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The legacy of immigration policies and employment exclusion: Assessing the relationship between employment exclusions and immigrant health

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ABSTRACT

Restrictive federal and state immigration policies create conditions of employment exclusion that may negatively influence the health of immigrants. In particular, these policy effects are reflected in labor market and workplace experiences that determine the types of work and employment opportunities that immigrants are able to access and pursue. This study examines the relationship between both cumulative and individual measures of employment exclusion and self-rated health and psychological distress among Asian and Latino immigrants in California, and whether this relationship is modified by legal status. We used data from the Research on Immigrant Health and State Policy (RIGHTS) study (n = 2010). We used both multivariable logistic regression and linear regression models for our analyses. For cumulative models, *labor market exclusion* was associated with poor health (OR = 1.21, 95% CI: 1.01, 1.46). *Workplace exclusion* was also associated with poor self-rated health (OR = 1.45, 95% CI: 1.15, 1.82) and increased psychological distress (β = 0.69, 95% CI: 0.31, 1.07). For individual measures of employment exclusion, settling for a job – a labor market exclusion – and working in a dangerous job and experiencing wage theft – workplace exclusions – were associated with poor health and increased psychological distress. There was no evidence that the association between employment exclusions and health varied by legal status. These findings demonstrate that the combined effect of employment exclusions is detrimental to immigrant health. To improve population health, public health researchers should continue to interrogate the policy conditions at the federal, state, and local level that exclude immigrants from employment opportunities and workplace protections.

1. Introduction

Work and employment are structural determinants of immigrant health that stem from interconnected policies (Sorensen et al., 2021; Wipfli et al., 2021). The immigration policies that the United States enacts influence immigrants' patterns of labor and employment, which are reflected in the many forms of precarity and exclusion faced by immigrants in the labor market and workplace (Gomberg-Munoz & Nussbaum-Barberena, 2011). Historically, immigration policies determined access to employment by granting authorization to work and influencing the type of jobs available to immigrants (e.g., farmwork, domestic work, construction) (Donato & Amuedo-Dorantes, 2020). Often, this included precarious jobs with limited workplace protections (Costa, 2020; Hall & Greenman, 2015). This continues to be observed today as occupational trajectories, labor practices, and work conditions reflect the policies in place. In particular, restrictive immigration policies create employment exclusions by explicitly barring immigrants from employment and work opportunities (e.g., work authorization) and limiting their workplace protections (e.g., safety protections) (Nakphong et al., 2022). This paper examines the health consequences associated with experiences of employment exclusion among California immigrants that are influenced by policies that constitute the US immigration system.

1.1. The intersection of immigration and labor policy

Immigration policies are intimately linked to the labor market. From both a historical and contemporary perspective, immigration has

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consistently been used as a tool to respond to labor market needs with immigrants serving as labor supply (Donato & Amuedo-Dorantes, 2020; Ngai, 2014). One of the many purposes of immigration policymaking has been to function as a lever to control the flow of migration into the US for economic reasons (Roediger & Esch, 2012). Entry into the labor market is one of many ways that immigrants integrate into society, but more importantly, it creates ways in which immigrants are able to thrive economically to support themselves and their families. Historically, immigrants were incentivized to enter the US to help build the US economy (Syed, 2016). For example, cheaper Chinese laborers were used to replace Irish workers in the construction of the transatlantic railroad (Roediger & Esch, 2012). The Bracero Program, which started in 1942, was one way of establishing a flow of Mexican agricultural workers in the West and Southwest (Donato & Amuedo-Dorantes, 2020). The Immigration Act of 1965 encouraged the migration of skilled professional workers to enhance the US' growing science and technology fields (Ngai, 2014). For Asian and Latino immigrants, in particular, migration patterns are set at the confluence of immigration and labor policy.

