







Epistemic Exclusion of Women Faculty and Faculty of Color: Understanding Scholar(Iy) Devaluation as a Predictor of Turnover Intentions

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ABSTRACT

Faculty diversity has received increased attention from researchers and institutions of higher education, yet faculty demographics have not changed substantially for many underrepresented groups. Several barriers to the retention of women and faculty of color have been offered, including a lack of belonging, discrimination, social exclusion, and tokenism. Epistemic exclusion, scholarly marginalization rooted in disciplinary and identity-based biases, is theorized to act as another barrier to the retention of these faculty. The present study examines the effect of scholarly devaluation, a primary component of epistemic exclusion, on faculty workplace outcomes using data from 1,341 tenure-track faculty from a predominantly White, research-intensive institution. We found that women and underrepresented faculty of color reported higher perceptions of scholarly devaluation. Further, scholarly devaluation was associated with higher intentions to leave the university and this relationship was mediated by lower job satisfaction and poorer perceptions of the workplace climate. Notably, the negative consequences of perceiving scholarly devaluation were found for all faculty, not just women and faculty of color. We discuss the implications of these findings for retaining marginalized faculty and for institutions of higher education more broadly.

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Despite increased focus on faculty diversity within higher education (Turner et al., 2008), there has been only marginal growth in the numbers of women and faculty of color,¹ and their representation within higher education remains disproportionately low compared to their representation in the U.S. population (U. S. Department of Education, 2018). These faculty face barriers to their recruitment and retention, including a lack of belonging, marginalization, social exclusion, and tokenism (Diggs et al., 2009; Li &

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Beckett, 2006; Settles et al., 2019; Tippeconnic, 2005; Turner et al., 2008; Zambrana et al., 2017). These barriers can negatively impact faculty wellness (Dancy & Jean-Marie, 2014; Niemann, 2011) and motivate them to leave the academy (Benson & Mathews, 2014).

We assert that *epistemic exclusion* is an additional challenge that undermines the retention of women and faculty of color. Epistemic exclusion is a form of scholarly delegitimization rooted in disciplinary biases about what types of research are valued as well as social identity-based biases against individuals from marginalized groups (Dotson, 2012, 2014; Settles, Jones, et al., 2020). Epistemic exclusion may have a disproportionately negative effect on women and faculty of color due to negative stereotypes about their competence, and their likelihood of engaging in research outside of the disciplinary mainstream (e.g., Bernal & Villalpando, 2002; Gonzales, 2018). Using data from 1,341 tenure-track faculty members at a research-intensive institution, we examined whether women and faculty of color were more likely than other faculty to experience epistemic exclusion, and whether job satisfaction and workplace climate mediate the relationship between epistemic exclusion and turnover intentions.

To date, there is no existing measure of epistemic exclusion. As a first step in understanding this phenomenon, we use an existing dataset to extend the literature on injustice and exclusion by quantitatively examining perceptions of scholarly devaluation, a primary component of epistemic exclusion. Previous research on epistemic exclusion has primarily been theoretical (e.g., Dotson, 2012, 2014) or used qualitative methods (e.g., Settles, Jones, et al., 2020). Our large survey design enhances our ability to examine epistemic exclusion via scholarly devaluation across faculty groups (e.g., women and faculty of color) and identify underlying factors that may explain the link between exclusion and faculty turnover, particularly among marginalized groups. Importantly, as a form of exclusion that reflects both interpersonal bias and structural oppression (Settles, Jones, et al., 2020), epistemic exclusion has broad implications for faculty well-being and career trajectories. As such, our results may inform both interpersonal- and institutional-level interventions.

Exclusion, gatekeeping, and legitimizing knowledge in the academy

Across a number of fields, scholars have grappled with issues of inclusion by focusing on legitimizing processes that determine who has access to academia (see Arnold et al., 2016; Bernal & Villalpando, 2002; Griffin, 2019; Griffin et al., 2020; Hart, 2016; Ponjuan et al., 2011). Within disciplines, faculty act as gatekeepers by determining who enters the field, socializing trainees into disciplinary norms, and removing those who fail to meet these standards (e.g., Vacha-Haase et al., 2004). In publishing, gatekeeping occurs when expert

reviewers determine if scholarship meets the methodological and intellectual standards of the field (e.g., King et al., 2018; Siler et al., 2015). Academic gatekeeping is thought to be objective, free of social identity-based biases, and of benefit to the field; however, gatekeeping is subject to disciplinary biases with differential effects for women and faculty of color (Eagan & Garvey, 2015; Espino & Zambrana, 2019; Gonzales, 2018; Gonzales & Terosky, 2016; O'Meara et al., 2018). Further, as universities increase demands for excellence in faculty scholarship, they rely on more narrow definitions of which types of scholarship are meritorious, resulting in knowledge production becoming more homogenous over time (Gonzales & Núñez, 2014; Gumpert & Snyderman, 2002; Pryor, 2020; Stensaker et al., 2019; Vican et al., 2020). This often denies individuals from marginalized groups credibility and legitimacy as producers of knowledge (Gonzales, 2018; Gonzales & Terosky, 2016; Griffin et al., 2011; Joseph & Hirshfield, 2011).

Epistemic exclusion

The theory of epistemic exclusion details the process by which individuals from marginalized groups are devalued as scholars within academia. Emerging from Black feminist thought (Collins, 1990), epistemic exclusion refers to the devaluation of marginalized scholars and scholarship that falls outside of a field's disciplinary center, asserting that they do not contribute meaningfully to knowledge production (Dotson, 2012, 2014). Epistemic exclusion theoretically fits within the broader epistemic (in)justice literature, which investigates the fundamental recognition of a person's capacity to know and to be a knower (Fricker, 2007). Salient literatures within philosophy and higher education assert that injustice or exclusion may occur due to prejudice or a reluctance to trust those producing the knowledge, an unwillingness to believe or trust others' interpretation of their own lived experiences, and an inability to see alternative forms of knowledge as valuable due to one's own social position (Dotson, 2012; Medina, 2017; O'Meara et al., 2017).

