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Supplementary Materials for

The intersectional privilege of white able-bodied heterosexual men in STEM

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Additional Methods and Materials Information

STEM Inclusion Study Survey

In collaboration with the leadership of each professional society, the STEM Inclusion Study was fielded electronically via email to either a random sample of the US-based members of each society (for societies over 10,000 members) or to the full US-based membership of the society (for societies under 10,000 members). The survey was open at each society for a period of six weeks. Non-responders received up to two reminder emails. Respondents could end the survey at any time and participation was anonymous and voluntary. The study was approved by the University of Michigan human subjects board.

Survey respondents were asked a variety of questions about their education, job circumstances, STEM discipline, workplace experiences, treatment by colleagues, future plans, and detailed demographics. The survey included skip logics that could accommodate retired members, students, and members who worked in non-STEM jobs; the analyses here only include data from respondents who were employed full time in a non-social science STEM job in the United States at the time of survey participation. After completing the survey, respondents were invited to enter a raffle for a $100 gift card (one per professional society) that could be used toward the annual cost of their society membership. To avoid duplicate individual entries, the first question in the survey asked respondents whether they had taken the survey previously; those who answered affirmatively were thanked and skipped to the end of the survey.

A survey of the size and substantive scope used here is the most effective way to tap nuanced intersectional differences in work experiences while also assessing whether those differences can be explained by variation between groups. At the time of writing, no other national survey of STEM professionals included adequate sampling procedures, a sufficient sample size, disability status and LGBTQ identity measures, and work experience questions that would allow for an investigation of this specificity and scope.

Survey Reliability and Validity

The measures used in the analyses are either replications of existing validated survey items or items that were designed and pre-tested by the research team. Specifically, education level, STEM field, supervisory status, employment sector, and salary measures are from the National Science Foundation's National Survey of College Graduates (https://www.census.gov/programs-surveys/nscg.html). Social inclusion and persistence measures are replications of questions in the National Survey of the Changing Workforce (https://www.shrm.org/hr-today/trends-and-forecasting/research-and-surveys/pages/national-study-of-the-changing-workforce.aspx). The career advancement opportunities questions are from the US Office of Personnel Management's biennial Merit Principles Survey (https://www.mspb.gov/studies/MPS2016.htm).

The five items that make up the professional respect scale were designed specifically for the SIS. These measures assess whether respondents' professional expertise is recognized and given proper credit by their colleagues. See Cech and Waidzunas *(14)* for a description of the pretesting procedures used to validate this scale.

The validity of the full survey instrument was assessed through a number of steps. First, content validity was established by workshopping the survey with a panel of social scientists who are content experts on workplace inequality. Second, the face validity of the survey was

assessed through in-person talk-through sessions (aka "cognitive interviews") with eight STEM professionals. In these sessions, informants explained aloud their interpretations of each question and its answer options as they progressed through the survey. These cognitive interviews offered insight into the clarity of survey questions *(64)*. Third, construct validity was established through analysis of the divergence of dissimilar concepts and convergence of similar concepts via correlations and factor loadings *(64-65)*. Indicating strong convergence validity, the questions used for the three scale measures (social inclusion, career opportunities, professional respect) each loaded onto their respective factors. Discriminant validity tests indicated that the measures in a given outcome scale were more highly correlated with measures in their own scale than with measures included in other scales; within-index correlations ranged from .64 to .76 (strongly correlated) while cross-index correlations were less than .40 (weakly correlated). Additionally, confirmatory factor analysis (CFA) with structural equation modeling (SEM) of the attitudinal outcome measures found that the SEM with items predicting latent variables that represent the scale measures used in the analysis had significantly better fit than the SEM where these attitudinal items predicted a single latent outcome measure ($\Delta df=8$; $\Delta\chi^2 = 5267$; $p<.001$). Finally, factor analysis of all attitudinal items that make up the outcome measures revealed five factors that reflect the same division of measures into substantive scales that is used in the manuscript.

Descriptive Statistics

Table S1 presents means for all respondents and for WAHM and non-WAHM respondents separately. The p-value column indicates the statistical significance of two-tailed bivariate difference in means tests between WAHM and non-WAHM. WAHM make up 42.7% of the survey sample. White men without disabilities (across LGBTQ status) make up 46.9% of STEM workers in the US generally. Given variation in demographic representation across sectors and STEM fields, and differences by education level and average age, it was important to control for this variation in Figs. 1-6 when assessing possible intersectional demographic differences along the six focal workplace experience measures.

The rightmost column in Table S1 presents means for the US STEM population nationally, drawn from 2017 National Science Foundation data (https://ncses.nsf.gov/pubs/nsf19304/data). Compared to the STEM population overall, the SIS survey data over-represent those who are white, who work in engineering and physical sciences, and those who work in university and government sectors. Supplemental analyses (discussed in the robustness tests section of the main text) reran all models while weighting the survey sample to match these NSF data by demographics, sector, and STEM field; the results patterns did not change with this weighting.

Detailed Decomposition Results

In Table S2, the explanatory power of each category of factors, and the specific factors within each category, are presented for the six outcome measure. Specifically, Table S2 presents the total gap between WAHM and non-WAHM (first row), the portion of that gap that is explained by the factors included in the model (third row), and the portion of that gap that remains unexplained once variation between WAHM and non-WAHM on these factors is accounted for (second row). The rest of Table S2 provides the portions of the WAHM/non-WAHM gap that is explained by each category of predictors and by the specific measures within each category. For example, 5% of the gap in experiences of social inclusion can be explained by

average differences between WAHM and non-WAHM in family responsibilities; the bulk of this is due to differences in primary childcare responsibilities (which explains 4.06% of the total gap in social inclusion experiences).