The enduring effects of historical and more recent policies continue to define conditions of employment and work for immigrants across the US and in specific states. The Immigration Act of 1965 removed a national origins quota system that operated along racial lines, but it imposed migration limits on countries in the Western Hemisphere that were previously exempt, regardless of the size of the country or its history of US migration. Under the current immigration system, for example, the same number of people are admitted from Mexico as from any other nation (Massey & Pren, 2012). The more recent Immigration Reform and Control Act of 1986 exacerbated conditions for unauthorized immigrants by making it illegal for employers to hire workers without documentation (Massey & Pren, 2012). And the Fair Labor Standards Act of 1938 continues to restrict many agricultural and domestic workers, who are predominantly immigrants, from protections granted to other workers (Siqueira et al., 2014). At the state level, California's Proposition 22 maintained gig workers as independent contractors, effectively denying labor protections to an unregulated workforce that is largely immigrant (Abkherz & McMahon, 2022).

Restrictive immigration policies enacted at federal, state, and local levels have long created obstacles for immigrants to equitably thrive in the US (Vernice et al., 2020; Martinez et al., 2015). As described above, a major consequence of immigration policies is that immigrants face multiple forms of precarity, from limited rights due to their legal status to denial of health benefits to lack of wage protections. The influence of immigration policy on labor and work produces employment exclusions that may adversely impact immigrant health. Recent research has documented the ways in which restrictive state policies limit immigrant workers' rights, showing that restrictive state-level immigrant policies are detrimental to immigrant health (Crookes et al., 2022; Juárez et al., 2019; Rhodes et al., 2020; Young et al., 2022). Other studies have similarly found that policies and practices governing the experiences of immigrants across the different sectors that immigrants interact with are associated with worse health (Young et al., 2022). Examining the role of employment exclusions that emerge due to immigration policies is critical to understand immigrant health.

1.2. Labor market exclusions and workplace exclusions

Immigration policies influence the types of employment and economic opportunities that immigrants can access (Gurrola & Ayon, 2018). Restrictive policies exacerbate conditions faced by workers seeking employment in the labor market as well as the conditions experienced in the workplace (Burgard et al., 2013). *Labor market exclusions* therefore refer to the barriers faced by immigrants entering the workforce. When immigrants arrive in the US, many face challenges gaining meaningful employment due to policies, such as visa backlogs or restrictions to switching employers, that limit their access to the kinds of jobs that they are eligible to take (Donato & Amuedo-Dorantes, 2020). This may include having to pursue opportunities that are discordant with the professional training that workers completed in their country of origin or contending with uncertainty about obtaining and keeping work authorization (Crollard et al., 2012; Hall et al., 2019). Immigrants are more likely to work in jobs where they are overqualified compared to native-born workers (Pivovarova & Powers, 2022). This mismatch depresses wages and living standards for all workers, and prevents immigrant workers in the US from further accumulating wealth (Lu & Li, 2021).

Restrictive immigration policies also occupationally segregate low-wage workers into jobs where they are more likely to experience exploitative conditions and occupational hazards (Gurrola & Ayon, 2018; Fan & Qian, 2017; Syed, 2016). *Workplace exclusions*, in contrast to labor market exclusions that limit access at the point of entry into the workforce, are workplace experiences that erode the quality and condition of jobs. The distribution of employment and occupational trajectories among this low-wage workforce are often described as precarious, with workers vulnerable to facing diminished employment security, rights and protections, and job mobility (Ornek et al., 2022; Oddo et al., 2021; Kreshpaj et al., 2020). Workplace exclusions disproportionately affect immigrant workers who are funneled into jobs with poor working conditions (Moyce & Schenker, 2018; Siqueira et al., 2014). This includes exploitative work conditions where violations such as wage theft occur and dangerous work environments persist (Gurrola & Ayon, 2018; Koenig, 2018).

1.3. Legal status and access to employment and work

While immigration policies create opportunities for some workers, these policies historically served as stopgaps to bolster and sustain the US economy. As a result, immigration policies have given rise to a segmented workforce where entry into the US is based on legal status and skill level (Pivovarova & Powers, 2022). This social stratification of immigrant workers has major implications for their experiences as workers and, ultimately, their health, including their entry into the workforce and the conditions of the workplace. These conditions describe how the patterns of employment and work get distributed across immigrants.