Epistemic exclusion theorizes that these challenges to the credibility of some knowers and some forms of knowledge occur because of two processes of bias (Dotson, 2012, 2014; Settles, Jones, et al., 2020). First, performance standards often reflect narrow disciplinary norms and values about the qualities of "good" and "rigorous" scholarship (e.g., objectivity, generalizability) that rely on metrics (e.g., whether a journal is "top-tier") that contribute to evaluation inequities (Gonzales, 2018). These standards reflect social and cultural assumptions held by those with power over scientific practices, which historically have been White men (Gonzales, 2018). Because of their social positionality, women and faculty of color are less likely to conduct "mainstream" research and are more likely to study populations (e.g., minority groups), topics (e.g., poverty, educational equity), and use methods (e.g., qualitative

research) that fall outside of disciplinary norms (Bernal & Villalpando, 2002; Gonzales, 2018). Despite being members of the academy, their identities and approaches to research contribute to them being outsiders without the full benefit of academic membership (Bernal & Villalpando, 2002; Collins, 1986, 1999; Gonzales, 2018) and their work is delegitimized as “me-search” (De La Luz Reyes & Halcón, 1988, p. 302). Through these practices, marginalized scholars’ work is devalued regardless of its scientific quality.

Second, being deemed as credible depends on one’s social position; thus, systems of oppression (e.g., racism, sexism), prejudice, and stereotypes act to marginalize some groups and privilege others (Berenstain, 2016; Gonzales, 2018; Gonzales & Terosky, 2016; Griffin, 2019; Griffin et al., 2011, 2013; Medina, 2017; Pohlhaus, 2012). Because of social norms against such prejudice, this bias is expressed indirectly by devaluing marginalized groups’ research — even when they conduct research within a discipline’s mainstream. The assertion that epistemic exclusion is due to social identity-based biases and tied to systemic power is a key distinction between this theory and academic gatekeeping. Consistent with epistemic exclusion theory, qualitative studies find that women and faculty of color are seen as less credible and lacking in skill and intellect (Gonzales & Terosky, 2016; Medina & Luna, 2000; O’Meara et al., 2018). This manifests in a variety of ways, including colleagues devaluing their research and questioning their qualifications (Griffin et al., 2011; Joseph & Hirshfield, 2011). In sum, epistemic exclusion theory proposes that women and faculty of color are disproportionately harmed by invisible biases built into ostensibly objective and neutral performance standards within systems of evaluation. These disciplinary biases exacerbate social identity-based biases, culminating in the devaluation of their scholarship.

In one of the only empirical examinations of epistemic exclusion to date, (Settles, Jones, et al., 2020) found that scholarly devaluation occurred through evaluation processes that the university used to make merit, promotion, and tenure decisions. In particular, some types of scholarship were evaluated as lower quality because of the topic (e.g., social problem focused), method (e.g., qualitative), publication outlet (e.g., top-tier journals or presses), and whether it was grant funded. Additionally, faculty of color reported being marginalized when their accomplishments were unrecognized, others viewed them as lacking scholarly legitimacy, and their scholarship was not understood. Finally, faculty of color noted that epistemic exclusion had negative consequences for their productivity, resulting in frustration, isolation, and uncertainty about their academic future (Settles, Jones, et al., 2020).

Epistemic exclusion and workplace outcomes

The current study builds on this research by examining the effect of epistemic exclusion on faculty workplace outcomes, including turnover intentions,

workplace climate, and job satisfaction. Previous research on workplace exclusion has focused on forms of social (e.g., being ignored) and informational (e.g., being kept out-of-the-loop) exclusion, rather than epistemic. Individuals experiencing social or informational exclusion report lower job satisfaction, productivity, and psychological well-being, as well as more job strain, withdrawal behaviors, and intentions to leave the workplace (Eagan & Garvey, 2015; Ferris et al., 2008; Hitlan et al., 2006; Jones et al., 2011; Mor Barak & Levin, 2002). Although all employees may be targets of exclusion, research suggests that women and people of color may be especially likely to have these experiences (Cortina & Magley, 2009; Cortina et al., 2001; Lim et al., 2008; Mor Barak & Levin, 2002; Zimmerman et al., 2016). This is consistent with *differential exposure*, which suggests that marginalized groups have more negative outcomes following mistreatment because of their greater likelihood of experiencing negative events (Bergman et al., 2012; Kessler et al., 1999). Moreover, double-jeopardy theory (Beal, 1970; King, 1988) suggests that due to their low social status and negative stereotypes about their racial and gender groups, women of color will experience more frequent mistreatment (e.g., Berdahl & Moore, 2006; Cortina et al., 2013), which has been supported in studies of faculty of color (e.g., Griffin et al., 2011). Thus, in the current study, we expected that people of color and women would report more epistemic exclusion than others, and women of color faculty would report especially high levels.

We also expected that the effect of epistemic exclusion on workplace outcomes would be greater for people of color and women faculty. Research suggests that experiences of mistreatment have a disparately negative impact on marginalized groups, a process known as *differential vulnerability* (Bergman et al., 2012; Kessler et al., 1999; Settles & O'Connor, 2014). This may be due to the lower social status of marginalized groups (Beal, 1970; King, 1988), which results in their having less power to redress or control the outcomes of experiences like exclusion and discrimination (Thoits, 1991). There is also support for the differential vulnerability of women of color (Buchanan et al., 2008), suggesting that women of color faculty may have especially negative outcomes following epistemic exclusion.

