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RESEARCH ARTICLE

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An intersectional analysis of the health status, work conditions, and nonwork conditions of the U.S. working-classed across class, sex, race, and nativity identities

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Abstract

Background: Classism, sexism, racism, and nativism intersect to create inequitable conditions and health outcomes based on workers' social identities. This study describes the health status, work conditions, and nonwork conditions of the United States (U.S.) working-classed at the intersections of class, sex, racial, and nativity identities.

Methods: Descriptive statistics (e.g., frequencies, percentages) were calculated from the 2015 National Health Interview Survey data for the total working classed sample (N = 11,884) and 16 intersectional groupings. General and psychosocial health status, work factors, and access to resources outside of work were examined.

Results: Intersectional analysis revealed divisions in work and nonwork conditions despite the majority of each grouping reporting very good/excellent health. The majority of the female Latine born-outside-U.S. grouping (60%) reported not having paid sick leave. The majority of the male Latine born-outside-U.S. grouping reported having neither paid sick leave (62%) nor health insurance (55%). The majority of the female Latine (53%), male Latine (60%), and male Black (55%) born-outside-U.S. groupings reported workplaces as less safe. The majority of the female Latine born-outside-U.S. grouping (53%) was the only grouping to report being moderately/very worried about being able to afford housing costs.

Conclusion: The health status and precarity of work and nonwork conditions of the U.S. working classed may be shaped by intersecting systems of power across class, sex, racial, and nativity identities. Intersectional analysis increases our purview to see who is most affected, how, and where, which can inform future opportunities to mitigate worker health inequities.

KEYWORDS

intersectional analysis, nonwork conditions, systems of power, work conditions, worker health equity

1 | INTRODUCTION

Researchers show how social constructs – class, sex, racial, and nativity identities – forecast disparate worker health status and workers' work and nonwork conditions. For example, workers in low-income jobs have worse health outcomes than high-income workers.[1,2] Workers characterized by lower socioeconomic status (SES) as a class measure are more likely to live in poverty and lack adequate health services.[3] Women appear more exposed to some work-related hazards, such as psychosocial and ergonomic hardships, than men.[4,5] Workers of color and immigrant workers are overrepresented in precarious employment and in jobs characterized by poor working conditions.[6–8] Moreover, there has been an increase in precarious employment among Hispanic and non-Hispanic Black workers compared to non-Hispanic white workers.[8] From a public health perspective, precarious employment and poor work conditions, such as exposure to hazards, job strain, and psychosocial stressors, contribute to health disparities.[8,9]

Health disparities are not reflective of individual behaviors, identities, or actions. This ongoing pressing public health problem results from inequitable conditions created by systems and structures of power that support the differential valuing of people based on their social locations.[10–12] Advantageous or less precarious conditions systemically give power and privilege to workers whose hegemonic identities (i.e., white, upper-classed men) are more highly valued in society over those with systemically minoritized identities (e.g., Asian racialized, working-classed women). For instance, consider occupational segregation where there is differential representation of systemically minoritized identities in particular occupations,[13] such as Black women being more likely to be employed in service occupations than non-Hispanic white women,[14] which presents differences in working conditions and hazardous exposures. These population variations extend beyond individual preferences and cultural differences in their choices of occupation. These variations reflect the influence of systems of power in shaping the conditions in which they work and live such that race, for instance, "precisely captures the impacts of racism."[15] (p1212) As intersectionality posits, systems of power work in tandem to have class, sex, racial, and nativity identities collectively interact at the individual level.[16,17] In other words, as articulated by Crenshaw:[17] (p1244)

> …the experiences Black women face are not subsumed within the traditional boundaries of race or gender discrimination as these boundaries are currently understood…the intersection of racism and sexism factors into Black women's lives in ways that cannot be captured wholly by looking at the race and gender dimensions of those experiences separately.

Occupational health and safety (OHS) research often examines identities as independent from one another using a controlled approach. Statistical control for potential identity confounders views outcomes conceptually independent of the inequitable conditions in which they are experienced. There is also limited attention to nonwork conditions, such as access to material, economic, and psychosocial resources outside the work environment. "Workers are people too,"[18] (p105) as Krieger reminded us. Research that examines power in the context of conditions at work and outside of work can better explore what is happening to exclude and marginalize workers and create health inequities at the systems level.[19]

Using a national data set, this present study describes the health status, work conditions, and nonwork conditions of the United States (U.S.) working classed across class, sex, racial identity, and nativity intersections. Unlike controlled approaches, an intersectional analysis,[20–25] gives specific, historically contextualized meaning to social identities.[26] This approach considers the implications of class, sex, racial, and nativity identities, rather than class, sex, racial, or nativity identities. Additionally, it enables us to advance analyses beyond *inter*group differences (e.g., working classed and nonworking classed) to highlight *intra*group differences (e.g., across classes, sexes, races, and nativity *within* the working classed).[17] More importantly, this intersectional approach centers working-classed workers with systemically marginalized and disenfranchised identities and provides an opportunity to explore how their embodiment of multiple identities can both present privilege and disadvantage in their experiences of work and nonwork conditions. Working classed is characterized as work positions of low power (non-ownership, non-supervisory positions).[27,28] "Classed" is used to denote that this is an identity/classification prescribed for, rather than by, this group of people. This study contributes to worker health equity research by describing patterns seen by class, sex, racial, and nativity identities within the U.S. working class.

2 | MATERIALS AND METHODS

The publicly accessible, deidentified 2015 National Health Interview Survey (NHIS) data were utilized. The NHIS is a cross-sectional national annual survey conducted by the National Center for Health Statistics (NCHS) on the households of the civilian, noninstitutionalized population across the U.S. The 2015 NHIS used a multistage sample design involving stratification, clustering, and oversampling of specific population subgroups (i.e., Black, Hispanic, and Asian persons particularly if aged 65 years or older). This data set was chosen specifically due to its collection of many demographic and socioeconomic characteristics along with a wide range of health topics from its participants.[29] Additionally, as a co-sponsoring agency, the National Institute for Occupational Safety and Health (NIOSH) included supplemental questions to the 2015 survey estimating workplace exposure prevalence and common health conditions related to work. Neither an Institutional Review Board (IRB) review nor an exempt determination was required for the protection of human participants because this publicly available data set did not contain any individual identifiers.

2.1 | Study sample

The final study sample consisted of 11,884 working-class workers. The final sample was obtained from the 2015 population data from 41,493 households. Households were composed of 103,789 persons in 42,288 families, of which 33,672 were adults aged 18 years and older. The total household response rate was 70.1%, the family response rate was 98.9%, and the conditional response rate (i.e., the number of completed survey interviews divided by the total number of eligible cases) for the sample adult (where the sample adult was a core component of the survey and was the source of occupational data) was 79.7%, yielding a final response rate of 55.2%.

To identify working adults, data were limited to those who responded as having current employment in the last week (i.e., working for pay at a job or business; with a job or business but not at work; working, but not for pay, at a family-owned job or business), non-ownership status of their employment (i.e., employee of a private company for wages; a federal/state/local government employee), and a non-supervisory work role (i.e., does not supervise other employees as part of their job) when surveyed. Given the nature of the study about work, respondents were excluded if unemployed.

2.2 | Study measures

Health status, employment conditions, working conditions, and nonwork conditions were described by a total of 15 items. Worker characteristics were described by 10 items. Items were reverse coded or recoded, when applicable, so that higher scores equated to better health outcomes; less precarious employment conditions, working conditions, and nonwork conditions; and advantageous characteristics (e.g., high annual income). For missing data, cases were dropped by listwise deletion from the analysis when there were missing values in one or more of the specified variables. For missing data from reports of family income and personal earnings (e.g., used to calculate the income-to-poverty ratio), data sets containing imputed values provided by the NHIS were used.[30]

2.2.1 | Health status

Health status was measured by general health and psychosocial health. *General health* was measured by one item ("Would you say your health in general is excellent, very good, good, fair, or poor?"). The original scale was a 5-point Likert scale ranging from excellent (1) to poor (5). The scores were reversed and recoded as fair or poor (1), good (2), and very good or excellent (3). *Psychosocial health* was measured by six items (α = 0.83) (e.g., how often the person felt sad that nothing could cheer them up or felt nervous during the past 30 days). Each item was originally rated on a 5-point Likert scale from all of the time (1) to none of the time (5). It was recoded to all of the time (0) to none of the time (4) and summed as a composite score (range = 0–24). Higher scores indicated experiencing adverse symptoms less often and better psychosocial health. A score of 12 or less indicated serious psychological distress.[31]

2.2.2 | Work conditions

Work conditions included employment conditions and working conditions. Employment conditions were defined as the quality of the contractual and relational dimensions of the relationship between the employer and employee.[32,33] Working conditions referred to the quality of the physical and psychosocial components of work (adaptation of definition by Benach, Muntaner, Solar, Santana, and Quinlan[32]). Variables were based on questions referring to the survey respondent's current, main job. The exception was for health insurance, which referenced the survey respondent's job or work last week as the source of health insurance.