Immigrant workers have a range of different statuses that confer varying levels of opportunities in the labor market and rights in the workplace. For example, citizens and visa holders are granted opportunities to seek and attain employment in the US whereas undocumented immigrants are subject to more precarious employment where they are often denied labor protections and health benefits (Hall & Greenman, 2015). Individuals with temporary visas and permanent statuses comprise both skilled and unskilled workers across a diverse range of occupations (Costa, 2020). Meanwhile, undocumented immigrants primarily work in farming, construction, production, service, and transportation occupations where labor violations are greatest (Passel & Cohn, 2016). However, evidence suggests that skilled and more educated workers are more likely to adjust their legal status to lawful permanent resident than other low-wage workers thereby affording further rights, protections, and economic opportunities (Costa, 2020).

1.4. Immigrant health and exposure to employment exclusions

The health consequences of being denied work and employment are well-documented in the literature. Employment exclusions may expose workers to both short-term (e.g., injury, illness) and long-term (e.g., chronic stress) health outcomes. Labor market exclusions influence occupational trajectories, which may have implications for health (Crollard et al., 2012). Studies have found that distress is associated with poor self-rated health, which is predictive of morbidity and mortality (Finch & Vega, 2003; Idler & Benyamini, 1997; Tessler & Mechanic, 1978). For example, workers who experience job strain and stress

arising from a lack of control and underutilization of skills have a greater likelihood of reporting poor health outcomes such as cardiovascular disease, hypertension, and cholesterol (Fujishiro & Heaney, 2017; Sorensen et al., 2021). Similarly, precarious employment is associated with worse general and mental health (Ornek et al., 2022; Bhattacharya & Ray, 2021). Previous studies have also found that exploitative employment and work conditions contribute to a host of negative health outcomes such as injury and stress (Gurrola & Ayon, 2018; Hargreaves et al., 2019; Moyce & Schenker, 2018). The effects of employment exclusion on immigrant health may be further exacerbated by legal status. Mental and physical health of immigrants have been found to differ by legal status with some evidence of undocumented immigrants reporting depression and anxiety (Bacong & Menjivar, 2021; Martinez et al., 2015). For undocumented workers, their legal status creates greater risks of workplace vulnerabilities and injury (Flynn et al., 2015).

However, a major gap remains in the literature, which has primarily examined single measures of work and employment exposure rather than the cumulative effect of these conditions on immigrant health (Burgard et al., 2013). Empirical research has examined the cumulative effect of state-level enforcement policies on immigrant health (Young et al., 2022), but research on restrictive employment conditions is limited. Given what is known about the association between work conditions and immigrant health, increasing exposure to employment exclusions may jeopardize physical and mental health. Most immigrant health research investigates this through an occupational health and workplace exposure perspective with a growing focus on psychosocial work environments (Landsbergis et al., 2014; Peckham et al., 2017; Sorensen et al., 2021). In taking a cumulative approach, this research applies a holistic worker-centered conceptualization that accounts for the experiences of immigrants as shaped by their policy environments.

This study uses population-level data to examine the associations between employment exclusions and the physical and psychological health of Asian and Latino immigrants in California. California has historically enacted inclusionary policies for migrants and has the largest foreign-born population in the country (Migration Policy Institute, 2021), and is thus an important geographic focus for understanding employment exclusions on immigrant health. Using population-based survey data on immigrants' employment and work experiences, we contextualize the ways immigration policies may lead to employment exclusions by developing measures of individual and cumulative employment exclusion. We conceptualize these measures as capturing the cumulative effects of multiple employment exclusions and representing the context in which restrictive immigration policies operate, which we hypothesize is harmful to immigrant health. Given that employment conditions are indicative of the policy landscape, we seek to understand how the amalgam of restrictive employment experiences act together to determine the health of immigrants within a state that often sets the stage for improved working conditions and immigrant well-being, and whether this relationship differs by legal status.

