factor loading <0.5

We also checked the correlation between the two factors. Factor correlation indicates

convergent validity (the degree to which two factors designed to measure the same construct are

related) or divergent validity (the degree to which two factors designed to measure different

concepts are related). In this case, these two factors should be correlated, but not too highly since

they are related as transformative ally behaviors but could be distinctive since one factor

measures reforming institutional policies and the other measures challenging individual racism.

The factor correlation was 0.61, which indicates a moderate positive correlation.

Discussion

In this paper, we described the process of developing a faculty transformative allyship

scale and the process of validating the scale by soliciting responses from white faculty members

at four-year institutions. We found that white faculty's ratings of their performance of

transformative allyship grouped into two factors (1) institutional policy and practice change; (2)

challenging and educating other white faculty and themselves about racism. The *Reforming*

Institutional-level Policy and Practice subscale included seven items that addressed white

faculty members' efforts to reform institutional/organizational policies that privilege white

faculty (e.g., hiring, tenure, promotion, and merit standards). The *Challenging Individual-level*

Racism subscale encompassed six items that addressed the extent to which white faculty

challenged racism enacted by individuals in the academic workplace and sought feedback to

become better allies.

We confirmed that the two factors align with the concept of transformational allyship,

which is defined as actions taken by privileged group members to transform oppressive systems

and individual behaviors. This finding aligns with Hardiman et al.'s (2007) model of oppression,

in which they noted that oppression operates differently at the individual, institutional, and

cultural/societal levels.

Several items grouped or failed to group in ways divergent from the allyship literature.

One item within the *Challenging Individual-level Racism* subscale related to white faculty

getting feedback to improve their anti-racist efforts (item #10) and five additional items

addressed challenging how faculty peers enacted racist practices (see Table 4). While these items

had adequate factor loadings to treat them as a single factor, we see a potential distinction

between them. Many authors (e.g., Adams et al., 2007; Reason & Broido, 2005; Carlson et al.

2019/2020) writing about social justice stress the importance of allies educating themselves and

seeking (and acting on) feedback from others doing anti-racist work, particularly people of color.

We consider this a dynamic distinct from educating others, implying that this item could be

considered a different factor. If researchers are interested in privileged faculty members' self-

reflections and efforts to receive feedback, more items related to that construct would be

required.

      We also initially were surprised that item #14, (educated other white colleagues by

leading a formal program), loaded with four items more obviously related to challenging

institutional- and departmental-level standards and practices. Further thought about this

combination led us to conclude that the focus on *formal* programs likely explained this grouping

with the other items that also related to formal university practices. This question may need to be

rephrased to make it either more theoretically congruent with other items in this factor or to shift

its focus away from formal programs to focus on informal peer-to-peer education.

      In this pilot test we considered only the perspectives of privileged group members. Prior

research (e.g., Brown & Ostrove, 2013) indicates that minoritized faculty participants rate their

peers as engaging in allyship less often than their privileged peers describe themselves as doing

so. Given this, we expected that the white faculty participants in this study would rate their ally

behaviors quite positively. However, their scores were only near the mid-point of the scale (see

Table 3). We suspect that this indicates that even participants recruited from the authors'

personal and professional networks and those who attended a conference or a workshop that

addressed allyship in academia were not frequently engaging in racial ally behaviors. The lack of congruent evaluation between those acting as allies and those "receiving" the allyship in prior research indicates the necessity of measuring racial allyship from the vantage points of both white faculty and faculty of color (as well as other privileged/minoritized groups), a point clearly articulated by Kutlaca et al. (2020) in their overview of research on allyship.

"Faculty member" is a title that covers a wide variety of job functions, and qualitative comments from survey respondents made clear that many items in the instrument were most relevant to those who had "traditional" faculty roles in which teaching, research, and service made up most of the respondents' work. Given the rise in the proportion of faculty who are in non-tenure-track roles (National Center for Educational Statistics, 2021), questions about acting as an ally in the domain of support for and evaluation of scholarship, as well as tenure, will be relevant to an increasingly smaller fraction of faculty. Yet, for those who are tenure-stream, research is often the critical determinant of tenure and promotion (Niles et al., 2020) and white faculty allyship may be even more important at research universities, where faculty of color are most underrepresented (Finkelstein et al., 2016). How to ensure inclusion of items about faculty allyship related to all aspects of faculty work and how to ensure respondents can easily skip items not relevant to their work is an issue that needs resolution.

Implications

We offer several implications for future research. The factor analyses results indicate two subfactors, *Reforming Institutional-level Policy and Practice* and *Challenging Individual-level Racism*, align with Hardiman et al.'s (2007) model of oppression, which addressed individual and institutional level racism. Faculty members' ally efforts for structural and systematic change also are congruent with Solórzano and Delgado Bernal's (2001) description of transformative

resistance. We sought to include multiple aspects of faculty work that affect other faculty in the

FTAB scale, such as hiring and tenure policies and practices, and research, teaching, and service

commitments. Thus, the FTAB scale could be used for other types of ally behaviors among

faculty members who hold privileged identities, such as men faculty, cis-gender faculty,

heterosexual faculty, or able-bodied faculty. The FTAB items were designed to measure actions

to challenge racism, and these items could be easily rephrased to address sexism, genderism,

homophobia, or ableism. When researchers use the items to address different forms of

oppression and allyship, we recommend additional validity tests as the respondents will not be

the same group as those in this pilot study. Additional consideration should be given to the

unique dynamics of each form of oppression and how those might manifest differently in faculty

work.