2.2.2.1 | *Employment conditions*

Employment conditions were measured by work arrangement, work schedule, job insecurity, and work-related benefits (paid sick leave, health insurance). *Work arrangement* was measured by one item that asked about the best description of their work arrangement. The four original response options (e.g., "You are paid by a temporary agency or work for a contractor who provides workers and services to others under contract") were dichotomously recoded (0 = nonstandard arrangement, 1 = standard arrangement (regular permanent employee)). *Work schedule* was measured by one item that best described the hours usually worked. The original response options of a regular daytime schedule (1) to a rotating shift (4) were reversed and recoded as rotating (non-regular) schedule (1), regular non-daytime (evening or night) schedule (2), and regular daytime schedule (3). *Job insecurity* was measured using a dichotomous item assessing worry about losing their job (1 = yes, 2 = no). Work-related benefits, *paid sick leave* and *health insurance*, were measured by two dichotomous items that were reversely coded (1 = no, 2 = yes).

2.2.2.2 | *Working conditions*

Working conditions were measured by low job demands, workplace safety, workplace harassment, and physical exertion. *Low job demands* were measured by one item ("I have enough time to get the job done.") with the original 4-point Likert scale that ranged from strongly agree (1) to strongly disagree (4). It was reversely coded and dichotomized (1 = disagree or strongly disagree, 2 = agree or strongly agree). *Workplace safety* ("Overall, how safe do you think your workplace is?") was originally measured on a 4-point Likert scale ranging from very unsafe (1) to very safe (4). It was reversed and dichotomously recoded (1 = less safe, 2 = very safe). *Workplace harassment* was measured by one dichotomous item (1 = yes, 2 = no) ("During the past 12 months, were you threatened, bullied, or harassed by anyone while you were on the job?"). *Physical exertion* was measured by one item ("How often does your job involve repeated lifting, pushing, pulling, or bending?") originally coded on a 5-point Likert scale that ranged from always (0) to never

(4). It was recoded as often or always (1), sometimes or seldom (2), and never (3).

2.2.3 | Nonwork conditions

Nonwork conditions refer to the extent to which a person has access to resources, such as material, economic, and psychosocial, outside the work environment.[12,34] It was measured by healthcare access, home ownership, housing affordability, and food insecurity. *Healthcare access* was measured by a reversely coded dichotomous item (1 = no, 2 = yes) ("Is there a place that you USUALLY go to when you are sick or need advice about your health?"). *Home ownership* was measured by "Is this house/apartment owned or being bought, rented, or occupied by some other arrangement by [you/or someone in your family]?". The original response options were owned or being bought (1), rented (2), and other arrangements (3). They were dichotomously recoded (1 = not owned, 2 = owned). *Housing affordability* was measured by "How worried are you right now about not being able to pay your rent, mortgage, or other housing costs?". The original response options ranged from very worried (1) to not worried at all (4). They were dichotomously recoded (1 = moderately or very worried, 2 = not too or at all worried). *Food insecurity* was measured by a single item (how frequently the respondents worried about whether their food would run out before they got money to buy more in the last 30 days). The original 3-point scale had response options of often true (1), sometimes true (2), and never true (3). It was dichotomously recoded (1 = often or sometimes true, 2 = never true).

2.2.4 | Demographics

Sex ("[Are/Is] [you/person] male or female?") was measured dichotomously (female, male). *Race* was recoded, respectively, from – Hispanic, non-Hispanic white, non-Hispanic Black, non-Hispanic Asian, and non-Hispanic all other race groups – to Latine, white, Black, Asian, and multiracial/race-not-listed. (Latine includes Hispanic, Latin, Latina, Latino, and Latinx.[35]) *Nativity* was measured by one question ("[Was person] born in the United States?") that had dichotomous response options of born outside the U.S. (born-outside-U.S.) and born in the U.S (U.S.-born).

Seven other worker characteristics were included to contextualize the health status and work and nonwork conditions. *Industry* and *occupation* were measured by main industry and occupation codes based, respectively, on the 2012 North American Industry Classification System (NAICS) used in the U.S. Census and the 2010 Standard Occupational Classification (SOC) occupation classification in the original survey.[29] The survey offered both simple and detailed measures for both industry (21 categories and 79 categories, respectively) and for occupation (23 categories and 94 categories, respectively). *Citizenship* ("[Is person] a citizen of the United States?") was measured using a dichotomous item (1 = no, 2 = yes). *Institutionalized educational attainment*, or education level, was measured by one item assessing for the highest level of schooling completed or the highest degree received. The original 21 response options were recoded as 0-12 grades (no diploma) (1), 12 grades (high school diploma) or General Educational Diploma (GED) (2), associate degree or some college (3), and college degree (4 years of college or more) (4).

Participants were assessed for having *multiple jobs* using a dichotomous item (1 = yes, 2 = no). *Annual income* was measured based on self-reported 2014 earnings, which included hourly wages, tips, salaries, and commissions before taxes and deductions. The original 11 response options of $1-$4,999 (1) to $75,000 and over (11) were recoded as < $20,000 (1), $20,000-$44,999 (2), $45,000-$64,999 (3), and $65,000 and over (4). *Family income to poverty threshold ratio* was calculated in the original 2015 NHIS instrument using several sources due to the 2014 weighted Census poverty thresholds not being available. For instance, for a family of four in 2014, 100% of the federal poverty level equated to an income of $24,000, $49,000 at 200% of poverty, and $97,000 at 400% of poverty. The original 18 response options were reduced and recoded into four response options as 100% of poverty (1), 100%-199% of poverty (2), 200%-399% of poverty (3), and 400% of poverty or more (4).

2.3 | Statistical analysis and intersectional groupings

Guidelines provided in the 2015 NHIS Survey Description were followed. Estimates used 2015 NHIS weighted data where weights were in part derived from population estimates based on the 2010 census.[29] Stata version 18[36] was used for data analyses.

Weighted distributions were calculated for the total sample and 20 original intersectional groupings. Sex, race, and nativity were used to define the intersectional groupings (otherwise referred to as groupings) by further subsetting the data by sex, race, and nativity (e.g., Asian female born-outside-U.S. working-classed workers). The multi-racial/race-not-listed intersectional groupings (smallest unweighted grouping $n = 7$) were not included in the intersectional analyses due to unreliable estimates from small cell sizes.[37] Descriptive statistics (e.g., frequencies and percentages) were used to report how 16 intersectional groupings described work and nonwork conditions. The intersectional approach used in this study centers workers with systemically marginalized identities by examining responses across intersectional groupings rather than statistically comparing between groupings or to the total sample, which is predominately female, white, and U.S.-born. Comparison could both mask responses of these workers and uses the white majority as the reference, which decenters workers with systemically marginalized identities.

Coefficients of variant (CV) for the population estimates (i.e., weighted percentages) were used to meet standards of precision or reliability.[37,38] If not met, these estimates were noted as such in the

tables of results. This approach is similar to others who have reported estimates using NHIS data.[31,39]

3 | RESULTS

The results highlight notable findings about health status, work conditions, and nonwork conditions by the total sample and intersectional groupings. Responses with the highest percentages were reported. The results for the total sample were included as a reference. Sections are divided by main findings and begin with the sample description (see Tables 1 and 2).

3.1 | Sample

3.1.1 | Weighted sample description: Total sample

About half of the total sample self-identified as female (53.3%) with the majority identifying as white (65.2%) and U.S.-born (82.9%). The total sample most often reported having citizenship (91.9%) and not having multiple jobs (91.6%). The total sample was employed across the 21 industries and 23 occupational survey categories; the health care and social assistant industry (14.6%) and office and administrative support occupations (14.9%) were the most common. Institutionalized educational attainment ranged from 0 to 12 grades to college degree or more, with a college degree (4 or more years) (36.0%) being the most frequently reported. The total sample most often reported an annual income between $20,000 and $44,999 (37.7%) and most often fell in the ≥ 400% of the poverty bracket (40.2%).

3.1.2 | Weighted sample description: Intersectional groupings

Similar to the total sample, not having multiple jobs was reported by the majority of all 16 groupings (>87% for each grouping). U.S. citizenship was frequently reported by more than 52% for each born-outside-U.S. grouping except for the female (46.5%) and male (35.0%) Latine born-outside-U.S. groupings. There were variations by industry, occupation, education level, annual income, and family income to poverty threshold ratio across groupings. Industry-wise, employment in the health care and social assistance industry was frequently reported by the female Black born-outside-U.S. (43.5%) and U.S.-born (30.3%), female white born-outside-U.S. (27.6%) and U.S.-born (21.7%), female Asian U.S.-born (24.9%), and female Latine born-outside-U.S. (18.2%) and U.S.-born (21.4%) groupings, which was similar to the total sample. Employment in the manufacturing industry was most often reported by the male white born-outside-U.S. (25.4%) and U.S.-born (16.2%), male Latine U.S.-born (13.3%), and male Black U.S.-born (12.8%) groupings; construction industry by the male Latine born-outside-U.S. grouping (22.1%); the professional, scientific, and technical services industry by the male Asian born-outside-U.S. (19.0%) and U.S.-born (16.4%) groupings; and the education services industry by the female Asian born-outside-U.S. grouping (14.1%).

For occupation, office and administrative support occupations were frequently reported by the female Latine U.S.-born (26.6%), female Black U.S.-born (23.2%), female white U.S.-born (21.6%) and born-outside-U.S. (18.6%), female Asian born-outside-U.S. (16.7%) and U.S.-born (16.6%), and male Latine U.S.-born (12.9%) groupings, which was similar to the total sample. The computer and mathematical occupations were most often reported by the male Asian born-outside-U.S. (25.2%) grouping; transportation and material moving occupations by the male Black U.S.-born (22.8%) grouping; construction and extraction occupations by the male Latine born-outside-U.S. grouping (21.9%); healthcare support occupations by the female Black born-outside-U.S. grouping (20.7%); and building and grounds cleaning and maintenance occupations by the female Latine born-outside-U.S. grouping (16.1%). The male white U.S.-born grouping frequently reported both transportation and material moving occupations and sales and related occupations (10.3%).