2. Methods

2.1. Data source

We used data from the Research on Immigrant Health and State Policy (RIGHTS) survey (n = 2010), a follow-up study of the California Health Interview Survey (CHIS) (California Health Interview Survey CHIS, 2020). CHIS is a representative state-level population health survey that includes data on health care access, health behaviors, and conditions that influence the health of Californians (California Health Interview Survey CHIS, 2023). Data collection for RIGHTS occurred between 2018 and 2020, which surveyed foreign-born CHIS participants from Asian or Latin American countries who were 18 years of age or older on their experiences across the health care, employment, social services, law enforcement, and education sectors. Survey weights for the RIGHTS sample were calculated based on CHIS with propensity weight and survey composite adjustments. Weights were applied to produce population estimates (RIGHTS, 2021). We accessed CHIS and RIGHTS data through the University of California, Los Angeles Center for Health Policy Research Data Access Center and obtained IRB approval through the University of California, Los Angeles Office for the Human Research Protection Program.

2.2. Independent variables

In order to measure employment exclusions, the RIGHTS survey included seven questions regarding respondents' lifetime experiences in the labor market and workplace. We used each survey item to derive variables of individual and cumulative employment exclusions. We categorized the seven variables into two continuous indices that conceptually represent the following cumulative measures: 1) labor market exclusions (range: 0–4; mean: 0.90, SD: 1.07) and 2) workplace exclusions (range: 0–3; mean: 0.56, SD: 0.80). The labor market exclusions relate to experiences of challenges in accessing employment and included whether respondents were ever at risk of losing work authorization (10.1%), ever unable to apply for jobs due to citizenship or legal status (29.0%), ever unable to be hired for the same type of job that they trained for in their home country (16.8%), and ever settled for a job that paid less than they deserved (33.9%). On the other hand, workplace exclusions refer to vulnerabilities experienced on the job: whether the respondent had ever experienced wage theft where they were not paid for hours worked (17.9%), ever asked to perform potentially dangerous tasks that may cause harm (11.8%), and ever injured while at work (26.0%).

2.3. Dependent variables

Our dependent variables were 1) self-rated health and 2) psychological distress. Self-rated health, which is a five-item Likert item, was dichotomized into good health (excellent, very good, good) and poor health (fair, poor) (Idler & Benyamini, 1997). Psychological distress is a continuous measure based on the Kessler 6 (K6) Distress Scale, a 6-item self-report measure of psychological distress (range: 0–24) (Prochaska et al., 2012).

2.4. Covariates

We used the following individual-level covariates based on their association with the outcomes: age (continuous), sex (male, female), race/ethnicity (Asian, Latino), legal status (naturalized citizen, lawful permanent resident, non-citizen without permanent status), years in the US (1 year, 2–4 years, 5–9 years, 10–14 years, 15+ years, unknown), living with a partner (no, yes), educational attainment (not high school graduate, high school graduate), employment status (currently employed, unemployed, not in labor force), occupation (management, business, or professional; natural resources, construction, or maintenance; production, transportation, or material moving; sales and office; service; unknown; not working), interview language (English, non-English).

2.5. Effect modifier

We examined legal status (naturalized citizen, lawful permanent resident, non-citizen without permanent status) as an effect modifier.

2.6. Analysis

We conducted descriptive statistics and bivariate analyses. We also applied two sets of multivariable logistic and linear regressions to assess the associations between cumulative employment exclusions on health, and examined the associations among the individual component parts. The first set was based on an analysis of our separate indices for labor

market exclusions and workplace exclusions. Using logistic regression models, we examined the association between each index – labor market exclusion and workplace exclusion – and self-rated health. Using linear regression models, we examined the association between each index – labor market exclusion and workplace exclusion – and psychological distress. In the second set of analyses, we assessed each of the seven individual measures of labor market and workplace exclusions separately. We examined the association between each of the individual measures and self-rated health using logistic regression models. We also tested ordered self-rated health using the Brant test, but a violation of the proportional odds assumption suggested that a binomial logistic regression was more appropriate. We then examined the relationship between each of the individual measures and psychological distress using linear regression models. Finally, we conducted an effect modification using statistical interaction between each index and each outcome – self-rated health and psychological distress.