In these decomposition models, in order for predictor measures to have significant independent contributions to the WAHM/non-WAHM gap in question, predictors must (1) be directly related to the work experiences outcome, and (2) be unequally distributed between WAHM and non-WAHM *(66)*. Positive coefficients in Table S2 indicate factors that help account for this gap. For instance, 27% ($6,743) of the WAHM/non-WAHM salary gap can be attributed to WAHM being more likely than non-WAHM to be employed in the higher-paying for-profit industry sector.

A negative value in Table S2 indicates an offsetting contribution of that factor to the gap. For instance, the value for "work is an important part of my identity" has a negative coefficient (-.0034) in the decomposition results for persistence intentions. In supplemental OLS regression models predicting persistence intentions with the full sample, personal identification with work is a strongly significant and positive predictor of persistence intentions (B=.430, p<.001). However (as shown in Table S1), non-WAHM are significantly more likely than WAHM to agree that they personally identify with their work. As such, accounting for differences in personal identification with work widens the WAHM/non-WAHM gap in persistence intentions that must be accounted for by other factors.

Table S3 summarizes the results of decomposition models with and without a control for job satisfaction. See the robustness tests section in the main text. Table S3 summarizes the unexplained and explained potion of the decomposition models with and without job satisfaction included; it lists the portions of the WAHM/non-WAHM gap explained by job satisfaction alone, and then the total portion explained when job satisfaction is included in the model.

Assessment of Intersectional Variability among Non-WAHM Groups

Although the central focus of the paper is to examine potential patterns of intersectional privilege among the most culturally and numerically dominant group in STEM, it is important to assess variability within these pattern among non-WAHM groups. The following analysis (1) examines the premiums accompanying WAHM status compared to disaggregated intersectional groups within the non-WAHM category, and (2) looks for broad patterns in the relative strength of the effect of each identity dimension in the context of others.

First, the focal analysis testing H2 sought to document potential privilege premiums for WAHM compared to all others. Doing so revealed important patterns net of a host of explanatory factors, but a drawback of this approach is that it aggregates the potentially wide variability among non-WAHM groups into a single category. To explore this variability, Table S4 summarizes results from separate decomposition models that compare WAHM to specific intersectional groups within the non-WAHM category. The values in Table S4 table represent the magnitude of the difference between WAHM and the focal non-WAHM group that remains unaccounted for by the explanatory factors included in the decomposition model. For example, in the decomposition models comparing WAHM to heterosexual Black women without disabilities, WAHM's average on the social inclusion measure was .445 points higher than the average for heterosexual Black women without disabilities. The decomposition model indicated that only 7.2% of this gap could be accounted for by explanatory factors in the model, leaving a net gap of .413. Because running decomposition models required larger subgroup sample sizes

than the tests for H1, Table S4 does not disaggregate disability status among LGBTQ-identifying STEM professionals of color (although it does disaggregate by disability status among heterosexual persons of color). Additionally, due to small sample sizes, some of the effects for the smallest groups do not reach full statistical significance even though they are substantively large.

The shading in Table S4 represents the relative magnitude of the gaps between WAHM and each non-WAHM group, with darker gray shading indicating the largest gaps. The shading thresholds are proportions of the standard deviation on that measure: the most lightly shaded cells contain statistically significant values that are less than 25% of the magnitude of the standard deviation of that outcome. The next darkest shadings represent values that are at least 25% of the magnitude of the standard deviation, at least 50%, at least 75% and 100% or more of the magnitude of the standard deviation on that measure. Key findings from Table S4 are highlighted in the supplemental analysis section in the main text.

Second, while theories of intersectionality do not interpret identity dimensions as operating separately from one another, it is instructive to understand whether variation along specific axes has outsized implications for workplace experiences. One way to capture these patterns is to look at the effect sizes of variation along one identity category on experiences across the other intersectional categories. While effect sizes are typically used to assess the strength of experimental outcomes and thus are less clearly interpretable in survey data, they provide a standardized comparison of differences across groups on specific outcomes. Table S5 presents the effect sizes (here, D=difference in means/pooled standard deviation) of specific identity dimensions among each intersectional group. The final row of each cluster in Table S5 provides the average effect size of variation on the focal identity dimension across subgroups on that outcome. Key findings from the results in this table are discussed in the supplemental analyses section of the main text. Future research should carefully attend to these differences with multimethod empirical approaches that can speak to the differential and intersectional cultural and structural processes that produce these effects.

Summary of Results from Field- and Sector-Specific Decomposition Models

Overall, the patterns of advantage by WAHM status documented in the main text and the decomposition results in Table S2 are mirrored in models ran separately for each STEM field and each employment sector. Specifically, the unexplained portions of the WAHM status advantage for the outcome measures in each of the STEM fields were all within 8 percentage points of the values listed in the second row of Table S2 except for the following: the percent of salary gap left unexplained was higher in life sciences and in computer science and mathematics (46% and 45% left unexplained, respectively) compared to the full sample (31%), and that the unexplained portion of persistence intentions was lower in life sciences and computer science and mathematics (28% and 48%, respectively) compared to 69% in the full sample.