For education level, consistent with the total sample, a college degree or higher level of institutionalized educational attainment was most frequently reported by the male Asian born-outside-U.S. (67.9%) and U.S.-born (60.1), female Asian born-outside-U.S. (59.7%) and U.S.-born (57.2%), male white born-outside-U.S. (59.3%), female white born-outside-U.S. (57.1%) and U.S.-born (42.5%), and female Black born-outside-U.S. (37.8%) groupings. Unlike these groupings, the female Latine U.S.-born (40.2%), female Black U.S.-born (40.0%), male Black U.S.-born (37.9%) and born-outside-U.S. (36.2%), male white U.S.-born (36.8%), and male Latine U.S.-born (36.7%) groupings frequently reported having an associate degree or some college. The male (46.1%) and female (37.3%) Latine born-outside-U.S. groupings were the only groupings to have frequently reported 0-12 grades of education.

Similar to the total sample, annual incomes of $20,000 to $44,999 were frequently reported by 11 of the 16 groupings (male Latine Born-outside-U.S. = 52.3%; female Black born-outside-U.S. = 47.9%; female white born-outside-U.S. = 45.1%; male Latine U.S.-born = 42.6%; female Black U.S.-born = 41.8%; female Latine U.S.-born = 41.6%; male Black born-outside-U.S. = 41.2%; male Black U.S.-born = 39.3%; female Asian U.S.-born = 38.6%; female white U.S.-born = 38.2%; and female Asian born-outside-U.S. = 38.0%). The exceptions were the female Latine born-outside-U.S. grouping (53.6%) who frequently reported earning less than $20,000 annually and the male white born-outside-U.S. (46.8%) and male Asian U.S.-born (40.1%) and born-outside-U.S. (38.9%) groupings who most often reported earning $65,000 or more annually. Lastly, for the family income to poverty threshold ratio, the male (36.9%) and female (32.8%) Latine born-outside-U.S. groupings were the only groupings to frequently fall in the lowest reported family income to poverty threshold ratio bracket (100-199% of poverty). The female white born-outside-U.S.

TABLE 1 U.S. Working-Classed Population Estimates for the Study Sample.

Demographics[a]		Study Sample	Estimated Population in thousands	% (95% CI)
Sex				
	Female	6,411	19,611	53.3 (52.1–54.4)
	Male	5,473	17,214	46.7 (45.6–47.9)
Race				
	Latine	2,282	5,496	14.9 (14.1–15.8)
	Black	1,658	4,926	13.4 (12.6–14.2)
	Asian	767	2,068	5.6 (5.2–6.1)
	White	7,035	24,023	65.2 (64.1–66.4)
	Multiracial, race not listed	142	312	0.8 (0.7–1.1)
Nativity				
	Born-outside-U.S.	2,420	6,300	17.1 (16.3–18.0)
	U.S.-born	9,459	30,804	82.9 (82.0–83.7)
Industry[b]				
	Health care and social assistance	1,770	5,298	14.6 (13.9–15.4)
	Education services	1,361	4,333	12.0 (11.2-12.8)
	Manufacturing	1,199	3,977	11.0 (10.2–11.8)
Occupation[b]				
	Office and administrative support	1,739	5,412	14.9 (14.2–15.7)
	Sales and related	959	3,209	8.8 (8.2–9.5)
	Education, training, and library	968	3,072	8.5 (7.9–9.1)
Citizenship				
	No	1,231	2,993	8.1 (7.5–8.8)
	Yes	10,635	33,781	91.9 (91.2–92.5)
Institutionalized educational attainment				
	0–12 grades (no diploma)	1,250	3,169	8.6 (8.1–9.2)
	12 grades or GED diploma	2,713	7,828	21.3 (20.4–22.3)
	Associate degree or some college	3,969	12,521	34.1 (32.9–35.3)
	College degree (4 or more years)	3,918	13,202	36.0 (34.6–37.3)
Multiple jobs				
	Yes	1,033	3,099	8.4 (7.8–9.1)
	No	10,842	33,701	91.6 (90.9–92.2)
Annual income				
	<$20 K	2,778	8,074	26.7 (25.5–27.8)
	$20K-44,999	3,773	11,402	37.7 (36.4–39.0)
	$45K-64,999	1,608	5,117	16.9 (16.0–17.9)
	$65 K or more	1,571	5,669	18.7 (17.7–19.8)
Family income to poverty threshold ratio				
	<100% of poverty	1,371	3,758	10.7 (9.9–11.6)
	100-199% of poverty	2,172	6,184	17.7 (16.7–18.6)

(Continues)

TABLE 1 (Continued)

Demographics[a]		Study Sample	Estimated Population in thousands	% (95% CI)
	200-399% of poverty	3,610	11,001	31.4 (30.3–32.6)
	400% or more	4,112	14,051	40.2 (38.8–41.5)
Female Latine Born outside U.S.		616	1,362	3.7 (3.4–4.1)
Female Latine U.S.-born		529	1,277	3.5 (3.1–3.8)
Male Latine Born outside U.S.		724	1,743	4.7 (4.3–5.2)
Male Latine U.S.-born		412	1,111	3.0 (2.7–3.4)
Female Black Born outside U.S.		129	330	0.9 (0.7–1.1)
Female Black U.S.-born		890	2,660	7.2 (6.7–7.8)
Male Black Born outside U.S.		126	376	1.0 (0.8–1.3)
Male Black U.S.-born		511	1,549	4.2 (3.8–4.6)
Female Asian Born outside U.S.		259	708	1.9 (1.7–2.2)
Female Asian U.S.-born		109	306	0.8 (0.7–1.0)
Male Asian Born outside U.S.		308	830	2.3 (2.0–2.6)
Male Asian U.S.-born		90	223	0.6 (0.5–0.8)
Female White Born outside U.S.		130	482	1.3 (1.1–1.6)
Female White U.S.-born		3,665	12,298	33.4 (32.3–34.5)
Male White Born outside U.S.		111	416	1.1 (0.9–1.4)
Male White U.S.-born		3,128	10,822	29.4 (28.2–30.6)

[a]Frequencies of individual variables may not equal the total sample size due to missing data.
[b]The top three industries/occupations with the highest frequencies were included.

(39.1%), male Latine U.S.-born (37.2%), male Black born-outside-U.S. (35.2%), female Black born-outside-U.S. (33.2%) female Latine U.S.-born (32.9%), and female Black U.S.-born (31.5%) groupings fell in the 200-399% of poverty bracket. Consistent with the total sample, the male white born-outside-U.S. (61.9%) and U.S.-born (48.4%), male Asian U.S.-born (59.6%) and born-outside-U.S. (45.8%), female Asian born-outside-U.S. (48.0%) and U.S.-born (47.2%), female white U.S.-born (46.3%), and male Black U.S.-born (31.7%) groupings frequently fell in the highest bracket (≥400% of poverty).

3.2 | Health status

Overall, the workers scored high across both general health and psychosocial health measures (see Table 3). Workers also had a similar pattern across the total sample and intersectional groupings. Very good or excellent general health was reported by the total sample and across intersectional groupings (responses of >52% for the total sample and all groupings). Of a range of 0 to 24 points, the total sample had a mean score of 21.7, 95% CI [21.6, 21.7], indicating less frequent experiences of adverse psychosocial symptoms in the past 30 days. Similarly, the range of mean scores for psychosocial health of the intersectional groupings were 21.2, 95% CI [20.8, 21.6] to 22.5, 95% CI [22.3, 22.7].

3.3 | Work conditions

3.3.1 | Employment conditions

The total sample and intersectional groupings frequently reported having a standard work arrangement (≥79%), regular daytime schedule (>61%), and job security (>79%). For work-related benefits, 58.0% and 67.5% of the total sample reported having paid sick leave and health insurance, respectively. Similarly, more than 50% of responses for each grouping reported having both benefits, respectively. A marginal majority of the female Latine born-outside-U.S. grouping (50.2%) reported health insurance, the male Black born-outside-U.S. (50.8%), and the male Latine U.S.-born (50.7%) groupings reported having paid sick leave. Notably, the majority of the female Latine born-outside-U.S. grouping reported not having paid sick leave (paid sick leave = 39.7%) and the majority of the male Latine born-outside-U.S. grouping reported not having either paid sick leave or health insurance (paid sick leave = 38.4%; health insurance = 44.8%). See Table 3.

TABLE 2 Population Percentages of Demographics for the U.S. Working Classed by Intersectional Groupings.