Compared to other items, we found that many white faculty members declined to answer

two specific items on the FTAB scale (see Table 3): "challenged practices that give white faculty

more resources for teaching" (item #5) and "challenged practices that give white faculty more

resources for research" (item #6). Although several participants mentioned that these items were

not relevant because their institutions have faculty unions, we do not have a clear explanation for

these missing cases and wonder if white faculty might not recognize racism in these practices at

their universities. Future research should incorporate a cognitive interview to better understand

why respondents tended to omit a response to these items.

Given that we recruited faculty participants through the authors' personal and

professional networks, the sample of this study is not nationally representative. Future research

needs to include more diverse institutional and disciplinary settings, such as two-year institutions

and sub-disciplines within STEM departments. Most literature on faculty allyship has focused on

four-year, historically white institutions, so it is necessary to explore how privileged faculty enact racial ally behaviors at two-year institutions or four-year institutions that are minority-serving institutions.

Participants also did not reflect the gender or tenure status distributions of faculty in the United States. We had substantially more participants who were white women than white men, and, because only one participant identified as gender nonconforming, non-binary, gender-fluid, or agender, we were unable to include that person in further analyses due to sample size restrictions. Because we used our personal and professional networks to recruit participants, tenured faculty were grossly overrepresented—72.6% of respondents vs. 41.5% of full-time faculty at a degree-granting postsecondary institutions in the United States in 2020—and non-tenure track faculty made up only 11.9% of respondents—vs. 36.8% of full-time faculty at a degree-granting postsecondary institutions in the United States in 2020 (National Center for Educational Statistics, 2021). The survey participants also requested that the instrument include questions about sexual orientation and disability status which could shape faculty work and influence faculty dynamics. Future research should better reflect the gender, tenure eligibility, and tenure status distributions of faculty and collect data about sexual orientation and disability status.

We acknowledge the call of many allyship authors (e.g., Brown & Ostrove, 2013; Kutlaca et al., 2020; Warren, et al., 2021) that allyship must be considered from the perspective of minoritized group members, which was beyond the scope of this study. We believe there is value in understanding allyship from both perspectives and support the work of future researchers in addressing the impact of allyship as evaluated by faculty of color.

We hope these measures will be useful for practice as well as research. This scale could be used as an evaluation for both short-term and long-term allyship training programs. The FTAB scale could be used as an evaluation to indicate whether such trainings are successful in creating more ally behaviors. Because the FTAB focuses on behaviors, it would be particularly valuable as a long-term measure of the training's impact, as many of the behaviors take time to implement. We believe the scale also could be used as a self-reflection tool for faculty members about ways they do and could use their privilege to create structural change and assess how their behaviors have perpetuated or interrupted racism.

The instrument also might be used to assess department-level or institution-level climates; are ally behaviors more common in some settings than others? Why? What organizational structures and dynamics foster the development of faculty allyship for their peers? Data indicating what perceptions privileged faculty members have about their own allyship in different university contexts could create important conversations about what constitutes effective allyship for racially minoritized faculty.

Much of the existing research on faculty allyship has been supported by NSF ADVANCE programs, which have evolved to look at other forms of privilege and oppression in addition to sexism (Hanasono et al., 2022). The FTAB instrument could be used to measure privileged faculty members' ally behaviors across multiple forms of oppression. Given that many studies of faculty allyship are single-institution qualitative studies (e.g., Anicha et al., 2015, Bilen-Green et al., 2013), this theory-based, quantitative, validated, parsimonious measure of behaviors that privileged faculty members enact to change institutional structures that impede their marginalized colleagues could be used in other ADVANCE grant studies. Furthermore, the FTAB scale could be used along with the Collaborative on Academic Careers in Higher

Education (COACHE) surveys (Faculty Surveys, n.d.). The COACHE surveys address faculty job satisfaction and retention; using the COACHE and FTAB surveys together could provide insight into how privileged faculty members' ally behaviors influence the job satisfaction and success of minoritized faculty in academia.

Conclusion

In this study, we demonstrated the process of scale development and validity testing of a measure of white faculty members' transformative racial ally behaviors to their racially minoritized faculty colleagues. We found two factors that measure transformative allyship: *Reforming Institutional-level Policy and Practice* and *Challenging Individual-level Racism.* While we recognize that this instrument is only an initial step toward a broadly usable measure of faculty allyship, the data we have collected indicate that it has promise. Given that higher education is both a site of oppression and of resistance to oppression (Stockdill & Danico, 2012), understanding how white faculty members' allyship is enacted and the impacts of allyship between faculty will help us to create colleges and universities that better enact social justice and support the success and contributions of all members. We recommend that researchers continue the FTAB's development as one of many tools to create more equitable college and university campuses.

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