2.7. Sensitivity analysis

We conducted a sensitivity analysis of the employment exclusions and psychological distress. We dichotomized labor market exclusions and workplace exclusions into respondents who had experienced no exclusions and those who had experienced one or more (Table A1). We also dichotomized psychological distress where a scale of 13 and above was clinically indicative of severe psychological distress (Table A2). The use of binary measures did not significantly change our results, which prompted us to maintain our continuous employment exclusion and psychological distress measures.

3. Results

Table 1 presents the demographic characteristics of the weighted study sample. The sample comprised immigrants with an average age of 48.8. A slightly higher proportion of respondents identified as female (52.7%) compared to male (47.3%). More than half were Latino (58.4%) compared to Asian (41.6%). Nearly half of respondents were naturalized citizens (47.8%) while about a quarter each were lawful permanent residents (e.g., green card holders) (27.3%) and non-citizens without permanent status (25.0%). Most respondents lived in the US for 15 or more years (69.7%), lived with a partner (69.2%), had graduated from high school (65.7%), were currently employed (59.4%), and had conducted the survey in a language other than English (52.9%). While many respondents did not work (39.3%), the remaining respondents worked in the following occupations: management, business, or professional (18.6%); natural resources, construction, or maintenance (6.3%); production, transportation, or material moving (10.4%); sales and office

Table 1
Descriptive statistics of sample population.

	Total		Dependent variables		Independent variables	
	n	%	% poor health	Distress, mean (SD)	Labor market exclusion, mean (SD)	Workplace exclusion, mean (SD)
Total			32.5	4.1 (4.3)	0.90 (1.07)	0.56 (0.80)
Age, mean (SD)	48.8 (16.2)		55.0 (15.7)			
Sex						
Male	920	47.3	31.1	3.7 (3.9)	0.89 (1.0)	0.64 (0.79)
Female	1090	52.7	33.8	4.4 (4.6)	0.90 (1.1)	0.48 (0.82)
Race/ethnicity						
Asian	1004	41.6	26.3	4.1 (4.9)	0.71 (1.0)	0.35 (0.70)
Latino	1006	58.4	36.9	4.0 (3.8)	1.0 (1.1)	0.71 (0.81)
Legal Status						
Naturalized citizen	1308	47.8	31.6	3.3 (4.4)	0.73 (1.1)	0.55 (0.89)
Lawful permanent resident	397	27.3	35.6	5.1 (4.4)	0.84 (0.90)	0.62 (0.75)
Non-citizen without permanent status	305	25.0	31.0	4.5 (3.1)	1.3 (0.90)	0.51 (0.62)
Years in the US						
1 year	53	3.7	16.8	4.9 (4.2)	0.93 (0.78)	0.32 (0.49)
2–4 years	91	5.1	23.7	4.6 (3.9)	0.79 (0.96)	0.30 (0.52)
5–9 years	156	9.7	15.5	5.2 (4.0)	0.93 (0.92)	0.34 (0.68)
10–14 years	163	10.9	21.3	3.5 (3.2)	0.75 (0.92)	0.44 (0.64)
15+ years	1524	69.7	38.3	4.0 (4.5)	0.92 (1.1)	0.64 (0.87)
Unknown	23	1.0	20.2	3.6 (3.1)	1.1 (0.94)	0.67 (0.97)
Living with a partner						
No	734	30.8	37.4	5.0 (5.1)	0.92 (1.1)	0.51 (0.81)
Yes	1276	69.2	30.4	3.7 (3.9)	0.89 (1.0)	0.58 (0.79)
Educational attainment						
Not high school graduate	436	34.3	46.9	4.2 (3.6)	0.90 (0.88)	0.73 (0.71)
High school graduate	1574	65.7	25.0	4.0 (4.5)	0.90 (1.1)	0.46 (0.80)
Employment status						
Currently employed	1082	59.4	24.9	4.0 (3.6)	1.0 (1.1)	0.58 (0.79)
Unemployed	88	5.0	16.1	4.4 (4.3)	1.0 (0.97)	0.49 (0.68)
Not in labor market	840	35.6	47.6	4.2 (5.3)	0.66 (0.98)	0.52 (0.84)
Occupation						
Management, business, or professional	444	18.6	17.1	4.2 (4.2)	1.0 (1.2)	0.41 (0.82)
Natural resources, construction, or maintenance	103	6.3	29.3	3.3 (3.0)	0.93 (0.97)	0.74 (0.75)
Production, transportation, or material moving	126	10.4	28.8	3.8 (2.7)	1.1 (0.94)	0.74 (0.70)
Sales and office	161	7.7	20.1	4.4 (3.7)	0.87 (1.0)	0.43 (0.74)
Service	201	14.5	34.6	3.8 (3.4)	1.1 (1.0)	0.72 (0.69)
Unknown	74	3.2	31.9	3.8 (3.9)	1.4 (1.4)	0.67 (0.88)
Not working	901	39.3	43.1	4.3 (5.3)	0.67 (0.96)	0.51 (0.83)
Language of interview						
English	1048	47.1	17.8	4.5 (4.8)	0.91 (1.1)	0.51 (0.80)
Non-English	962	52.9	45.7	3.8 (3.8)	0.88 (1.0)	0.60 (0.80)