Given the existing research, we hypothesized that epistemic exclusion would be related to greater turnover intentions and that this relationship would be mediated by job satisfaction and perceptions of workplace climate, especially for people of color and women faculty. Studies find that turnover intentions are more strongly associated with actual turnover than attitudinal factors (e.g., commitment, satisfaction; Hom et al., 1992; Steel & Ovalle, 1984; Tett & Meyer, 1993). Further, job satisfaction is one of the strongest predictors of turnover intentions (Hom et al., 1992; Steel & Ovalle, 1984; Tett & Meyer, 1993), including among faculty (Zhou & Volkwein, 2004). Climate is also an important predictor of thoughts of leaving an organization, as negative climate

perceptions may reflect a poor fit between the person and the organization (Nei et al., 2015). In academic settings, negative perceptions of the climate are associated with less interest in entering or remaining in academia (Biggs et al., 2018), especially for women (Callister, 2006). These findings suggest that job satisfaction and climate perceptions have a role in faculty decision-making regarding whether to stay or exit their workplace.

The current study

The current study extends the existing literature in higher education and organizational studies to examine faculty experiences of epistemic exclusion, an emerging theory with great implications for how we conceptualize bias within academia. To do so, we used an existing dataset comprising a large sample of tenure-track faculty at a research-intensive university. Specifically, this dataset permitted us to examine perceptions of scholarly devaluation, a key component of epistemic exclusion identified in previous qualitative research (Settles et al., 2019; Settles, Jones, et al., 2020). Importantly, because there are no existing measures of epistemic exclusion, our examination of perceptions of scholarly devaluation in this study serves as a critical step toward understanding the construct of epistemic exclusion quantitatively. Specifically, we examined race and gender group differences in epistemic exclusion via scholarly devaluation, and whether it is related to turnover intentions via lower job satisfaction and more negative perceptions of the climate. Our hypotheses were:

H1. Women and people of color will report more epistemic exclusion than men and White faculty, and women of color faculty will report more epistemic exclusion than other groups.

H2. Epistemic exclusion will be related to more turnover intentions, and this relationship will be mediated by job satisfaction and department climate.

H3. The mediated relationship between perceptions of epistemic exclusion and turnover intentions via job satisfaction and climate will be stronger for women, people of color, and women of color faculty.

Method

Participants and procedure

The current study is a secondary data analysis of a large survey to assess faculty perceptions of the climate at a research-intensive, predominantly White

university (for more information, see Malley et al., 2012). The survey was designed and administered by the institution's unit concerned with faculty diversity; as a result, we are limited to the existing variables included in the dataset. In Fall 2012, to reflect total population sampling, all faculty in Science and Engineering (SE), Social Science (SS), and Arts and Humanities (AH) were emailed an invitation to participate in an online study "to assess the work environment." The survey was anonymous, confidential, and designed to be completed in under 45 minutes. Participants were not compensated for completing the survey. The current study uses data from the subsample of 1,341 tenure-track, instructional faculty, representing a response rate of 46% (SE = 40%, SS = 37%, AH = 56%).

There were more male ($n = 862$, 64.3%) than female participants ($n = 452$, 33.7%). The racial composition of the sample was 78.2% ($n = 1049$) White/European American, 11.0% ($n = 147$) Asian/Asian American, 4.0% ($n = 54$) Latinx/Hispanic, 3.5% ($n = 48$) Black/African American, and 0.5% ($n = 7$) Native American/American Indian. Just over half of the participants were from SE fields ($n = 688$, 51.3%), and the remainder represented SS ($n = 284$, 21.2%) and AH ($n = 228$, 17.0%). There were fewer participants at the rank of assistant professor ($n = 311$, 23.2%) and associate professor ($n = 315$, 23.5%) than full professor ($n = 715$, 53.3%). Most participants were U.S. citizens ($n = 1014$, 75.6%; non-citizens, $n = 143$, 10.7%). Participants were not required to answer all demographic questions; thus the breakdown of our sample composition may not sum to the total sample size. The final sample of respondents used in the current analysis are very similar to the overall population of tenure-track faculty at the institution in terms of these demographic characteristics (Malley et al., 2012) with the exception of faculty in SE being somewhat underrepresented in our sample (60% of population vs. 51% of sample).

Measures

Unless otherwise noted, scale scores were created by averaging items such that higher scores indicate higher levels of the construct. Cronbach's alphas are shown in Table 1.

Epistemic exclusion: Perceptions of scholarly devaluation

We measured epistemic exclusion via scholarly devaluation using four items from the dataset, which were adapted from the University of Michigan Faculty Work-Life Study (Center for the Study of Higher and Postsecondary Education [CSHPE] & Center for the Education of Women [CEW], 1999): "My research interests are valued by my colleagues" (reverse scored), "My colleagues solicit my opinions about their research ideas and problems" (reverse scored), "My colleagues have lower expectations of me than of other faculty," and "I have/had to work harder than I believe my colleagues do, in

Table 1. Means, standard deviations, and correlations for main study variables.

	1	2	3	4
1. Scholarly Devaluation	.71			
2. Job Satisfaction	-.60*	.83		
3. Positive Climate	-.57*	.59*	.90	
4. Turnover Intentions	.35*	-.49*	-.39*	-
<i>M (SD)</i>	2.16 (.85)	3.78 (.77)	3.93 (.77)	2.84 (1.20)

Note. * $p < .001$

Cronbach's alphas are presented on the diagonal.

order to be/have been perceived as a legitimate scholar.” Participants indicated how well each statement applied to their department on a scale from 1 (*strongly disagree*) to 5 (*strongly agree*). While acceptable, the modest alpha (alpha = .71) is likely due to the shortness of the scale; the Spearman-Brown prophecy formula indicates that an equivalent 8-item scale would have a reliability of .83 (Frey, 2018; Hair et al., 2010).