The unexplained portion of variation by WAHM status on each of the outcome measures by employment sectors were all within 7 percentage points of the Table S2 values except that the unexplained portion of persistence intentions was lower among those employed in the nonprofit sector (46%) compared to the full sample (69% unexplained), the proportion of unexplained variation in professional opportunities in the for-profit sector (43%) was lower than the unexplained portion in the full sample (59%), and, likely due to tightly regulated salary

determination in federal agencies, the unexplained portion of the salary gap in the government sector was 13%, compared to 31% in the full sample.

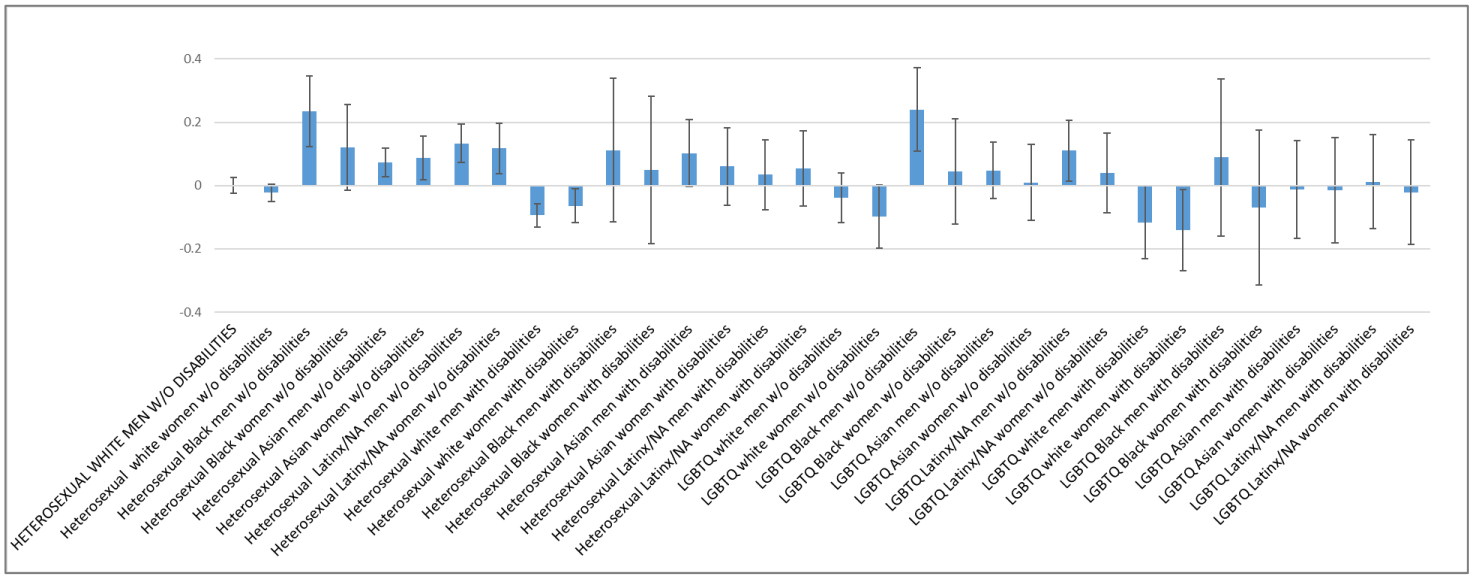

Fig. S1: STEM Professionals' Willingness to Put in Extra Effort beyond what is Required of Their Job, by Intersectional Demographic Category, Centered at Mean for WAHM. Predicted means for each category, holding constant variation by STEM field, employment sector, highest education, and age. Values represent the average divergence of each group's experiences from those of WAHM. Values were produced by OLS regression models with gender x race x LGBTQ status x disability status interaction terms. Error bars represent 95% Confidence Intervals. N=25,324. WAHM= white heterosexual men without disabilities.

Table S1. Univariate and Bivariate Statistics for Demographics, Explanatory Measures, and Outcomes, for All Respondents and for WAHM and non-WAHM Respondents in the SIS Survey Data, and Descriptive Statistics from National Science Foundation Data on US STEM Professionals.