Note. Source: RIGHTS Survey and CHIS, 2018-2020 (n = 2010). Proportions and means are weighted. SD = standard deviation.

Table 2
Adjusted associations between cumulative labor market exclusions and (a) self-rated health and (b) psychological distress.

	(a) Self-rated health		(b) Psychological distress	
	OR	95% CI	ß	95% CI
Labor market exclusion (index)	**1.21**	**1.01, 1.46**	0.25	-0.01, 0.51
Age	**1.02**	**1.01, 1.04**	**-0.05**	**-0.08, -0.03**
Sex				
Male	ref		ref	
Female	0.90	0.62, 1.32	0.54	-0.09, 1.18
Race/ethnicity				
Asian	ref		ref	
Latino	0.97	0.65, 1.46	-0.63	-1.39, 0.13
Legal Status				
Naturalized citizen	ref		ref	
Lawful permanent resident	1.51	0.97, 2.34	**1.84**	**0.91, 2.77**
Non-citizen without permanent status	1.27	0.71, 2.26	0.77	-0.09, 1.62
Years in the US				
1 year	ref		ref	
2–4 years	1.63	0.36, 7.48	-0.21	-2.30, 1.89
5–9 years	0.90	0.21, 3.91	0.39	-1.44, 2.23
10–14 years	1.29	0.31, 5.25	-0.63	-2.39, 1.14
15+ years	2.41	0.61, 9.54	0.40	-1.35, 2.15
Unknown	0.40	0.03, 5.66	1.60	-1.42, 4.62
Living with a partner				
No	ref		ref	
Yes	**0.64**	**0.44, 0.94**	**-1.20**	**-1.87, -0.54**
Educational attainment				
Not high school graduate	ref		ref	
High school graduate	0.93	0.61, 1.42	-0.78	-1.63, 0.06
Employment status				
Currently employed	ref		ref	
Unemployed	0.99	0.27, 3.58	-0.69	-2.45, 1.08
Not in labor market	3.75	0.96, 14.60	0.19	-1.36, 1.73
Occupation				
Management, business, or professional	ref		ref	
Natural resources, construction, or maintenance	0.95	0.41, 2.20	-0.28	-1.39, 0.84
Production, transportation, or material moving	0.99	0.46, 2.10	0.03	-1.09, 1.15
Sales and office	1.04	0.50, 2.19	0.36	-0.71, 1.43
Service	1.36	0.67, 2.76	-0.17	-1.37, 1.03
Unknown	1.05	0.32, 3.43	-0.17	-1.76, 1.41
Not working	0.54	0.14, 2.13	0.64	-0.92, 2.21
Language of interview				
English	ref		ref	
Non-English	**3.43**	**2.26, 5.21**	**-0.79**	**-1.57, -0.02**
Constant	**0.03**	**0.01, 0.18**	**7.01**	**4.53, 9.50**