	Industry[a]				
Intersectional Grouping	Health Care and Social Assistance % (95% CI)	Construction % (95% CI)	Manufacturing % (95% CI)	Education Services % (95% CI)	Professional, Scientific, and Technical Services % (95% CI)
Female Latine Born outside U.S.	18.2 (15.0–22.0)	†	12.4 (9.8–15.6)	9.3 (6.9–12.5)	4.1 (2.4–6.6)
Female Latine U.S.-born	21.4 (17.8-25.5)	†	2.9 (1.7–4.8)	16.2 (12.7–20.4)	5.4 (3.6–8.1)
Male Latine Born outside U.S.	2.5 (1.6-4.0)	22.1 (18.4–26.2)	12.8 (9.9–16.4)	†	†
Male Latine U.S.-born	†	9.3 (6.1–14.0)	13.3 (10.0–17.5)	5.0 (3.2–7.7)	5.3 (3.2–8.7)
Female Black Born outside U.S.	43.5 (33.3–54.3)	0.0	†	†	†
Female Black U.S.-born	30.3 (26.8–34.1)	†	5.6 (4.2–7.6)	13.7 (11.1–16.7)	3.1 (2.0–4.7)
Male Black Born outside U.S.	†	†	†	†	†
Male Black U.S.-born	8.2 (5.6–11.8)	3.7 (2.2–6.2)	12.8 (9.8–16.5)	6.9 (4.5–10.4)	†
Female Asian Born outside U.S.	13.7 (9.7–19.0)	†	11.0 (7.3–16.3)	14.1 (9.7–19.9)	13.1 (9.4–17.9)
Female Asian U.S.-born	24.9 (17.3–34.4)	0.0	†	†	†
Male Asian Born outside U.S.	7.7 (4.9–12.0)	†	18.4 (13.7–24.3)	10.0 (5.4–17.9)	19.0 (14.0–25.3)
Male Asian U.S.-born	8.2 (3.2–19.4)	1.5 (0.2–8.7)	10.4 (4.6–21.7)	15.3 (8.6–25.9)	16.4 (8.8–28.5)
Female White Born outside U.S.	27.6 (19.9–36.8)	†	†	17.0 (10.5–26.3)	†
Female White U.S.-born	21.7 (20.1–23.4)	1.3 (0.9-1.8)	7.1 (6.1–8.3)	17.1 (15.6–18.7)	6.7 (5.7–8.0)
Male White Born outside U.S.	†	†	25.4 (16.3–37.2)	†	†
Male White U.S.-born	4.6 (3.7–5.6)	5.9 (4.9–7.0)	16.2 (14.5–17.9)	8.8 (7.5–10.3)	7.5 (6.4–8.6)
U.S. Working Classed	14.6 (13.9–15.4)	3.9 (3.5–4.4)	11.0 (10.2–11.8)	12.0 (11.2–12.8)	6.6 (6.0–7.3)

[a]The top three industries/occupations with the highest frequencies for each intersectional grouping were included. †Estimate was not published due to small number of unweighted observations and/or had a high relative standard error.

	Occupationa					
Intersectional Grouping	Building and Grounds Cleaning and Maintenance % (95% CI)	Office and Administrative Support % (95% CI)	Construction and Extraction % (95% CI)	Healthcare support % (95% CI)	Transportation and Material Moving % (95% CI)	Computer and Mathematical % (95% CI)
Female Latine Born outside U.S.	16.1 (12.9–19.9)	11.3 (8.8–14.3)	†	7.5 (5.3–10.5)	5.6 (3.9–8.1)	†
Female Latine U.S.-born	4.2 (2.5–6.9)	26.6 (22.3-31.3)	†	4.9 (3.4–7.2)	2.0 (1.0–3.8)	†
Male Latine Born outside U.S.	10.4 (8.6–12.4)	4.1 (2.8–6.1)	21.9 (17.8–26.5)	†	13.1 (10.5–16.2)	†
Male Latine U.S.-born	†	12.9 (9.4–17.4)	9.8 (6.7–14.2)	†	10.6 (7.5–14.6)	†
Female Black Born outside U.S.	†	†	0.0	20.7 (13.6–30.1)	†	†
Female Black U.S.-born	4.5 (3.2–6.3)	23.2 (20.2–26.5)	†	7.4 (5.6–9.8)	3.9 (2.7–5.7)	†

(Continues)

TABLE 2 (Continued)

Intersectional Grouping	Occupationa					
	Building and Grounds Cleaning and Maintenance % (95% CI)	Office and Administrative Support % (95% CI)	Construction and Extraction % (95% CI)	Healthcare support % (95% CI)	Transportation and Material Moving % (95% CI)	Computer and Mathematical % (95% CI)
Male Black Born outside U.S.	†	†	†	†	†	†
Male Black U.S.-born	5.5 (3.7–8.2)	14.7 (11.6–18.5)	4.1 (2.5–6.6)	†	22.8 (18.8–27.3)	†
Female Asian Born outside U.S.	†	16.7 (12.3–22.3)	0.0	†	†	10.9 (6.8–16.9)
Female Asian U.S.-born	†	16.6 (10.5–25.3)	0.0	†	†	†
Male Asian Born outside U.S.	†	†	†	†	7.7 (5.1–11.5)	25.2 (18.5–33.2)
Male Asian U.S.-born	†	†	†	0.0	†	†
Female White Born outside U.S.	†	18.6 (12.3–27.2)	†	†	†	†
Female White U.S.-born	2.0 (1.5-2.7)	21.6 (20.0–23.3)	†	4.5 (3.6–5.6)	1.7 (1.2–2.2)	2.1 (1.6–2.7)
Male White Born outside U.S.	†	†	†	0.0	†	†
Male White U.S.-born	3.5 (2.8–4.3)	7.5 (6.3–8.8)	6.0 (5.1–7.0)	†	10.3 (8.9–11.8)	6.8 (5.7-8.2)
U.S. Working Classed	3.9 (3.5–4.3)	14.9 (14.2–15.7)	3.5 (3.2-4.0)	3.2 (2.8–3.6)	6.7 (6.1–7.3)	4.5 (4.0–5.0)

[a]The top three industries/occupations with the highest frequencies for each intersectional grouping were included. †Estimate was not published due to small number of unweighted observations and/or had a high relative standard error.

Intersectional Grouping	Citizenship	Education Level			
	Yes % (95% CI)	0–12 Grades % (95% CI)	12 Grades (High School Diploma) or GED Certificate % (95% CI)	Associate Degree or Some College % (95% CI)	≥4-Year College Degree % (95% CI)
Female Latine Born outside U.S.	46.5 (42.1–50.9)	37.3 (33.0–41.9)	24.6 (20.8–28.8)	22.1 (18.6–26.0)	16.0 (12.9–19.7)
Female Latine U.S.-born	100	8.4 (6.1–11.5)	25.8 (21.6–30.5)	40.2 (35.5–45.2)	25.5 (21.5–29.9)
Male Latine Born outside U.S.	35.0 (30.7–39.5)	46.1 (41.7–50.5)	27.9 (24.1–31.9)	14.8 (12.2–17.9)	11.3 (8.7–14.4)
Male Latine U.S.-born	100	14.1 (11.0–17.9)	28.9 (24.1–34.1)	36.7 (31.9–41.8)	20.3 (15.9–25.7)
Female Black Born outside U.S.	67.2 (57.6–75.5)	†	23.6 (17.2–31.5)	32.6 (24.1–42.4)	37.8 (29.4–47.0)
Female Black U.S.-born	100	8.6 (6.9–10.8)	21.8 (18.8–25.3)	40.0 (36.3–43.7)	29.5 (25.6–33.8)
Male Black Born outside U.S.	64.4 (53.7–73.8)	†	23.1 (16.2–31.8)	36.2 (27.7–45.6)	34.8 (26.5–44.2)
Male Black U.S.-born	100	10.0 (7.6–13.1)	32.8 (28.6–37.3)	37.9 (33.4–42.6)	19.3 (15.3–24.0)
Female Asian Born outside U.S.	63.1 (55.6–70.0)	†	12.6 (8.8–17.8)	22.0 (17.0–28.1)	59.7 (52.4–66.5)
Female Asian U.S.-born	100	†	†	31.6 (20.9–44.6)	57.2 (45.4–68.2)
Male Asian Born outside U.S.	52.8 (44.3-61.0)	7.5 (4.7-11.7)	10.4 (7.5–14.3)	14.2 (10.0–19.8)	67.9 (61.0–74.1)

TABLE 2 (Continued)

Intersectional Grouping	Citizenship	Education Level			
	Yes % (95% CI)	0–12 Grades % (95% CI)	12 Grades (High School Diploma) or GED Certificate % (95% CI)	Associate Degree or Some College % (95% CI)	≥4-Year College Degree % (95% CI)
Male Asian U.S.-born	100	†	†	28.3 (18.5–40.6)	60.1 (46.6–72.2)
Female White Born outside U.S.	81.7 (71.1–88.9)	†	†	32.4 (23.8–42.3)	57.1 (47.4–66.3)
Female White U.S.-born	100	3.5 (2.9–4.2)	18.2 (16.7–19.8)	35.8 (33.8–37.8)	42.5 (40.3–44.7)
Male White Born outside U.S.	66.1 (53.8–76.5)	†	21.8 (14.3–31.7)	18.6 (11.4–28.7)	59.3 (47.9–69.7)
Male White U.S.-born	100	5.4 (4.5–6.5)	22.6 (20.8–24.5)	36.8 (34.6–39.1)	35.2 (32.9–37.5)
U.S. Working Classed	91.9 (91.2–92.5)	8.6 (8.1–9.2)	21.3 (20.4–22.3)	34.1 (32.9–35.3)	36.0 (34.6–37.3)

†Estimate was not published due to a small number of unweighted observations and/or had a high relative standard error.