	ALL N=25,324	**White heterosexual men without disabilities (WAHM) N=10,823**	**Non-WAHM N=14,501**	**Significance (WAHM vs Non-WAHM)**	**2017 NSF Data**
WAHM (white able-bodied heterosexual men)	42.74%	---	---	---	---
Women (cisgender & transgender)	30.17%	---	---	---	29.00%
Men (cisgender & transgender)	69.81%	---	---	---	71.00%
Transgender & Gender Non-binary	0.85%	---	---	---	---
LGBTQ	4.51%	---	---	---	---
Black	2.19%	---	---	---	5.73%
Hispanic/Latinx	5.91%	---	---	---	7.58%
Asian	10.20%	---	---	---	20.09%
Native American and Asian Pacific Islander	0.93%	---	---	---	0.57%
White	78.89%	---	---	---	66.02%
Other race/ethnicity	5.51%	---	---	---	---
Disability	15.92%	---	---	---	---
Engineering	38.58%	43.91%	34.63%	***	20.18%
Life Sciences	11.72%	7.79%	14.48%	***	7.12%
Physical Sciences	21.92%	23.22%	20.30%	***	4.30%
Computer Science & Mathematics	15.52%	14.28%	16.84%	***	39.90%
Other STEM Occupation	12.26%	10.75%	13.74%	***	28.49%
For-Profit Sector	33.71%	39.45%	28.81%	***	63.77%
University Sector	39.91%	35.25%	43.97%	***	13.01%
Government Sector	13.71%	13.16%	13.81%		11.60%
Nonprofit Sector	5.28%	4.45%	5.86%	***	5.31%
K-12 Sector	3.81%	2.73%	4.58%	***	3.19%
Other Sector	3.57%	4.86%	2.94%	***	3.12%
Highest Degree	6.59	6.45	6.70	***	
Age	49.84	52.34	48.02	***	---
Born in the US	72.41%	80.66%	65.71%	***	---
Parents' Highest Degree	4.30	4.28	4.32		---
Years at employing organization	13.53	15.12	12.26	***	---
Employer Size	5.60	5.45	5.67	***	---
Job related to highest degree	2.68	2.67	2.68		---
Supervisory responsibilities	57.45%	60.39%	55.09%	***	---
Core Technical Work Indicator	39.15%	38.79%	39.16%		---
Primarily work in teams	63.03%	65.57%	60.97%	***	---
Average hours worked per week	48.06	47.86	48.21	*	---
Willing to put in extra effort	4.12	4.23	4.21		---
Work is an important part of identity	4.19	4.18	4.22	*	---
Personally care about fate of organization	4.20	4.25	4.14	***	---
Have young/school-aged children	26.19%	26.48%	25.96%		---
Has primary childcare responsibilities	4.59%	1.51%	7.07%	***	---
Have eldercare responsibilities	16.78%	15.14%	18.09%	***	---
Outcome: Social Inclusion	3.91	4.01	3.84	***	---
Outcome: Harassment Experience in Past Year	17.93%	9.91%	22.37%	***	---
Outcome: Professional Respect	3.93	4.09	3.80	***	---
Outcome: Annual Salary	$127,356	$141,101	$116,322	***	---
Outcome: Career Advancement Opportunities	4.05	4.18	3.92	***	---
Outcome: Persistence Intentions	4.19	4.27	4.13	***	---

Notes: * p<.05; ** p<.01; *** p<.001; two-tailed tests, comparing WAHM and non-WAHM respondents via t-tests. Gender categories for women and men include both cisgender and transgender persons who identify as women and men, respectively. Transgender and gender non-binary status is combined above to protect confidentiality. NAAPI=Native American and Asian Pacific Islander. Unlike the NSF survey, the SIS survey allowed respondents to indicate more than one racial/ethnic category.

Table S2: Proportion of Unexplained and Explained Variation on Outcome Measures between WAHM and other STEM Professionals in Blinder-Oaxaca Decompositions

	Social Inclusion			Harassment			Professional Respect		
	Diff.	% of diff	Sig	Diff.	% of diff	Sig	Diff.	% of diff	Sig
Difference, WAHM vs non-WAHM	.1503	---	***	.0805	---	***	.2833	---	***
Unexplained portion of difference	.1295	86.17%	***	.0653	81.12%	***	.2360	83.28%	***
Explained portion of difference (all categories combined)	.0208	13.83%	***	.0152	18.88%	***	.0473	16.72%	***
Detailed Decomposition	Portion of diff.	% of diff Expl'd	Sig	Portion of diff.	% of diff Expl'd	Sig	Portion of diff.	% of diff Expl'd	Sig
Category: Human Capital	*.0004*	*0.27%*		*.0012*	*1.49%*		*.0007*	*0.25%*	
STEM field[1]	-.0029	-1.93%		.0013	1.61%		.0017	0.61%	
Highest degree	.0016	1.06%		.0002	-0.25%		-.0009	-0.32%	
Years at employing organization	.0017	1.13%		-.0001	0.12%		-.0016	-0.56%	
Category: Background Characteristics	*-.0231*	*-15.37%*	***	*.0039*	*4.84%*	**	*.0032*	*1.13%*	
Age	-.0131	-8.72%	***	.0040	4.96%	***	.0038	1.34%	
Whether born in US	-.0100	-6.65%	***	-.0002	-0.22%		-.0004	-0.14%	
Parents' highest level of education	.0000	0%		.0000	0%		-.0002	-0.07%	
Category: Job Characteristics	*.0137*	*9.12%*	***	*.0007*	*0.99%*		*.0087*	*2.77%*	***
Employment sector[2]	.0078	5.19%	***	.0029	3.60%	***	.0070	2.47%	***
Employer size	.0012	0.80%		-.0001	-0.12%		.0003	0.10%	
Job related to highest degree	-.0006	-0.40%		-.0001	-0.12%		-.0007	-0.25%	
Primary job resp is a core technical task	.0000	0%		-.0002	-0.24%		.0000	0%	
Supervisory responsibilities	.0005	0.33%		-.0009	-1.12%	***	.0006	0.21%	
Primarily work in teams	.0048	3.19%	***	-.0008	-1.00%	***	.0016	0.55%	***
Category: Work Effort and Commitment	*.0222*	*14.79%*	***	*.0050*	*6.21%*	***	*.0214*	*7.55%*	***
Ave hours worked per week	.0007	0.47%		-.0004	-0.50%		.0011	0.39%	
Willing to put in extra effort	.0003	0.20%		.0002	0.25%		-.0001	-0.04%	
Work is an important part of identity	-.0022	-1.46%	*	.0001	0.12%		-.0020	-0.71%	*
Personally care about fate of organization	.0234	15.57%	***	.0049	*6.09%*	***	.0224	7.91%	***
Category: Family Responsibilities	*.0075*	*4.99%*	***	*.0044*	*5.47%*	***	*.0147*	*5.20%*	***
Have young/school-aged children	.0000	0%		.0000	0%		-.0001	-0.04%	
Have primary childcare responsibilities	.0061	4.06%	***	.0032	3.98%	***	.0119	4.20%	***
Have eldercare responsibilities	.0014	0.93%	***	.0012	1.49%	***	.0030	1.05%	***