Three factors support the validity of this scale (Boateng et al., 2018). First, these items are consistent with epistemic exclusion theory (deductive support), capturing scholarly devaluation in how performance standards mark some scholarship as more valued and interpersonal ways in which scholarly devaluation occurred. They are also supported by previous research (inductive support) that finds that marginalized faculty report being seen as less competent and therefore needing to exceed usual expectations in order to overcome these perceptions of illegitimacy (O'Meara et al., 2018; Settles et al., 2019; Settles, Jones, et al., 2020). Second, the items demonstrate strong face validity and are representative of faculty experiences (Boateng et al., 2018). Third, items demonstrate concurrent validity in that participants reporting higher scholarly devaluation were also less satisfied with being valued by colleagues for their scholarship ($r = -.63$, $p < .001$) or teaching ($r = -.51$, $p < .001$). Further, scholarly devaluation was higher among those faculty who reported that lack of interest among colleagues was a barrier to collaboration (barrier: $M = 2.50$, $SD = .88$, not a barrier: $M = 2.10$, $SD = .83$; $t(1, 1194) = -6.15$, $p < .001$) and among those who indicated that their department failed to nominate them for an award for which they were qualified (failed to nominate: $M = 2.53$, $SD = .92$, did nominate: $M = 1.85$, $SD = .72$; $t(1, 508) = -9.14$, $p < .001$).

Turnover intentions

Intentions to exit the university were assessed with a single item that stated: “How often do you think about leaving the university?” ranging from 1 (*never*) to 5 (*often*).

Job satisfaction

Satisfaction with one's job was assessed using 9-items of the Career Satisfaction Scale adapted from the University of Michigan Faculty Work-Life Study (CSHPE & CEW, 1999). This measure tapped several dimensions of

satisfaction, including the “amount of social interaction with members of my department/unit,” “current salary in comparison to the salaries of my colleagues,” “balance between professional and personal life,” and overall job satisfaction. Four items assessing satisfaction with being valued by colleagues/students for teaching/research/mentoring were excluded due to being conceptually similar to scholarly devaluation. Participants responded on a scale from 1 (*very dissatisfied*) to 5 (*very satisfied*).

Positive climate

Participants’ perceptions of the positivity of the general climate within their department was measured with a 10-item Departmental Climate Scale (Hurtado, 1998). This scale consists of 5-point semantic differential items in which each pair of descriptors served as the labels for their poles, such as friendly vs. hostile, competitive vs. cooperative, not supportive vs. supportive, sexist vs. nonsexist, and racist vs. not racist.

Demographics

Participants self-reported their gender (0 = *male*, 1 = *female*) and race, which we categorized into three groups: White/European American faculty, Underrepresented Minority faculty (URM; included Black/African American, Latinx/Hispanic, and Native American), and Asian/Asian American faculty. We made these groupings because the literature suggests many of the experiences of URM faculty are similar to each other (underrepresentation in academia; negative intellectual stereotypes) and different from those of Asian/Asian American faculty (overrepresentation in academia; positive intellectual stereotypes; Chou & Feagin, 2015; Ghavami & Peplau, 2013; U.S. Census Bureau, 2017; U.S. Department of Education, 2013).

Results

Preliminary analyses

Means, standard deviations, and correlations for study variables are provided in Table 1. Due to missing data, multivariate analyses use data from participants with responses across study variables, which range from 1,017 to 1,151. Little’s MCAR test indicated that missing data is completely at random, $\chi^2(13) = 15.21$, $p = .28$. Power analyses, reported for each analysis, used G*Power (Faul et al., 2007). We first used MANOVA to examine whether the main study variables (scholarly devaluation, job satisfaction, positive climate, and turnover intentions) differed by rank, discipline, and citizenship — our potential control variables (see Table 2). Sensitivity analysis indicated that this analysis had the ability to detect small effects (Cohen’s $f = .12$) given our sample size with power of 0.95 at $p = .05$. Results indicated that full and assistant professors reported

Table 2. MANOVA for job satisfaction, positive climate, turnover intentions, and scholarly devaluation by rank, discipline, and citizenship.

	Job Satisfaction		Positive Climate		Turnover Intentions		Scholarly Devaluation	
	<i>M</i> (<i>SD</i>)	<i>F</i>	<i>M</i> (<i>SD</i>)	<i>F</i>	<i>M</i> (<i>SD</i>)	<i>F</i>	<i>M</i> (<i>SD</i>)	<i>F</i>
Rank		9.74***		2.61		3.41*		13.27***
Assistant	3.77 _a (.75)		3.89 (.73)		2.85 _{ab} (1.19)		2.28 _a (.82)	
Associate	3.60 _b (.76)		3.83 (.81)		3.02 _a (1.22)		2.33 _a (.86)	
Full/Senior	3.89 _a (.75)		3.97 (.76)		2.75 _b (1.21)		2.04 _b (.83)	
Discipline		9.29***		7.61***		2.45		3.74*
Social Science	3.83 _a (.80)		3.91 _a (.77)		2.81 _{ab} (1.27)		2.17 _{ab} (.90)	
Science or Engineering	3.86 _b (.71)		3.99 _a (.73)		2.78 _a (1.15)		2.10 _a (.81)	
Arts or Humanities	3.56 _b (.84)		3.72 _b (.85)		3.03 _b (1.30)		2.32 _b (.88)	
Citizenship		.01		3.77		.03		1.75
Not a U.S. Citizen	3.77 (.75)		4.02 (.71)		2.88 (1.27)		2.13 (.81)	
U.S. Citizen	3.80 (.76)		3.91 (.77)		2.83 (1.21)		2.16 (.85)	

Note. * $p < .05$, ** $p < .01$, *** $p \leq .001$. The degrees of freedom were as follows: rank (2, 1011), discipline (2, 1011), and citizenship (1, 1011). For each rank and discipline sub-column, means with different subscripts are significantly different.

more job satisfaction than associate professors, full professors had fewer thoughts of leaving than associate professors, and full professors reported significantly less scholarly devaluation than associate and assistant professors. For discipline, faculty in both SE and SS reported more job satisfaction and positive climate than those in AH, and faculty in AH reported greater turnover intentions and more scholarly devaluation than those in SE. There were no significant differences in our study variables by citizenship. Because of these differences, we included rank and discipline, but not citizenship, as covariates in analyses where possible.