Note. Source: RIGHTS survey and CHIS, 2018-2020 (n = 2010). Estimates are weighted. OR = odds ratio; ß = difference in means; CI = confidence interval. Boldface indicates statistical significance ($P < 0.05$).

(7.7%); and service (14.5%).

3.1. Associations between cumulative employment exclusions and (a) self-rated health and (b) psychological distress

Table 2 presents the associations between labor market exclusion and self-rated health and psychological distress. Cumulative labor market exclusions were associated with a 21% increased odds of poor compared to good health (OR = 1.21, 95% CI: 1.01, 1.46), but not associated with psychological distress.

Table 3 shows that the cumulative workplace exclusions were associated with a 45% greater odds of poor health compared to good health (OR = 1.45, 95% CI: 1.15, 1.82) and a 0.69-point increase in psychological distress (β = 0.69, 95% CI: 0.31, 1.07) for each additional workplace exclusion experienced.

3.2. Associations between individual employment exclusion experiences and (a) self-rated health and (b) psychological distress

Table 4 presents the associations between each individual measure of employment exclusion and self-rated health and psychological distress. Across labor market exclusions, being at risk of losing work authorization (OR = 2.04, 95% CI: 1.13, 3.68) and settling for a job that paid less than deserved (OR = 1.48, 95% CI: 1.01, 2.17) were associated with an increased odds of poor self-rated health. Within workplace exclusions, performing dangerous tasks that may cause harm (OR = 2.28, 95% CI: 1.32, 3.91) and experiencing wage theft (OR = 1.90, 95% CI: 1.17, 3.07) were both associated with increased odds of poor self-rated health. Performing dangerous work (β = 1.03, 95% CI: 0.16, 1.89), experiencing work injury (β = 0.90, 95% CI: 0.08, 1.72), and experiencing wage theft (β = 1.09, 95% CI: 0.25, 1.93) were all associated with increased psychological distress.

3.3. Cumulative employment exclusions by legal status

Table 5 shows the associations between the two employment exclusions and both self-rated health and psychological distress by legal status. There was no evidence of a significant interaction between labor market exclusion and legal status for self-rated health (F-test = 0.73, $P = 0.48$) or psychological distress (F-test = 0.98, $P = 0.38$). Similarly, the relationship between workplace exclusion and both self-rated health (F-test = 0.00, $P = 1.00$) and psychological distress (F-test = 0.29, $P = 0.75$) were not modified by legal status.

Table 3
Adjusted associations between cumulative workplace exclusions and (a) self-rated health and (b) psychological distress.