Intersectional Grouping	Multiple Jobs	Annual Income			
	Yes % (95% CI)	<$20,000 % (95% CI)	$20 K–$44,999 % (95% CI)	$45K–$64,999 % (95% CI)	≥$65 K % (95% CI)
Female Latine Born outside U.S.	3.8 (2.5–5.7)	53.6 (48.3–58.7)	36.6 (32.0–41.6)	4.8 (3.0-7.6)	†
Female Latine U.S.-born	7.8 (5.3–11.3)	37.2 (32.0–42.7)	41.6 (36.0–47.4)	12.0 (8.7–16.3)	9.2 (6.4–13.2)
Male Latine Born outside U.S.	5.2 (3.5–7.6)	32.0 (27.5–36.9)	52.3 (47.5–57.1)	9.2 (6.7–12.5)	6.5 (4.2–9.8)
Male Latine U.S.-born	8.2 (5.6–12.1)	28.3 (23.2–34.0)	42.6 (36.3–49.1)	13.9 (9.9–19.3)	15.2 (10.9–20.9)
Female Black Born outside U.S.	3.1 (1.2–7.9)	25.1 (17.7–34.2)	47.9 (35.8–60.2)	†	†
Female Black U.S.-born	10.6 (8.4–13.2)	35.8 (31.4–40.4)	41.8 (37.9–45.8)	13.6 (11.0–16.7)	8.9 (6.7–11.6)
Male Black Born outside U.S.	6.7 (3.0–14.4)	25.4 (16.3–37.1)	41.2 (31.4–51.8)	†	†
Male Black U.S.-born	9.7 (7.3–12.7)	30.6 (26.1–35.6)	39.3 (33.4–45.5)	19.5 (15.6–24.0)	10.6 (7.4–15.0)
Female Asian Born outside U.S.	6.1 (3.9–9.4)	22.6 (16.5–30.2)	38.0 (30.4–46.3)	19.1 (13.2–26.8)	20.2 (14.2–28.0)
Female Asian U.S.-born	12.7 (7.3–21.3)	†	38.6 (26.5–52.2)	16.3 (9.9–25.7)	25.2 (16.6–36.3)
Male Asian Born outside U.S.	6.5 (4.2–9.9)	18.4 (13.9–23.9)	30.8 (23.5–39.3)	12.0 (8.2–17.1)	38.9 (31.2–47.1)
Male Asian U.S.-born	4.3 (1.3–12.8)	†	†	†	40.1 (26.9–54.9)
Female White Born outside U.S.	9.1 (4.9–16.2)	23.9 (16.1-33.9)	45.1 (34.3–56.4)	†	†
Female White U.S.-born	9.3 (8.2–10.5)	28.9 (27.0–30.9)	38.2 (36.0–40.6)	17.5 (15.8–19.4)	15.4 (13.7–17.2)
Male White Born outside U.S.	4.6 (1.9–10.8)	†	25.6 (16.9–36.8)	†	46.8 (36.4–57.4)
Male White U.S.-born	8.6 (7.5–9.9)	18.3 (16.4–20.4)	33.4 (31.0–35.8)	20.6 (18.7–22.6)	27.7 (25.5–30.1)
U.S. Working Classed	8.4 (7.8–9.1)	26.7 (25.5–27.8)	37.7 (36.4–39.0)	16.9 (16.0–17.9)	18.7 (17.7–19.8)

†Estimate was not published due to a small number of unweighted observations and/or had a high relative standard error.

Intersectional Grouping	Family Income to Poverty Threshold Ratio			
	<100% of Poverty % (95% CI)	100–199% of Poverty % (95% CI)	200–399% of Poverty % (95% CI)	≥400% of Poverty % (95% CI)
Female Latine born outside U.S.	26.1 (22.4–30.2)	32.8 (28.6–37.3)	24.8 (21.1–29.0)	16.3 (12.7–20.6)
Female Latine U.S.-born	17.5 (13.8–22.0)	24.8 (20.3–30.0)	32.9 (28.2–38.1)	24.7 (20.3–29.8)
Male Latine born outside U.S.	20.3 (17.4–23.7)	36.9 (32.9–41.1)	32.7 (28.6–37.2)	10.0 (7.4–13.3)
Male Latine U.S.-born	12.2 (9.3–15.9)	20.3 (16.0–25.4)	37.2 (31.4–43.5)	30.3 (24.7–36.5)
Female Black Born outside U.S.	18.2 (11.1–28.4)	25.7 (17.6–35.9)	33.2 (24.8–42.7)	22.9 (15.0–33.4)
Female Black U.S.-born	20.6 (17.2–24.4)	25.8 (22.5–29.4)	31.5 (27.8–35.4)	22.1 (18.9–25.6)

(Continues)

TABLE 2 (Continued)

Intersectional Grouping	Family Income to Poverty Threshold Ratio			
	<100% of Poverty % (95% CI)	100–199% of Poverty % (95% CI)	200–399% of Poverty % (95% CI)	≥400% of Poverty % (95% CI)
Male Black Born outside U.S.	†	25.9 (18.2–35.6)	35.2 (26.8–44.6)	24.4 (16.8–34.1)
Male Black U.S.-born	12.6 (9.6–16.2)	21.4 (17.4–26.1)	34.4 (30.0–39.0)	31.7 (26.7–37.2)
Female Asian born outside U.S.	9.0 (5.2–15.0)	11.8 (8.1–16.9)	31.3 (24.8–38.5)	48.0 (41.1–55.0)
Female Asian U.S.-born	†	†	27.9 (16.7–42.7)	47.2 (36.2–58.4)
Male Asian born outside U.S.	9.6 (6.6–13.6)	17.0 (12.9–22.0)	27.7 (22.0-34.1)	45.8 (38.1-53.7)
Male Asian U.S.-born	†	†	26.8 (16.7-40.0)	59.6 (46.2-71.6)
Female White born outside U.S.	†	18.9 (12.0–28.6)	39.1 (29.4–49.7)	36.5 (27.2–47.0)
Female White U.S.-born	8.3 (7.2–9.5)	14.9 (13.5–16.5)	30.6 (28.7–32.5)	46.3 (44.0–48.6)
Male White Born outside U.S.	†	†	22.2 (14.0-33.3)	61.9 (49.5-72.9)
Male White U.S.-born	6.5 (5.1–8.1)	12.8 (11.2–14.6)	32.2 (29.9–34.8)	48.4 (45.9–50.9)
U.S. Working Classed	10.7 (9.9–11.6)	17.7 (16.7–18.6)	31.4 (30.3–32.6)	40.2 (38.8–41.5)

†Estimate was not published due to a small number of unweighted observations and/or had a high relative standard error.

3.3.2 | Working conditions

Low job demands in the past 12 months were reported by the majority of the total sample (88.2%) and the majority of each intersectional grouping (range = 81.5% – 97.7%). No workplace harassment in the past 12 months was reported by the majority of the total sample (92.9%) and by the majority of the intersectional groupings (range = 86.0% – 98.6%). Workplace safety was reported as very safe by 60.0% of the total sample and by 13 of the intersectional groupings (range = 50.7% – 66.7%). The exceptions were for three groupings who reported the workplace as less safe: male Latine born-outside-U.S. (59.9%), male Black born-outside-U.S. (54.6%), and female Latine born-outside-U.S. (53.2%) groupings. The male Black U.S.-born grouping had split results (very safe = 50.7%, less safe = 49.3%). See Table 4.

For job-related physical exertion, the total sample (40.2%) and eight intersectional groupings (range = 34.5%–60.4%) frequently reported their jobs as often or always involving repeated lifting, pushing, pulling, or bending. Sometimes or seldom involvement was most often reported by the male white born-outside-U.S. (38.1%), female white U.S.-born (37.9%), male Asian U.S.-born (36.7%), and the female Latine U.S.-born (35.9%) groupings. The female Asian born-outside-U.S. (46.2%) and U.S.-born (34.2%), the female white born-outside-U.S. (44.8%), and the male Asian born-outside-U.S. (39.9%) were the only groupings that frequently reported their jobs as never involving such physical exertion.

3.4 | Nonwork conditions

Access to healthcare was reported by > 83% of the total sample; > 57% of responses for each intersectional grouping also indicated frequently having this access. Food insecurity was reported as never experienced by the majority of the total sample (87.4%) and each of the groupings (> 73% across grouping). As for home ownership and housing affordability concerns, there were variations between groupings. Home ownership was frequently reported by 55.9% of the total sample and by the female white U.S.-born (64.9%) and born-outside-U.S. (61.0%), male white U.S.-born (63.3%), female Asian born-outside-U.S. (56.1%) and U.S.-born (50.8%), and male Asian U.S.-born (51.1%) groupings. The majority of the groupings reported not owning their home: female Black born-outside-U.S. (72.5%) and U.S.-born (63.6%), male Black born-outside-U.S. (69.3%) and U.S.-born (59.0%), male Latine born-outside-U.S. (67.5%) and U.S.-born (52.4%), female Latine born-outside U.S. (60.1%) and U.S.-born (51.1%), and male Asian born-outside-U.S. (55.7%) groupings. The male white born-outside-U.S. (50.0%) grouping had split results. See Table 5.

For concerns about being able to afford housing costs, 77.0% of the total sample and the majority of the groupings (range = 56%–89.2%) most often reported not too or at all worried about being able to afford housing costs. The majority of the male Black born-outside-U.S. grouping marginally reported being not too or at all worried (50.4%). The notable exception was for the female Latine born-outside-U.S. grouping who frequently reported being moderately or very worried (53.1%).