A second MANOVA was used to test H1 regarding race and gender differences in scholarly devaluation (see results below) and to examine race and gender differences in job satisfaction, positive climate, and turnover intentions (see Table 3); we merged this preliminary analysis with our hypothesis testing to account for correlations among dependent variables. Sensitivity analysis indicated that we could detect small effects (Cohen's $f = .12$) given our sample size (power of 0.95 at $p = .05$). In this analysis, race, gender, and their interaction were the independent variables; and scholarly devaluation, job satisfaction, positive climate, and turnover intentions were the dependent variables. Because our data did not meet the assumption of the independence of covariates (rank and discipline) and the independent variables (race and gender), we omitted covariates from this analysis but did include them in subsequent moderated mediation analyses (Leppink, 2018). We found that there were no racial group differences in job satisfaction, positive climate, or turnover intentions. Further, although there were no gender differences in turnover intentions, men reported higher job satisfaction than women and perceived their department climates more positively. Finally, there were no interactions between race and gender for job satisfaction, positive climate, or turnover intentions.

Table 3. MANOVA for job satisfaction, positive climate, turnover intentions, and scholarly devaluation by race, gender, and race x gender.

	Job Satisfaction		Positive Climate		Turnover Intentions		Scholarly Devaluation	
	<i>M (SD)</i>	<i>F</i>	<i>M (SD)</i>	<i>F</i>	<i>M (SD)</i>	<i>F</i>	<i>M (SD)</i>	<i>F</i>
Race ^a		1.20		0.04		0.14		5.83**
URM	3.84 (.77)		3.89 (.80)		2.92 (1.12)		2.43 _a (.99)	
Asian	3.69 (.76)		3.92 (.84)		2.85 (1.21)		2.28 _{ab} (.82)	
White	3.81 (.76)		3.93 (.76)		2.83 (1.22)		2.11 _b (.83)	
Gender		5.08*		16.16***		2.87		11.73**
Women	3.66 (.81)		3.68 (.81)		3.01 (1.22)		2.38 (.90)	
Men	3.88 (.72)		4.06 (.72)		2.74 (1.19)		2.04 (.79)	
Race x Gender ^b		0.62		1.45		0.96		1.13
URM Women	3.76 (.75)		3.78 (.76)		3.10 (.96)		2.48 (.96)	
URM Men	3.90 (.79)		3.97 (.83)		2.77 (1.22)		2.39 (1.01)	
Asian Women	3.62 (.80)		3.75 (.86)		2.83 (1.28)		2.52 _a (.86)	
Asian Men	3.72 (.74)		4.01 (.83)		2.86 (1.18)		2.15 _b (.77)	
White Women	3.65 (.82)		3.65 (.81)		3.03 (1.24)		2.35 _a (.90)	
White Men	3.90 (.71)		4.08 (.69)		2.72 (1.20)		1.99 _b (.77)	

Note. * $p < .05$, ** $p < .01$, *** $p \leq .001$. The degrees of freedom are as follows: race (2, 1145), gender (1, 1145), and race x gender (2, 1145). Post-hoc analyses performed using Sidak adjustment.

URM = Underrepresented minority.

^aFor each race sub-column, means with different subscripts are significantly different from each other at $p < .05$.

^bFor scholarly devaluation, means with different subscripts for women and men within each racial group (URM, Asian, White) are significantly different from each other at $p < .05$.

Race and gender differences in scholarly devaluation

Using the same MANOVA (see Table 3) to test H1, we found significant race and gender differences for scholarly devaluation. Women reported more scholarly devaluation than men and URM faculty reported more scholarly devaluation than White faculty but did not differ from Asian faculty. Asian faculty also did not differ from White faculty in their perceptions of scholarly devaluation. Although the overall F-test for the race by gender interaction was not significant, we conducted pairwise comparisons following recommendations by Chen et al. (2018) to determine whether women of color reported more scholarly devaluation than White women and men of all races as predicted. Sensitivity analysis indicated that with power of 0.95 and $p = .05$, for URM and Asian gender comparisons, we could detect large effects (Cohen's $d = .75$ and $.70$ respectively), but for White gender comparisons, we could detect small effects (Cohen's $d = .25$). Examining gender differences by racial group indicated that among White and Asian faculty, women reported more scholarly devaluation than men. However, URM women and men did not differ from each other due to high levels of scholarly devaluation among URM men, comparable to levels for women overall. Thus, URM and women faculty reported more scholarly devaluation as predicted by H1; however the levels of scholarly devaluation for women of color were similar to the high levels reported by URM men and White women faculty, contrary to our prediction that their rates would be highest.

Moderated mediation analyses

To test Hypotheses 2 and 3, we conducted two moderated mediation analyses using Process 3.0, Model 11, with 5000 bootstrap samples (Hayes, 2017). In these analyses, scholarly devaluation was the independent variable; turnover intentions was the dependent variable; job satisfaction and positive climate were the two mediators; race and gender were tested as moderators of the relationship between scholarly devaluation and each mediator; and rank (via two dummy variables for assistant and full professors in which associate professor was the referent) and discipline (via two dummy variables for SE and SS in which AH was the referent) were included as covariates. A post-hoc power analysis indicated that with 1,032 participants, at $p = .05$ we had statistical power of 0.87 to detect small effects (Cohen's $f^2 = .02$) and statistical power of 1.00 to detect medium effects (Cohen's $f^2 = .15$).

In order to examine race and gender as moderators we conducted two analyses that alternately examined the strength of the associations between scholarly devaluation, job satisfaction, and positive climate for URM vs. White faculty, and then for Asian vs. White faculty. We opted not to combine Asian and URM faculty, due to differences in their patterns of scholarly devaluation endorsement by gender. To analyze the three racial groups, we computed two dummy variables for race: one representing URM faculty (1 = URM faculty, 0 = all other faculty), and one representing Asian faculty (1 = Asian faculty, 0 = all other faculty). In each model, the effect of being in the relevant racial group was isolated by including the dummy variable for that group (e.g., URM faculty); then, including the second dummy variable as a covariate (e.g., Asian faculty) made White faculty the referent group and allowed us to separately isolate and examine the effects for URM vs. White faculty and Asian vs. White faculty. We also examined participants' gender as a moderator in both analyses. Across our analyses, we determined significant effects based on confidence intervals of the indirect effect that did not include zero, and the significance of the index of moderated mediation.