[1] "STEM field" aggregates results for separate field indicators: Life sciences, physical sciences, computer science and mathematics, other STEM field (engineering is the comparison category). [2] "Employment sector" aggregates the results for separate employment sector indicators: university or college, government, nonprofit, K-12, other sector (for-profit is the comparison category). Values indicate the portion of the WAHM/non-WAHM difference in the outcome measure explained by each factor (and in italics the proportion explained by that category of factors). Significance indicates whether the contribution of each factor to the difference between WAHM and non-WAHM is significantly different from zero. See Analytic Strategy section for details on the decomposition models and interpretation of coefficients. N=25,324. WAHM= white heterosexual men without disabilities.

Table S2 (Continued): Proportion of Unexplained and Explained Variation on Outcome Measures between WAHM and other STEM Professionals in Blinder-Oaxaca Decompositions

	Salary			**Professional Opportunities**			**Persistence Intentions**		
	Diff.	% of diff	Sig	Diff.	% of diff	Sig	Diff.	% of diff	Sig
Difference, WAHM vs non-WAHM	24,994	---	***	.2587	---	***	.1961	---	***
Unexplained portion of difference	7,831	31.33%	***	.1062	41.05%	***	.1350	68.82%	***
Explained portion of difference (all categories combined)	17,163	68.67%	***	.1525	58.95%	***	.0611	31.16%	***
Detailed Decomposition	Portion of diff.	% of diff Expl'd	Sig	Portion of diff.	% of diff Expl'd	Sig	Portion of diff.	% of diff Expl'd	Sig
Category: Human Capital	*651*	*2.60%*	*	*.0148*	*5.72%*	**	*.0283*	*14.28%*	***
STEM field	577	2.30%	**	.0032	1.23%		.0058	2.86%	*
Highest degree	-1567	-6.27%	***	-.0030	-1.16%	***	.0053	2.71%	**
Years at employing organization	1639	6.56%	***	.0146	5.64%	***	.0171	8.72%	***
Category: Background Characteristics	*8865*	*35.47%*	***	*.0236*	*9.12%*	***	*-.0020*	*-1.02%*	***
Age	7425	29.71%	***	.0087	3.36%	**	.0232	11.83%	***
Whether born in US	1471	5.89%	***	.0152	5.88%	***	-.0250	-12.78%	***
Parents' highest level of education	-32	-0.13%		-.0003	-0.12%		-.0002	-0.10%	
Category: Job Characteristics	*7226*	*28.91%*	***	*.0265*	*11.30%*	***	*-.0178*	*-9.07%*	***
Employment sector	6743	26.98%	***	.0030	1.16%	*	-.0144	-7.34%	***
Employer size	-1415	-5.66%	***	.0014	0.54%		.0000	0%	
Job related to highest degree	-39	-0.13%		-.0011	-0.43%		-.0013	-0.66%	
Primary job resp is a core technical task	15	0.06%		.0004	0.16%		-.0012	-0.60%	
Supervisory responsibilities	1151	4.61%	***	.0177	6.84%	***	-.0015	-0.76%	
Primarily work in teams	772	3.09%	***	.0078	3.02%	***	.0006	0.31%	
Category: Work Effort and Commitment	*23*	*0.10%*		*.0233*	*9.01%*	***	*.0418*	*21.32%*	***
Ave hours worked per week	-289	-1.16%		.0005	0.19%		.0017	0.87%	
Willing to put in extra effort	14	0.06%		.0002	0.08%		.0000	0%	
Work is an important part of identity	-51	-0.20%	*	-.0035	-1.35%	**	-.0034	-1.89%	**
Personally care about fate of organization	349	1.40%	***	.0261	10.09%	***	.0436	22.23%	***
Category: Family Responsibilities	*399*	*1.56%*	***	*.0153*	*5.92%*	***	*.0109*	*5.56%*	***
Have young/school-aged children	48	0.20%		.0000	0%		.0003	0.15%	
Have primary childcare responsibilities	174	0.70%		.0122	4.72%	***	.0067	3.42%	***
Have eldercare responsibilities	176	0.70%	***	.0031	1.20%	***	.0037	1.87%	***

Table S3: Explained and Unexplained Portion of Variation between WAHM and Non-WAHM from Original Decomposition Models and from Supplemental Decomposition Models Including Job Satisfaction Measure

Outcome Measures	Original Decomposition Models	Decomposition Models with Job Satisfaction
Social Inclusion		
Total Explained Portion	13.83%	30.80%
Portion Explained by Job Satisfaction	--	*27.70%*
Unexplained Portion	86.17%	69.20%
Harassment		
Total Explained Portion	18.88%	28.60%
Portion Explained by Job Satisfaction	--	*15.60%*
Unexplained Portion	81.12%	71.40%
Professional Respect		
Total Explained Portion	16.72%	27.40%
Portion Explained by Job Satisfaction	--	*17.30%*
Unexplained Portion	83.28%	72.60%
Salary		
Total Explained Portion	68.67%	70.10%
Portion Explained by Job Satisfaction	--	*2.23%*
Unexplained Portion	31.33%	29.9%
Professional Opportunities		
Total Explained Portion	41.05%	53.90%
Portion Explained by Job Satisfaction	--	*20.60%*
Unexplained Portion	58.95%	46.10%
Persistence Intentions		
Total Explained Portion	31.16%	57.40%
Portion Explained by Job Satisfaction	--	*42.50%*
Unexplained Portion	68.82%	42.60%

N=25,324. WAHM= white heterosexual men without disabilities.