4 | DISCUSSION

This study describes the health status, work conditions, and nonwork conditions for the U.S. working classed (non-ownership, non-supervisory positions) by total sample and by intersectional groupings. The intersectional analysis revealed divisions in work and

TABLE 3 Population Percentages of Health Status and Employment Conditions by Intersectional Groupings and U.S. Working Classed.

Intersectional Grouping	General Health Very Good or Excellent % (95% CI)	Psychosocial Health *(Population Mean)* *M* (95% CI)	Work Arrangement Standard % (95% CI)	Work Schedule Regular Daytime Schedule % (95% CI)
Female Latine born outside U.S.	52.6 (48.4–56.8)	21.5 (21.2–21.8)	84.1 (80.1–87.4)	81.1 (77.5–84.3)
Female Latine U.S.-born	61.7 (56.9–66.2)	21.2 (20.8–21.6)	90.0 (85.5–93.2)	76.2 (72.1–79.9)
Male Latine born outside U.S.	61.6 (57.6–65.5)	22.5 (22.3–22.7)	79.4 (76.0–82.5)	72.8 (68.8–76.4)
Male Latine U.S.-born	66.9 (61.6–71.8)	21.7 (21.3–22.2)	88.2 (84.2–91.3)	65.4 (59.7–70.7)
Female Black born outside U.S.	70.1 (61.0–77.8)	21.3 (20.4–22.2)	91.9 (85.5–95.6)	72.1 (63.6–79.3)
Female Black U.S.-born	58.7 (55.0–62.3)	21.4 (21.1–21.6)	90.0 (87.5–92.0)	72.9 (68.9–76.5)
Male Black born outside U.S.	73.7 (65.9–80.3)	22.2 (21.6–22.8)	79.0 (70.9–85.2)	62.9 (54.7–70.5)
Male Black U.S.-born	62.9 (58.2–67.4)	22.0 (21.7–22.3)	85.4 (81.9–88.3)	61.1 (56.1–65.9)
Female Asian born outside U.S.	75.0 (69.1–80.2)	22.1 (21.7–22.5)	84.3 (77.5–89.3)	78.3 (72.3-83.2)
Female Asian U.S.-born	71.5 (59.0–81.4)	21.7 (21.1–22.3)	87.0 (77.0–93.1)	77.8 (64.6–87.0)
Male Asian born outside U.S.	71.8 (65.7–77.2)	22.2 (21.8–22.6)	88.7 (83.8–92.2)	79.7 (73.9–84.5)
Male Asian U.S.-born	73.9 (60.9–83.8)	22.2 (21.5–22.9)	93.0 (85.0–96.9)	70.2 (58.9–79.6)
Female White born outside U.S.	70.8 (61.4–78.7)	21.5 (20.8–22.3)	79.1 (67.6–87.2)	79.4 (70.7–86.1)
Female White U.S.-born	71.4 (69.6–73.1)	21.3 (21.1–21.4)	89.4 (88.0–90.7)	77.7 (75.8–79.6)
Male White born outside U.S.	68.1 (57.3–77.3)	22.4 (22.0–22.8)	88.4 (80.0–93.6)	75.1 (63.8–83.8)
Male White U.S.-born	69.4 (67.4–71.4)	22.0 (21.8–22.1)	87.2 (85.6–88.7)	73.0 (70.9–74.9)
U.S. Working Classed	67.8 (66.7–68.9)	21.7 (21.6–21.7)	87.6 (86.8–88.4)	74.4 (73.3–75.5)

Intersectional Grouping	Job Insecurity Yes % (95% CI)	Paid Sick Leave Yes % (95% CI)	Health Insurance Yes % (95% CI)
Female Latine born outside U.S.	18.7 (15.4–22.5)	39.7 (35.3–44.3)	50.2 (45.5–54.9)
Female Latine U.S.-born	9.7 (7.0–13.2)	58.2 (52.9–63.2)	61.7 (56.5–66.6)
Male Latine born outside U.S.	20.9 (17.7–24.5)	38.4 (34.3–42.6)	44.8 (40.2–49.5)
Male Latine U.S.-born	12.1 (8.7–16.6)	50.7 (44.5–56.9)	67.0 (60.9–72.7)
Female Black born outside U.S.	14.9 (9.9–21.8)	57.0 (48.3–65.4)	66.4 (56.6–74.9)
Female Black U.S.-born	9.5 (7.4–12.0)	59.6 (55.4–63.7)	68.4 (64.6–71.9)
Male Black born outside U.S.	15.7 (10.1–23.5)	50.8 (40.1–61.5)	63.7 (51.7–74.3)
Male Black U.S.-born	9.5 (6.9–13.0)	55.6 (50.5–60.6)	68.6 (63.8–73.1)
Female Asian born outside U.S.	15.8 (11.3–21.7)	60.4 (52.8–67.7)	65.6 (58.4–72.2)
Female Asian U.S.-born	10.9 (5.8–19.5)	70.1 (58.8–79.5)	77.9 (68.0–85.4)
Male Asian born outside U.S.	19.1 (14.6–24.6)	63.6 (56.4–70.3)	75.3 (69.3–80.4)
Male Asian U.S.-born	5.2 (1.7–14.9)	77.1 (63.2–86.8)	78.8 (68.2–86.6)
Female White born outside U.S.	18.3 (12.2–26.7)	56.9 (46.8–66.4)	67.5 (58.1–75.8)
Female White U.S.-born	10.7 (9.4–12.2)	60.7 (58.5–62.8)	67.1 (65.1–69.0)
Male White born outside U.S.	20.3 (12.0–32.1)	70.9 (59.7–80.1)	73.0 (63.4–80.8)
Male White U.S.-born	10.2 (8.9–11.7)	59.4 (56.9–61.8)	73.0 (70.9–75.1)
U.S. Working Classed	11.7 (10.9–12.6)	58.0 (56.6–59.3)	67.5 (66.3–68.6)

TABLE 4 Population Percentages of Working Conditions by Intersectional Groupings and U.S. Working Classed.

Intersectional Grouping	Low Job Demands Agree or Strongly Agree % (95% CI)	Workplace Safety Very Safe % (95% CI)	Workplace Harassment No % (95% CI)	Physical Exertion Often or Always % (95% CI)	Sometimes or Seldom % (95% CI)	Never % (95% CI)
Female Latine born outside U.S.	90.2 (87.4–92.5)	46.8 (42.4–51.3)	93.9 (91.0–95.9)	40.9 (36.5–45.5)	35.6 (31.4–40.1)	23.5 (19.9–27.6)
Female Latine U.S.-born	87.2 (83.6–90.1)	59.7 (54.7–64.4)	94.0 (91.2–95.9)	34.1 (29.7–38.8)	35.9 (31.6–40.4)	30.0 (25.7–34.8)
Male Latine born outside U.S.	87.9 (84.7–90.5)	40.1 (35.8–44.6)	96.1 (94.0–97.5)	60.4 (56.4–64.3)	26.6 (23.4–30.1)	13.0 (10.3–16.2)
Male Latine U.S.-born	90.0 (86.0–92.9)	51.9 (46.4–57.3)	94.3 (91.4–96.2)	52.2 (47.4–57.0)	33.3 (28.6–38.3)	14.5 (11.2–18.4)
Female Black born outside U.S.	85.0 (76.7–90.6)	52.9 (42.6–63.1)	94.3 (87.0–97.6)	34.5 (26.2–43.7)	34.4 (25.0–45.2)	31.1 (21.7–42.4)
Female Black U.S.-born	86.1 (83.2–88.5)	53.4 (49.7–56.9)	93.9 (91.7–95.5)	38.5 (34.9–42.3)	34.5 (31.3–37.8)	27.0 (23.8–30.6)
Male Black born outside U.S.	95.3 (89.2–98.0)	45.4 (35.9–55.3)	92.1 (85.3–95.9)	51.4 (41.8–60.8)	32.8 (23.7–43.3)	15.9 (9.9–24.5)
Male Black U.S.-born	90.1 (86.3–92.9)	50.7 (45.5–55.8)	93.2 (90.4–95.2)	54.5 (49.7–59.2)	28.1 (23.7–33.1)	17.4 (14.0–21.4)
Female Asian born outside U.S.	92.7 (87.5–95.8)	64.9 (57.7–71.5)	95.8 (92.0–97.8)	19.9 (15.2–25.6)	34.0 (27.7–40.8)	46.2 (39.0–53.4)
Female Asian U.S.-born	81.5 (72.4–88.1)	57.1 (45.7–67.8)	86.0 (75.5–92.4)	32.0 (22.0-43.9)	33.8 (24.0–45.4)	34.2 (25.0–44.8)
Male Asian born outside U.S.	94.0 (90.4–96.4)	66.5 (60.3–72.2)	98.6 (96.4–99.4)	23.5 (17.9–30.2)	36.6 (30.8–42.9)	39.9 (34.2–45.9)
Male Asian U.S.-born	97.7 (94.7–99.0)	64.3 (52.4–74.6)	95.8 (84.2–99.0)	28.3 (19.2–39.5)	36.7 (24.9–50.3)	35.0 (23.7–48.4)
Female White born outside U.S.	85.1 (76.3–91.0)	66.7 (56.8–75.3)	94.9 (87.9–97.9)	28.6 (19.8–39.3)	26.6 (18.5–36.6)	44.8 (34.6–55.5)
Female White U.S.-born	85.4 (83.8–86.9)	65.9 (63.8–67.9)	90.7 (89.4–91.8)	33.7 (31.7–35.9)	37.9 (36.0–39.8)	28.4 (26.5–30.4)
Male White born outside U.S.	90.5 (80.4–95.7)	66.5 (53.9–77.2)	92.1 (83.9–96.3)	25.0 (16.1–36.8)	38.1 (27.8–49.6)	36.9 (27.1–47.8)
Male White U.S.-born	90.6 (89.2–91.9)	61.4 (59.2–63.7)	93.6 (92.5–94.7)	46.0 (43.5–48.5)	32.4 (30.0–34.8)	21.6 (19.8–23.6)
U.S. Working Classed	88.2 (87.3–89.0)	60.0 (58.7–61.3)	92.9 (92.3–93.5)	40.2 (30.9–41.5)	34.5 (33.3–35.6)	25.3 (24.3–26.4)

TABLE 5 Population Percentages of Nonwork Conditions by Intersectional Groupings and U.S. Working Classed.