Figure 1a (top panel) shows the results for URM vs. White faculty. Scholarly devaluation was related to lower job satisfaction and more negative climate perceptions. Greater job satisfaction and positive climate were related to fewer thoughts of leaving the university. Further, the indirect effects were significant for all race-gender groups, as none of the confidence intervals contained zero, supporting H2 (see Table 4). However, contrary to H3, none of the interactions were significant (scholarly devaluation*race, scholarly devaluation*gender, race*gender, or scholarly devaluation*race*gender) for either mediator, and the indices of moderated mediation were not significant. As shown in Figure 1b (bottom panel), the results for Asian vs. White faculty demonstrated the same relationships; the indirect effects (see Table 4) were again significant

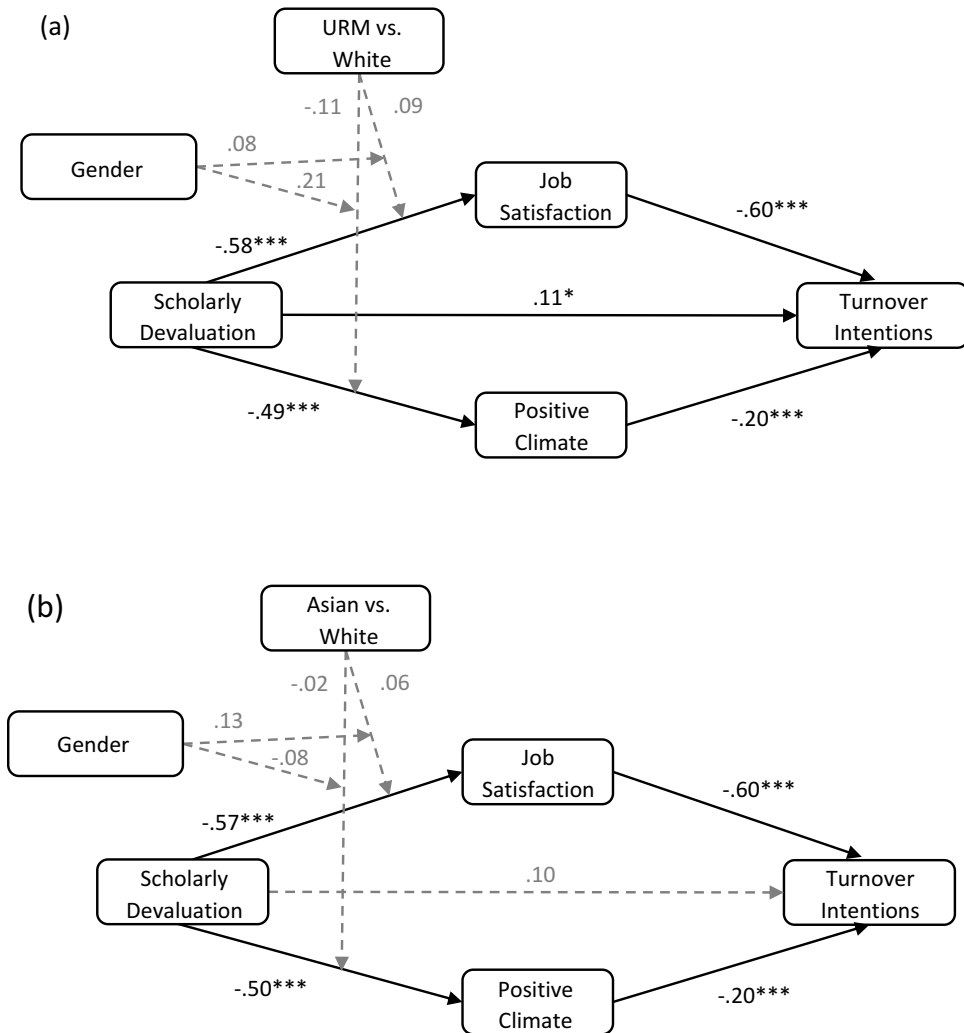


Figure 1. Relationship between scholarly devaluation and turnover intentions mediated by job satisfaction and positive climate, with moderation by race and gender. Not shown: covariates for rank and discipline using dummy variable coding. Unstandardized coefficients are presented. URM = Underrepresented minority. *** $p < .001$.

for all race-gender groups but none of the interactions nor the indices of moderated mediation were significant.

In sum, women and URM faculty were more likely to experience scholarly devaluation. Further, more scholarly devaluation was related to greater turnover intentions indirectly through lower job satisfaction and more negative climate perceptions, but this mediated relationship did not differ by participants' race, gender, or their interaction.

Table 4. Conditional indirect effects of scholarly devaluation on turnover intentions through the job satisfaction and positive climate mediators with race and gender as moderators.

	Coefficient	se	LLCI	ULCI
<i>URM faculty compared to White faculty</i>				
Job Satisfaction				
Conditional Indirect Effects				
White Men	.35*	.04	.27	.43
White Women	.32*	.04	.24	.40
URM Men	.30*	.06	.18	.42
URM Women	.22*	.06	.11	.35
Index of Moderated Mediation	-.05	.08	-.21	.12
Positive Climate				
Conditional Indirect Effects				
White Men	.10*	.03	.04	.16
White Women	.10*	.03	.04	.16
URM Men	.12*	.04	.05	.20
URM Women	.08*	.03	.03	.14
Index of Moderated Mediation	-.04	.03	-.12	.02
<i>Asian faculty compared to White faculty</i>				
Job Satisfaction				
Conditional Indirect Effects				
White Men	.34*	.04	.26	.43
White Women	.32*	.04	.24	.40
Asian Men	.31*	.07	.19	.46
Asian Women	.20*	.09	.03	.38
Index of Moderated Mediation	-.08	.11	-.31	.13
Positive Climate				
Conditional Indirect Effects				
White Men	.10*	.03	.04	.16
White Women	.10*	.03	.04	.16
Asian Men	.11*	.04	.04	.19
Asian Women	.12*	.04	.04	.21
Index of Moderated Mediation	.02	.04	-.06	.09

Note. 5,000 bootstrap resamples were used. Unstandardized estimates of the indirect effects are presented.