Table S4. Gap in Workplace Experience Measures between WAHM and Non-WAHM Groups. Values are the Magnitude of the Gap Left Unexplained once Factors in Decomposition Model were Accounted For.

	N (Non-WAHM group)	Social Inclusion	Harass-ment	Professional Respect	Salary	Professional Opportunities	Persistence Intentions
WAHM vs. Heterosexual white women w/o disabilities	4092	0.085	-0.086	0.249	$7,407	0.128	0.091
WAHM vs. Heterosexual Black men w/o disabilities	227	0.137	-0.042	0.261	$9,888	0.077	0.133
WAHM vs. Heterosexual Black women w/o disabilities	144	0.413	-0.106	0.528	$4,814	0.215	0.241
WAHM vs. Heterosexual Asian men w/o disabilities	1317	0.061	-0.003	0.197	$2,771	0.212	0.127
WAHM vs. Heterosexual Asian women w/o disabilities	560	0.138	-0.056	0.277	$2,683	0.213	0.049
WAHM vs. Heterosexual Latinx/NA men w/o disabilities	772	0.028	-0.023	0.122	$5,322	0.120	0.018
WAHM vs. Heterosexual Latinx/NA women w/o disabilities	404	0.155	-0.115	0.385	$8,818	0.185	0.138
WAHM vs. Heterosexual white men with disabilities	1982	0.138	-0.037	0.136	$8,603	0.055	0.230
WAHM vs. Heterosexual white women with disabilities	903	0.219	-0.167	0.450	$15,662	0.268	0.340
WAHM vs. Heterosexual Black men with disabilities	29	0.060	-0.100	0.345	$9,375	0.241	0.336
WAHM vs. Heterosexual Black women with disabilities	43	0.604	-0.192	0.691	$19,552	0.239	0.573
WAHM vs. Heterosexual Asian men with disabilities	188	0.113	-0.009	0.255	$12,028	0.210	0.216
WAHM vs. Heterosexual Asian women with disabilities	83	0.216	-0.159	0.568	$6,714	0.353	0.244
WAHM vs. Heterosexual Latinx/NA men with disabilities	154	0.169	-0.141	0.246	$12,219	0.209	0.290
WAHM vs. Heterosexual Latinx/NA women with disabilities	101	0.378	-0.128	0.582	$22,138	0.338	0.503
WAHM vs. LGBTQ white men w/o disabilities	349	0.102	-0.002	0.086	$8,155	0.066	0.020
WAHM vs. LGBTQ white women w/o disabilities	218	0.163	-0.092	0.236	$7,502	0.043	0.099
WAHM vs. LGBTQ white men with disabilities	125	0.301	-0.101	0.163	$6,522	0.023	0.161
WAHM vs. LGBTQ white women with disabilities	98	0.378	-0.195	0.538	$7,431	0.371	0.385
WAHM vs. LGBTQ Black men (w/ or w/o disabilities)	21	0.686	-0.053	0.658	$34,421	0.635	0.178
WAHM vs. LGBTQ Black women (w/ or w/o disabilities)	17	0.421	-0.285	0.785	$1,723	0.184	1.185
WAHM vs. LGBTQ Asian men (w/ or w/o disabilities)	65	0.389	-0.075	0.412	$22,902	0.314	0.443
WAHM vs. LGBTQ Asian women (w/ or w/o disabilities)	25	0.053	-0.161	0.192	$1,318	0.078	0.128
WAHM vs. LGBTQ Latinx/NA men (w/ or w/o disabilities)	64	0.152	-0.160	0.402	$23,326	0.304	0.001
WAHM vs. LGBTQ Latinx/NA women (w/ or w/o disabilities)	31	0.436	-0.148	0.380	$31,879	0.584	0.484

Shading Key

Significant, up to 25% of St. Dev
>25% of magnitude of St. Dev
>50% of magnitude of St. Dev
>75% of magnitude of St. Dev
>100% of magnitude of St. Dev

Note: Numbers in each cell represent the magnitude of the gap in workplace experiences between WAHM and the focal non-WAHM group that remains once the explanatory factors (listed in Table 1) are accounted for in the deposition model. Each cell represents the focal coefficient from a single decomposition model. Because these disaggregated decomposition models require larger Ns than were needed for testing H1 and H2, the table does not disaggregate by disability status among LGBTQ-identifying STEM professionals of color. The shading reflects the relative size of the bap, and shading thresholds are defined as proportions of the magnitude of the standard deviation on that outcome; shading is included for interpretive ease only.