Intersectional Grouping	Healthcare Access Yes % (95% CI)	Home Ownership Not Own % (95% CI)	Housing Affordability Moderately or Very Worried % (95% CI)	Not Too or At All Worried % (95% CI)	Food Insecurity Never True % (95% CI)
Female Latine born outside U.S.	82.4 (78.6–85.6)	60.1 (55.7–64.4)	53.1 (48.8–57.3)	46.9 (42.7–51.2)	76.4 (72.4–80.0)
Female Latine U.S.-born	83.9 (79.8–87.3)	51.1 (46.0–56.2)	28.8 (24.7–33.3)	71.2 (66.7–75.3)	80.0 (76.1–83.5)
Male Latine born outside U.S.	57.6 (53.4–61.7)	67.5 (53.2–71.4)	43.7 (39.6–47.9)	56.3 (52.1–60.4)	75.3 (71.5–78.7)
Male Latine U.S.-born	71.5 (66.4–76.1)	52.4 (46.5–58.3)	23.8 (19.1–29.2)	76.2 (70.8–80.9)	83.4 (79.0–87.0)
Female Black born outside U.S.	87.5 (80.2–92.4)	72.5 (60.8–81.7)	43.2 (34.4–52.4)	56.8 (47.6–65.6)	73.9 (63.3–82.3)
Female Black U.S.-born	90.8 (88.0–93.0)	63.6 (59.3–67.6)	31.2 (27.4–35.2)	68.8 (64.8–72.6)	76.6 (73.1–79.7)
Male Black born outside U.S.	79.0 (71.2–85.2)	69.3 (60.0–77.2)	49.6 (39.9–59.4)	50.4 (40.6–60.1)	80.2 (70.9–87.1)
Male Black U.S.-born	78.2 (73.7–82.2)	59.0 (53.8–63.9)	25.7 (21.6–30.2)	74.3 (69.8–78.4)	80.1 (75.9–83.8)
Female Asian born outside U.S.	89.0 (83.3–93.0)	43.9 (37.0–51.0)	26.0 (20.3–32.5)	74.0 (67.5–79.7)	93.5 (89.0–96.2)
Female Asian U.S.-born	81.0 (67.4–89.8)	49.2 (37.5–60.9)	†	81.4 (71.7–88.3)	90.3 (80.7–95.4)
Male Asian born outside U.S.	79.4 (73.9–84.1)	55.7 (48.1–63.1)	25.9 (20.1–32.7)	74.1 (67.3-79.9)	93.4 (89.6–95.9)
Male Asian U.S.-born	81.2 (69.6–89.0)	48.9 (34.8–63.2)	†	89.2 (80.3–94.4)	97.1 (85.7–99.5)
Female White born outside U.S.	90.0 (82.1–94.6)	39.0 (29.9–48.9)	34.8 (25.6–45.3)	65.2 (54.7–74.4)	90.8 (83.3–95.1)
Female White U.S.-born	90.1 (88.8–91.3)	35.1 (32.7–37.6)	20.2 (18.4–22.0)	79.8 (78.0–81.6)	89.8 (88.5–91.0)
Male White born outside U.S.	71.9 (61.0–80.8)	50.0 (38.2–61.8)	†	79.6 (66.4–88.5)	93.8 (85.2–97.5)
Male White U.S.-born	80.6 (78.7–82.4)	36.7 (34.1–39.4)	14.0 (12.5–15.7)	86.0 (84.3–87.5)	92.2 (90.9–93.2)
U.S. Working Classed	83.5 (82.5–84.4)	44.1 (42.6–45.7)	23.0 (21.9–24.1)	77.0 (75.9–78.1)	87.4 (86.6–88.1)

†Estimate was not published due to small number of unweighted observations and/or had a high relative standard error.

nonwork conditions across class, sex, racialized, and nativity groupings that were not seen in the total sample analysis. These results may suggest that workers, based on their social identities, are systemically positioned into inequitable conditions. Similar to prior findings, this study may suggest the persistence of systemic sexism,[40–44] racism,[45,46] and nativism[47–50] in shaping work and nonwork conditions for the U.S. working classed.

There is a general divide in where people find employment between sexes across racialized and nativity groups. Female groupings across racialized and nativity groups (e.g., Latine, Black, and Asian women born outside the U.S. and in the U.S.) most often reported employment in the service or care industry and in office and administrative support occupations. This pattern may suggest how sexism segregates access to employment opportunities. Service or care work has historically been stereotyped as "women's work" and societally and monetarily devalued due to the undervaluing of the worker (i.e., women) and of the skills involved as compared to the valuing of men and men's labor.[51] Historically, this conceptualization of labor and work has manifested in "protective" (or rather exclusionary) labor legislations that had in some ways protected women from inequitable working conditions in factories in the late 1800s to early 1900s. However, such labor legislations also reinforced the segregation of women from male-dominated occupations that paid higher wages.[52] Even with the Fair Labor Standards Act of 1938 that was to improve employment quality irrespective of sex, sex-specific labor laws were not prohibited. For immigrant women of color, these protections in employment and working conditions rarely applied.[52] Even now, across the intersections of sex, race, and nativity, women of color are especially more likely to be employed in the lowest-paid positions of care work,[51] which reinforces these gender, racial, nativity, and class disparities between those who receive care and those who provide labor.

Additionally, the findings of this study seem to suggest that the division of labor and work may be mutually gendered,

racialized, and shaped by nativism. The female Latine and Black groupings across nativity most frequently reported employment in the healthcare and social assistance industry. However, the born-outside-U.S. workers within these groupings most often reported occupations described by physically and mentally demanding work compared to their U.S.-born counterparts and female white groupings across nativity. Across sexes and racialized groups, workers born outside the U.S. encounter less favorable work conditions (e.g., wages, interpersonal treatment, benefits, physically-demanding work).[53,54] Prior studies have reported employers actively selecting and favoring born-outside-U.S. workers to U.S.-born workers based on their vulnerability, or rather, exploitability in the workplace.[47–50] Systems and structures (e.g., labor laws, immigration policies) enable employers to restructure work and working conditions in such ways that only "the most subordinated workers would accept,"[47 (p282)] positions commonly ascribed to workers born outside the U.S. Work segregation by nativity, as seen between the born-outside-U.S. and U.S.-born groupings across sexes and races in this study, may reflect how unjust employment practices for nativity-vulnerable workers are perpetuated in the U.S. system.

For working conditions, there were differences between racialized groupings across sex and nativity groups. The majority of the Latine and Black racialized groups frequently reported their job as often or always involving physical exertion. This finding is likely explained by their employment in physically laborious occupations (e.g., construction and extraction, transportation and material moving). Because of systemic racism, workers of color have been historically relegated to "the worst jobs,"[45] such as low-paying jobs with dirty and dangerous work conditions.[45,46] The frequent experience of certain occupational hazards such as physical exertion and common employment in physically laborious occupations among Latine and Black racialized groups may be indicative of the impacts of racism on occupational segregation.