URM = Underrepresented minority.

* = Upper and lower 95% confidence interval does not contain 0.

Discussion

The present study explored whether epistemic exclusion may account for the low numbers of women and faculty of color in academia. As a first step toward answering this question in full, we examined scholarly devaluation, a primary component of epistemic exclusion, using a large, existing dataset of faculty at a research-intensive university. This research extends the higher education literature by naming and describing epistemic exclusion — a phenomenon that has not yet been studied in depth empirically. Further, building on the organizational literature, we identified that women and URM faculty are at risk for experiencing epistemic exclusion via scholarly devaluation, which was related to turnover intentions through lower job satisfaction and less positive climate perceptions. As such, these results offer new explanations for faculty turnover, particularly for those from marginalized groups. Our findings support calls from underrepresented scholars in a number of fields for boundary

broadening, that is, for disciplines to expand and redefine the topics, methodologies, and scholars deemed legitimate (e.g., Louis, 2007; Monzó & SooHoo, 2014; Stanley, 2007).

H1 concerned whether certain marginalized groups would report more epistemic exclusion via scholarly devaluation than others. Our results indicated that women and URM faculty reported more scholarly devaluation than men and White faculty, respectively. The findings that women and URM faculty are at particular risk for this aspect of epistemic exclusion is consistent with the literature on workplace mistreatment which finds that these groups report more social and informational exclusion (e.g., Diggs et al., 2009; Li & Beckett, 2006; McCord et al., 2018; Mor Barak & Levin, 2002; Settles et al., 2019; Tippeconnic, 2005; Turner et al., 2008). The theory proposes that epistemic exclusion is based on prejudice toward certain groups, and allows perpetrators to mask group-based prejudice by devaluing their scholarship on the basis of presumably identity-neutral factors, such as lack of quality or publishing in lower-status journals (Dotson, 2012, 2014; Settles, Jones, et al., 2020). That is, scholarly devaluation is not explicitly related to race or gender and therefore could be perceived simply as academic gatekeeping to maintain disciplinary standards; yet, our results suggest that this is not the case and instead, epistemic exclusion via scholarly devaluation is identity-relevant, as the experience is more common to women and URM faculty. Further, epistemic exclusion theory proposes that even when women and faculty of color work within disciplinary norms, gender and racial biases will still cause them to be seen as illegitimate scholars and their scholarship to be viewed as outside of the mainstream (Bernal & Villalpando, 2002; Dotson, 2012, 2014; Gonzales & Terosky, 2016; Griffin et al., 2020; O'Meara et al., 2018; Ponjuan et al., 2011). Although our study cannot speak directly to prejudice as a motivation for epistemic exclusion, our results indicate that bias in scholarly devaluation is occurring through its disparate impact on certain groups.

Contrary to H1, the level of scholarly devaluation reported by Asian faculty fell between those of URM and White faculty but did not differ significantly from either. However, examination of race by gender differences indicated that Asian women reported significantly more scholarly devaluation than Asian men, consistent with the double-jeopardy hypothesis suggesting that women of color may have particularly negative experiences (Beal, 1970; King, 1988). However, two other patterns differed from double-jeopardy predictions. Namely, White women reported significantly more scholarly devaluation than White men, and URM men reported levels of scholarly devaluation consistent with those of URM women. Taken together, these results suggest that women of all races and URM men are especially likely to experience the scholarly devaluation aspect of epistemic exclusion, with fewer experiences reported by White and Asian men. Asian men may benefit from positive stereotypes around the intelligence and competence of Asians and men,

similar to the stereotypes for White men. Further, due to their increasing representation in many academic fields (U.S. Department of Education, 1993, 2013), Asian faculty may no longer be seen as “token” representatives of their group (Kanter, 1977) but rather as legitimate members of the academy. In contrast, URM men still face low levels of representation and status within academia (Ghavami & Peplau, 2013; Griffin, 2019) which may place them at risk for devaluation.

We found full support for H2, which proposed that epistemic exclusion via scholarly devaluation would be associated with lower job satisfaction and less positive climate perceptions, which in turn would be associated with higher turnover intentions. Previous research has consistently found support for the harm caused by various forms of workplace exclusion (e.g., Ferris et al., 2008; Mor Barak & Levin, 2002) but the only other study to test a relationship similar to the one we proposed did so with incivility as the form of mistreatment (Lim et al., 2008). Unlike other forms of exclusion, such as ostracism or incivility, epistemic exclusion is theorized to harm workplace outcomes because devaluing the scholarship of women and URM faculty will affect their performance evaluations and chances of positive tenure decisions. Although the current study cannot address faculty advancement, our results suggest that epistemic exclusion via scholarly devaluation may hinder the retention of these groups because it is associated with greater turnover intentions, which are the best predictor of actual turnover (Tett & Meyer, 1993).