Table S5. Effect Sizes of Variation along Individual Identity Dimensions on the Workplace Experiences of Persons along the other Intersectional Identity Dimensions

	Social Inclusion	Harassment	Professional Respect	Salary	Professional Opportunities	Turnover intentions
Effect of Variation by Gender (women vs. men) among….						
Heterosexual white Rs w/o disabilities	0.139	0.295	0.395	0.356	0.218	0.127
Heterosexual white Rs w/ disabilities	0.138	0.383	0.456	0.345	0.253	0.192
LGBTQ white Rs w/o disabilities	0.116	0.295	0.219	0.207	0.005	0.037
LGBTQ white Rs w/ disabilities	0.100	0.223	0.467	0.209	0.384	0.193
Heterosexual Asian Rs w/o disabilities	0.105	0.211	0.173	0.190	0.078	0.252
Heterosexual Asian Rs w/ disabilities	0.216	0.468	0.570	0.200	0.391	0.181
LGBTQ Asian Rs w/o disabilities	0.105	0.226	0.173	0.190	0.075	0.253
LGBTQ Asian Rs w/ disabilities	0.216	0.468	0.570	0.200	0.392	0.181
Heterosexual Black Rs w/o disabilities	0.331	0.267	0.387	0.119	0.278	0.224
Heterosexual Black Rs w/ disabilities	0.620	0.289	0.474	0.195	0.201	0.315
LGBTQ Black Rs w/o disabilities	0.724	0.915	0.693	0.303	0.142	0.984
LGBTQ Black Rs w/ disabilities	0.465	0.616	0.456	0.155	0.358	0.154
Heterosexual Latinx/NAAPI Rs w/o disabilities	0.173	0.329	0.419	0.225	0.151	0.211
Heterosexual Latinx/NAAPI Rs w/ disabilities	0.250	0.085	0.400	0.343	0.202	0.214
LGBTQ Latinx/NAAPI Rs w/o disabilities	0.146	0.009	0.262	0.244	0.031	1.098
LGBTQ Latinx/NAAPI Rs w/ disabilities	0.259	0.147	0.009	0.262	0.244	0.251
Average effect size of Gender:	***0.256***	***0.327***	***0.383***	***0.234***	***0.213***	***0.304***
Effect of Variation by LGBTQ status (LGBTQ vs. non-LGBTQ) among….						
Men white Rs w/o disabilities	0.153	0.007	0.213	0.204	0.212	0.136
Men white Rs w/ disabilities	0.249	0.239	0.163	0.364	0.144	0.187
Women white Rs w/o disabilities	0.123	0.018	0.036	0.057	0.008	0.043
Women white Rs w/ disabilities	0.193	0.075	0.154	0.240	0.266	0.182
Men Asian Rs w/o disabilities	0.303	0.210	0.409	0.365	0.269	0.536
Men Asian Rs w/ disabilities	0.997	0.575	0.638	0.664	0.415	0.627
Women Asian Rs w/o disabilities	0.183	0.235	0.121	0.210	0.019	0.017
Women Asian Rs w/ disabilities	0.118	0.278	0.267	0.084	0.161	0.172
Men Black Rs w/o disabilities	0.314	0.060	0.349	0.186	0.382	0.082
Men Black Rs w/ disabilities	0.814	0.052	0.425	0.479	0.753	0.166
Women Black Rs w/o disabilities	0.543	0.571	0.583	0.206	0.104	0.695
Women Black Rs w/ disabilities	0.625	0.292	0.433	0.176	0.508	0.005
Men Latinx/NAAPI Rs w/o disabilities	0.323	0.389	0.458	0.358	0.508	0.094
Men Latinx/NAAPI Rs w/ disabilities	0.140	0.232	0.153	0.564	0.128	0.308
Women Latinx/NAAPI Rs w/o disabilities	0.033	0.030	0.253	0.384	0.377	0.151
Women Latinx/NAAPI Rs w/ disabilities	0.346	0.011	0.030	0.282	0.382	0.181
Average effect size of LGBTQ status	***0.341***	***0.205***	***0.293***	***0.301***	***0.290***	***0.224***
Effect of Variation by Disability Status effect (w vs. w/o) among….						
Heterosexual white men	0.223	0.127	0.238	0.150	0.183	0.180
Heterosexual white women	0.197	0.220	0.289	0.142	0.221	0.255
LGBTQ white men	0.306	0.362	0.187	0.310	0.124	0.239
LGBTQ white women	0.280	0.273	0.400	0.337	0.489	0.399
Heterosexual Asian men	0.064	0.053	0.075	0.004	0.073	0.251
Heterosexual Asian women	0.154	0.318	0.399	0.010	0.213	0.187
LGBTQ Asian men	0.607	0.373	0.265	0.413	0.060	0.381
LGBTQ Asian women	0.394	0.347	0.674	0.126	0.090	0.376
Heterosexual Black men	0.100	0.208	0.159	0.021	0.239	0.278
Heterosexual Black women	0.278	0.239	0.281	0.100	0.089	0.332
LGBTQ Black men	0.209	0.246	0.738	0.389	0.484	0.239
LGBTQ Black women	0.839	0.001	0.703	0.836	0.272	0.254
Heterosexual Latinx/NAAPI men	0.205	0.254	0.233	0.092	0.131	0.263
Heterosexual Latinx/NAAPI women	0.266	0.005	0.237	0.259	0.182	0.276
LGBTQ Latinx/NAAPI men	0.244	0.124	0.035	0.477	0.476	0.198
LGBTQ Latinx/NAAPI women	0.595	0.038	0.556	0.188	0.256	0.282
Average effect size of Disability status	***0.310***	***0.199***	***0.342***	***0.241***	***0.224***	***0.274***