Further, racialized experiences across sex and nativity groups also manifested in nonwork conditions. The Latine and Black racialized groupings across sexes and nativity (i.e., Latine and Black born-outside-U.S. and U.S.-born women and men) often reported not owning their homes. This finding is consistent with the research literature that has described Latine and Black racialized individuals as less likely to own homes compared to white individuals. Common reasons were greater difficulty first obtaining conventional mortgages, and second, if approved, paying higher interest rates compared to white and Asian racialized people.[55]

In this study, overall, workers with female, Latine, and born-outside-U.S. identities were positioned in more precarious conditions than across other identity intersections. The majority of the female Latine born-outside-U.S. grouping most often reported not having citizenship and having lower educational attainment (0-12 grades completed). These results likely contribute to their reported experiences of more precarious work and nonwork conditions (e.g., most often reporting not having paid sick leave, having less safe workplaces, having jobs often or always involving physical exertion, not owning their home, and being moderately or very worried about being able to afford housing costs) as citizenship and education offers opportunities to more resources and advantageous conditions.[56] These results may be in part explained by immigration and the process of citizenship, which are not race neutral. Racism and nativism inform restrictive immigration policies (e.g., Johnson-Reed Act), immigrant policies (e.g., Immigration Reform and Control Act; 1996 Personal Responsibility and Work Opportunity Reconciliation Act), and legislative procedures in the process for obtaining visas and citizenship.[54,56–58] Encompassing citizenship, legal status is racialized such that "legal status [is] a racialized *identity*."[56 (p1097)] This racialized identity breeds anti-immigrant hostility and xenophobia and homogenizes Latine irrespective of nativity as "illegal," the ramifications of which contribute to less advantageous conditions.[56,59]

Meanwhile, in this study, workers with Asian racialized identities across sexes and nativity were positioned in more advantageous conditions than other systemically minoritized racial groupings across sexes and nativity. For instance, the majority of the female Asian groupings across nativity reported having citizenship and higher educational attainment (4-year college degrees or higher). These results likely contribute to their reported experiences of more advantageous work and nonwork conditions (e.g., majority reported having paid sick leave and health insurance, very safe workplaces, less physically laborious occupations, owning their home, and not too or at all worried about being able to afford housing costs). This finding is consistent with national statistics based on 2010 estimates showing that compared to the general public, Asian Americans had higher median household incomes, higher levels of educational attainment, and higher achievement in employment,[60] which may offer more access to resources to, at, and outside of work. The advantageous positionality of people with Asian racialized identities has often been explained by theses such as the immigrant health paradox and model minority stereotypes/theses.[61–65] Historically, Asian racialized people were widely dehumanized and exploited for their labor in the U.S. After World War II and in the mid 1960s, however, they became elevated as the "model minority" due to their "ethnic assimilability,"[64] which contributes to their proximity to whiteness.[66] This proximity to whiteness offers white advantage or systemic privilege such that, for instance, "[regarding occupation] the cost of being female has declined over time and the white advantage has increased."[43] As a result of systemic racism and nativism, the social position of Asian intersectional groupings across sexes suggests access to less precarious conditions of work and nonwork.

This study offers another perspective and intersectional approach to understanding systemically minoritized workers' work and health in an integrated way. These findings suggest that analyzing conditions by social identities independently reifies the faulty notion of a hierarchy of oppressions, or the valuing of one oppression as greater than another, such as the impact of racism trumping that of the impacts of sexism and nativism. Rather, identities and the systems

of oppression that shape conditions need to be conceptualized as intertwined and co-constituting the human work and nonwork experience. This perspective is suggested by the data about the female Latine born-outside-U.S. grouping related to how racism interacts and is informed by sexism and nativism and vice versa. The intersectional approach helps to describe social identity trends in worker positions in multiple, simultaneously oppressive work and nonwork conditions, which is overlooked when not investigating the intersections.

4.1 | Research innovation

To date, no known prior studies describe work and nonwork conditions using an intersectional analysis. A few studies examine health outcomes across class, gender, and racial identities; most focus on class and gender *or* class and race distinctions,[67–69] Eisenberg-Guyot, Prins, and Muntaner,[68] however, offered a study which analyzed between class distinctions. For example, part of Eisenberg-Guyot, Prins, and Muntaner's interclass study included an *intra*class analysis of the working-classed and examined "quality of worklife"[68] variables (encompassing employment and working conditions) at the class and gender intersections (i.e., female, male), and racial identity (i.e., Black/Hispanic/Latinx and non-Hispanic white). Limited studies from the U.S.-based relational class literature have explicitly based social class indicators on mechanisms of employment and work to explain socioeconomic inequalities and their potential health effects.[70] Socioeconomic class analysis of nonwork conditions, however, have largely been understudied despite the known interplay between work and nonwork environments.[71,72] This study adds to the scant U.S.-based relational class and OHS literature by also including an intraclass analysis. It extends knowledge of work *and* nonwork conditions reported by female and male Latine, Black, Asian, and white born-outside-U.S. and U.S.-born workers of the U.S. working classed.

4.2 | Strengths and limitations

There were four main strengths. First, the survey included a large number and variety of variables, including those specific to the work environment. The large number offered alternative options for choosing items that similarly measured the same concepts. Second, the nationally representative sample of the original survey enabled interpretation of group experiences and provided generalizable data for the adult, civilian, and noninstitutionalized U.S. working classed. Third, the complexity of disparities and inequities requires multiple viewpoints through qualitative and quantitative analyses, of which the latter is offered through this study. This large quantitative data set enabled applying an intersectional analysis. Framing quantitative methods with an intersectional analysis disrupts "white logic and white methods"[73] and advances how we monitor progress towards health equity. Finally, applying this intersectional analysis facilitates the analysis of power, a concept pivotal to advancing worker health equity as "the well-being of people is determined by power,"[74 (p231)] by repositioning the level of analysis from individual attributes, preferences, and cultural differences to the conditions and the systems of power shaping such conditions in which workers are embedded.

There were a few study limitations with using existing national survey data, which had a different orientation and research purpose. First, there were missing desired items (e.g., membership in labor union, measure of income sufficiency) as well as high rates of missingness for certain items (e.g., access to primary care services, marital status) that restricted measures of work and nonwork conditions and relevant sample characteristics. Since the survey included a large number and variety of variables, we were able to identify alternative options to mitigate the limitation to some extent. For example, instead of measuring access to primary care services, which can reduce health inequalities,[75] assessing if respondents had a place to go when sick or needing advice about their health was identified as a measure of healthcare access. Additionally, with a self-reported survey design, there is the potential for response bias and differences in interpretations by the respondents of the questions asked. Third, the broad racial categories disguised various ethnic and multiethnic differences, thereby, masking disparate exposures to inequitable conditions. This limitation was particularly evident for the Asian intersectional groupings; Asian people are often overgeneralized as having similar work concerns. Yet, the roots of the 22 million Asian racialized group in the U.S. can be traced to more than 20 unique countries across East Asia, Southeast Asia, and the Indian subcontinent, each with distinct languages, histories, and culture, for instance.[76] The work and nonwork environments differ substantially by ethnicity and ancestry, such as differential occupational employments and risks for workplace hazards.[77,78] For example, a study by Siordia and Galley[78] found that amongst Asian racialized workers, those with Filipino ancestry had higher engagement in high-risk occupations. Fourth, the national data set from which this study data was drawn contained only quantitative data. Qualitative data would have enriched the inferences of the findings. Lastly, due to small cell sizes and associated high relative standard errors, estimates were not published (most evident for demographic data, i.e., industries and occupations). However, the variables assessing work and nonwork conditions with the highest frequency of responses were reportable and supports the interpretations made.

4.3 | Research implications for occupational health and safety

As remarked by Asada, Whipp, Kindig, Billard and Rudolph, "no single group characteristic or health outcome represents the whole picture of inequalities."[79] Intersectional analyses made visible precarious and less precarious work and nonwork conditions, which would have otherwise been missed. As the nature of work and workforce characteristics change in the U.S. and globally,[80,81] a quantitative intersectional analysis coupled with qualitative methods across different

time periods may show how systems of power change with societal changes. Moreover, to better capture worker health disparities, research questions should extend beyond work factors to include nonwork factors and the associated social conditions that shape nonwork conditions. Lastly, expanded data (e.g., what measurements are used) and greater inclusion of more diverse research participants (e.g., extending beyond the binary categories of sex and monolithic racialized categories) are also needed. Discussion of findings must include the nonwork environment and the associated social conditions that shape nonwork conditions.

5 | CONCLUSION

This study described data across class, sex, racial, and nativity intersectional groups to contribute to occupational health equity research. Complex findings were noted across intersectional identity groupings among the U.S. working classed. The health status and work and nonwork precarity of the U.S. working classed may be informed by power dynamics across class, sex, racial, and nativity identities. The results also seem to suggest that privilege and oppression associated with social identities are not stagnant. Depending on the social identities of the workers and the environment in which they reside, workers are more or less oppressed (or more or less privileged). In addition to advancing health equity to identify which workers are involved, as was done in this study, it is important to research how those workers are experiencing the precarity of work and nonwork conditions. This study supports future quantitative and qualitative research about diverse worker populations who have less social power and yet are a critical workforce in and for society.

AUTHOR CONTRIBUTIONS

Dr. Eunice Soh conceived of this work and was involved in the design of this work and the acquisition, analysis, and interpretation of the data, the drafting of the work, and revising it critically for important intellectual content. Dr. Jenny Tsai was involved in the design of this work and the acquisition, analysis, and interpretation of the data, the drafting of the work, and revising it critically for important intellectual content. Dr. Doris Boutain was involved in the design of this work and the acquisition, analysis, and interpretation of the data, the drafting of the work, and revising it critically for important intellectual content. Dr. Kenneth Pike was involved in the acquisition, analysis, and interpretation of the data, the drafting of the work, and revising it critically for important intellectual content. All authors gave final approval of the version to be published and agreed to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.

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CONFLICTS OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DISCLOSURE BY AJIM EDITOR OF RECORD

Jian Li declares that he has no conflict of interest in the review and publication decision regarding this article.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available in the National Center for Health Statistics at https://www.cdc.gov/nchs/nhis/index.htm. These data were derived from the following resources available in the public domain: -NHIS 2015, https://www.cdc.gov/nchs/nhis/nhis_2015_data_release.htm.

INSTITUTION AND ETHICS APPROVAL AND INFORMED CONSENT

Neither an IRB review nor an exempt determination was required for the protection of human participants because a publicly available data set that did not contain any individual identifiers was used.

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