Contrary to H3 predicting stronger mediating relationships for women and faculty of color, we found support for a differential exposure effect, such that the scholarly devaluation aspect of epistemic exclusion was associated with more turnover intentions via lower job satisfaction and less positive climate perceptions to the same degree for all groups, despite women and URM faculty reporting more of these experiences. Research shows that negative affect about one’s organization is related to lower work performance, poorer decision-making, and turnover intentions (Barsade & Gibson, 2007). Similarly, epistemically excluded faculty may experience negative emotions and a lack of belonging within the university (Williams & Carter-Sowell, 2009). A consequence may be turnover intentions, as faculty consider whether other institutions or jobs might allow them to more fully belong. Notably, Settles, Jones, et al. (2020) found that faculty of color coped with epistemic exclusion by seeking validation and support, often from outside their institution. Finally, epistemic exclusion may remove a sense of agency and control over performance evaluations once faculty experience biases in scholarly evaluation (Williams & Carter-Sowell, 2009).

Although not part of our focal hypotheses, we found that faculty in AH reported more scholarly devaluation than those in SE, although they did not differ from those in SS. This is consistent with past work that found epistemic exclusion was more common for those in AH (Settles, Jones, et al., 2020),

perhaps reflecting the wider range of formats that scholarship in these fields might take (e.g., artwork, dance, popular literature, academic articles/books) or the overall growing societal devaluation of AH (Belfiore, 2015). Additionally, assistant and associate professors reported more scholarly devaluation than full professors. It may be that faculty who make it up the career ladder to full are more likely to engage in scholarship falling within disciplinary norms. However, follow-up analyses indicate that among our participants, full professors were significantly more likely to be male and White. Thus, full professors may be protected from epistemic exclusion not only by their status and seniority, but also by their gender and/or race. Whatever the reason, these two findings suggest that those in AH and lower rank faculty are vulnerable to scholarly devaluation.

Limitations and future directions

Because our study was a secondary analysis of existing data, our measurement of epistemic exclusion was limited. Although there was evidence for the validity of our measure, our items mainly captured the perceptions of scholarly devaluation aspect of epistemic exclusion. We believe this limitation is offset by our ability to examine this phenomenon in a large sample of faculty from diverse backgrounds in a range of academic disciplines. Nevertheless, a comprehensive measure of epistemic exclusion could yield more robust findings, allow scholars to identify the relative impact of particular forms of epistemic exclusion (e.g., use of external sources, like journal impact factors and grant funding, to determine scholarly value; lack of recognition), and illuminate differences between groups with finer granularity (e.g., the use of grant funding as an indication of research quality may differ across fields). Future research could also include an assessment of the extent to which one's research deviates from a discipline's mainstream and is marginalized by colleagues. Additionally, our use of agreement scales to assess scholarly devaluation may have resulted in acquiescence bias (Saris et al., 2010); however, this bias is weaker among highly educated samples like ours who are used to responding to survey items (Weijters et al., 2010) and this format has been used by the institution for faculty surveys for over 10 years.

Finally, our survey examines faculty at a single, research-intensive university. Although we may observe similar findings at other large public universities, we do not know how well our findings generalize to faculty at other types of institutions. At minority serving institutions (e.g., HBCUs) or women's colleges, URM faculty and women, respectively, might experience less epistemic exclusion than in other contexts. Further, epistemic exclusion may extend to scholarly endeavors beyond research, such that faculty who teach certain topics (e.g., race) or engage in service that is

devalued (e.g., being on a diversity committee) may be viewed as less credible and legitimate scholars by both students and other faculty (Gonzales & Terosky, 2016; Griffin et al., 2011, 2013; O'Meara et al., 2017, 2018). Although there are likely mean level differences in epistemic exclusion across institutions and areas of scholarship, we suspect that those who experience it will have negative workplace outcomes similar to those we observed.

Implications

Our findings have direct implications for departmental leaders, administrators, and educational policy makers. We suggest that institutional change to reduce epistemic exclusion should work in three areas (Settles, Jones, et al., 2020). First, to increase awareness of epistemic exclusion, departments should have discussions of disciplinary norms to make implicit values about good scholarship explicit, offering the possibility to critique unstated and unquestioned beliefs. To complement discussions of disciplinary bias, implicit bias training could bring to light the social group biases theorized to contribute to epistemic exclusion. Second, policies and practices must be aligned with shifts in disciplinary values. At the departmental level, chairs and other senior administrators can work to recognize and support scholars working “on the margins” (e.g., internal grant opportunities and awards). Performance reviews should use holistic assessments of scholarly quality that do not rely solely on external metrics like federal grant funding and journal impact factors. Greater valuing of publications in “specialty” outlets and including indicators of societal impact (e.g., scholarship informing public policy or used as a teaching resource) would also reduce epistemic exclusion. Importantly, given that the pool of internal scholars able to engage in a thoughtful and informed evaluation of scholarship on the margins may be limited, institutions should have processes in place to involve faculty from other institutions in performance evaluations. And, in doing so, recognize that soliciting external reviewers from “peer or better institutions” may exclude the faculty most knowledgeable on a particular subject (Buchanan et al., 2021) who, through the processes of epistemic exclusion, may not be represented at said institutions. Third, success in the previous two areas must be monitored by tracking institutional faculty diversity (hiring, retention, and advancement) and assessing faculty perceptions of the climate.

Change can also take place at the disciplinary level (Settles, Warner, et al., 2020). For example, editors of journals and books can help reduce scholarly devaluation by including marginalized scholarship and valuing marginalized voices. Greater diversification of those in powerful gatekeeping roles, such as editors, may facilitate the broadening of norms around valued and quality scholarship (Buchanan et al., 2021). Similarly, graduate and undergraduate

training would need to reflect changes in disciplinary values, attention to social group bias, and institutional and disciplinary practices (Buchanan & Wiklund, 2020; Neblett, 2019). Further, efforts need to focus on broadening perceptions of what an academic looks like, diversifying the topics, methods, and forms of scholarship deemed valuable, and reducing negative stereotypes that challenge the legitimacy of women and faculty of color. In so doing, we may reduce epistemic exclusion and therefore increase the full participation and retention of women and faculty of color.

Note

1. The term *faculty of color* refers to faculty who racially self-identify as African American/Black, Hispanic/Latinx, Asian American/Pacific Islander, or Native American.

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