Effect of Variation by Race/Ethnicity (Asian vs. White) among…						
Heterosexual men w/o disabilities	0.109	0.066	0.378	0.217	0.408	0.086
Heterosexual men w/ disabilities	0.139	0.114	0.392	0.254	0.305	0.158
LGBTQ men w/o disabilities	0.316	0.243	0.206	0.141	0.154	0.166
LGBTQ men w/ disabilities	0.152	0.178	0.104	0.216	0.078	0.171
Heterosexual women w/o disabilities	0.198	0.278	0.515	0.386	0.460	0.171
Heterosexual women w/ disabilities	0.237	0.464	0.677	0.385	0.477	0.268
LGBTQ women w/o disabilities	0.548	0.036	0.347	0.117	0.268	0.365
LGBTQ women w/ disabilities	0.204	0.269	0.216	0.268	0.261	0.070
Average effect size of Asian vs. White	***0.238***	***0.206***	***0.354***	***0.248***	***0.301***	***0.182***
Effect of Variation by Race/Ethnicity (Black vs. White) among…						
Heterosexual men w/o disabilities	0.199	0.164	0.432	0.310	0.180	0.110
Heterosexual men w/ disabilities	0.117	0.232	0.329	0.156	0.156	0.167
LGBTQ men w/o disabilities	0.334	0.038	0.506	0.279	0.300	0.124
LGBTQ men w/ disabilities	0.808	0.041	0.608	0.476	0.738	0.218
Heterosexual women w/o disabilities	0.397	0.083	0.383	0.069	0.235	0.218
Heterosexual women w/ disabilities	0.494	0.176	0.384	0.011	0.104	0.325
LGBTQ women w/o disabilities	0.909	0.726	0.941	0.230	0.127	0.955
LGBTQ women w/ disabilities	0.617	0.366	0.388	0.252	0.772	0.132
Average effect size of Black vs.White	***0.484***	***0.228***	***0.496***	***0.223***	***0.327***	***0.281***
Effect of Variation by Race/Ethnicity (Latinx/NAAPI vs. White) among…						
Heterosexual men w/o disabilities	0.046	0.104	0.204	0.206	0.219	0.034
Heterosexual men w/ disabilities	0.045	0.228	0.206	0.160	0.167	0.117
LGBTQ men w/o disabilities	0.188	0.480	0.405	0.353	0.510	0.020
LGBTQ men w/ disabilities	0.357	0.251	0.237	0.451	0.126	0.418
Heterosexual women w/o disabilities	0.085	0.141	0.229	0.063	0.144	0.116
Heterosexual women w/ disabilities	0.174	0.048	0.187	0.162	0.127	0.153
LGBTQ women w/o disabilities	0.063	0.166	0.064	0.374	0.497	0.220
LGBTQ women w/ disabilities	0.248	0.185	0.001	0.216	0.187	0.095
Average effect size of Latinx/NAAPI vs.White	***0.151***	***0.200***	***0.192***	***0.248***	***0.247***	***0.147***

Note: Effect size= difference in means/pooled standard deviation. Numbers represent the effect sizes of variation along the focal identity dimension for that group. E.g., the effect size of variation by gender on the social inclusion measure for LGBTQ white respondents without disabilities is .116 and .105 for LGBTQ Asian respondents without disabilities. The bolded row at the bottom of each segment is the average effect size on that outcome across the groups listed directly above it.

Table S6: Means on Outcome Measures by Disaggregated Racial/Ethnic Categories, Disability Status, and LGBTQ Status, centered at the means for WAHM

	Social Inclusion (difference from WAHM mean)		**Harassed in Last Year (difference from WAHM mean)**		**Professional Respect (difference from WAHM mean)**		**Annual Salary (difference from WAHM mean)**		**Career Opportunities (difference from WAHM mean)**		**Persistence Intentions (difference from WAHM mean)**	
	Coeff	SE	Coeff	SE	Coeff	SE	Coeff	SE	Coeff	SE	Coeff	SE
Latinx	-.020	*.028*	.045	*.012*	-.121	*.024*	-13,580	*2619*	-.102	*.032*	-.064	*.050*
Native Amer/Pacific Islander	-.163	*.067*	.017	*.030*	-.074	*.049*	-3,839	*6437*	-.019	*.076*	-.039	*.121*
Multiracial White/Nonwhite	-.147	*.068*	.024	*.030*	-.107	*.059*	-9,805	*6501*	-.023	*.077*	-.043	*.125*
Multiracial Nonwhite	-.255	*.128*	.026	*.017*	-.262	*.118*	-14,314	*1305*	-.360	*.154*	-.048	*.039*
Other race/ethnicity	-.266	*.037*	.132	*.019*	-.318	*.035*	-17,487	*3302*	-.274	*.044*	-.223	*.024*
Physical Disabilities	-.145	*.022*	.073	*.010*	-.187	*.019*	-16,754	*2087*	-.184	*.025*	-.118	*.060*
Mental Illness	-.377	*.035*	.095	*.015*	-.288	*.029*	-15,577	*3171*	-.251	*.039*	-.072	*.049*
Chronic Illness	-.110	*.023*	.037	*.011*	-.129	*.021*	-11,802	*2228*	-.097	*.027*	-.071	*.042*
Transgender and Gender Non-binary	-.256	*.065*	.167	*.029*	-.296	*.056*	-1,482	*6239*	-.078	*.074*	-.325	*.117*
Bisexual	-.111	*.055*	.010	*.025*	-.120	*.047*	-11,282	*5259*	-.011	*.062*	-.054	*.102*
Queer	-.289	*.058*	.139	*.026*	-.176	*.051*	-4,455	*5537*	-.035	*.067*	-.238	*.107*

Predicted means for each category, holding constant variation by STEM field, employment sector, highest education, and age. Values represent the average divergence of each group's experiences from those of WAHM. Values were produced by OLS regression models; See Analytic Strategy section for details. N=25,324. WAHM= white heterosexual men without disabilities.

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