	(a) Self-rated health		(b) Psychological distress	
	OR	95% CI	ß	95% CI
Workplace exclusion (index)	**1.45**	**1.15, 1.82**	**0.69**	**0.31, 1.07**
Age	**1.02**	**1.01, 1.04**	**-0.05**	**-0.08, -0.03**
Sex				
Male	ref		ref	
Female	0.97	0.66, 1.43	**0.67**	**0.07, 1.28**
Race/ethnicity				
Asian	ref		ref	
Latino	0.92	0.61, 1.39	-0.75	-1.52, 0.02
Legal Status				
Naturalized citizen	ref		ref	
Lawful permanent resident	1.50	0.96, 2.35	**1.85**	**0.95, 2.75**
Non-citizen without permanent status	1.51	0.84, 2.69	**0.99**	**0.18, 1.81**
Years in the US				
1 year	ref		ref	
2–4 years	1.57	0.35, 7.09	-0.28	-2.33, 1.76
5–9 years	0.88	0.20, 3.78	0.38	-1.41, 2.17
10–14 years	1.19	0.30, 4.72	-0.70	-2.43, 1.02
15+ years	2.31	0.60, 8.88	0.29	-1.40, 1.98
Unknown	0.33	0.03, 4.01	1.40	-1.62, 4.42
Living with a partner				
No	ref		ref	
Yes	**0.63**	**0.43, 0.92**	**-1.24**	**-1.90, -0.59**
Educational attainment				
Not high school graduate	ref		ref	
High school graduate	0.99	0.65, 1.52	-0.65	-1.50, 0.20
Employment status				
Currently employed	ref		ref	
Unemployed	1.08	0.32, 3.69	-0.58	-2.33, 1.16
Not in labor market	**4.04**	**1.11, 14.71**	0.24	-1.27, 1.76
Occupation				
Management, business, or professional	ref		ref	
Natural resources, construction, or maintenance	0.87	0.36, 2.07	-0.43	-1.54, 0.68
Production, transportation, or material moving	0.93	0.44, 2.00	-0.11	-1.22, 1.01
Sales and office	1.02	0.49, 2.12	0.32	-0.76, 1.39
Service	1.27	0.62, 2.58	-0.33	-1.48, 0.81
Unknown	1.12	0.33, 3.81	-0.16	-1.69, 1.37
Not working	0.48	0.13, 1.76	0.49	-1.05, 2.04
Language of interview				
English	ref		ref	
Non-English	3.51	2.31, 5.34	**-0.78**	**-1.55, -0.01**
Constant	**0.03**	**0.01, 0.17**	**6.90**	**4.47, 9.33**

Note. Source: RIGHTS survey and CHIS, 2018-2020 (n = 2010). Estimates are weighted. OR = odds ratio; ß = difference in means; CI = confidence interval. Boldface indicates statistical significance ($P < 0.05$).

4. Discussion

This study used population-based data to examine the associations between employment exclusions and the health of Asian and Latino immigrants in California. We generally observed poor self-rated health and increased psychological distress for two distinct cumulative measures of employment exclusion: labor market exclusions and workplace exclusions. These findings demonstrate that the compounded effect of multiple exclusions operate together in a way that is detrimental to Asian and Latino immigrant health. This research is the first to our knowledge to use population-representative data to investigate employment exclusions that are contextualized through immigration policy. By doing this, we expand the theoretical underpinning of how employment and work conditions influence immigrant health. These findings confirm and strengthen existing evidence of the association between downward occupational mobility and poor mental health by highlighting the cumulative conditions and persistent effect of being excluded from labor market opportunities (Ro, 2014). Moreover, we contribute population-based evidence of the relationship between poor working conditions and health among a structurally vulnerable population (Quesada et al., 2011). Building beyond a focus solely on the labor market or workplace as individual sets of exposures, we broaden this thinking to encompass the totality of immigrant experiences within the domain of work and employment.

There was variation in the extent to which the four individual measures of labor market exclusion proved burdensome to health. There are several possible explanations for why we did not see an association between not being able to find a job because of citizenship or legal status

Table 4
Adjusted associations between seven individual measures of employment exclusion and (a) self-rated health and (b) psychological distress.

	(a) Self-rated health		(b) Psychological distress	
	OR	95% CI	ß	95% CI
Work authorization	**2.04**	**1.13, 3.68**	0.30	-0.51, 1.10
Settled for job	**1.48**	**1.01, 2.17**	0.58	-0.02, 1.19
Unable to apply	1.25	0.80, 1.96	0.08	-0.59, 0.75
Unable to hire	1.13	0.71, 1.82	0.70	-0.10, 1.50
Dangerous job	**2.28**	**1.32, 3.91**	**1.03**	**0.16, 1.89**
Work injury	1.30	0.85, 2.01	**0.90**	**0.08, 1.72**
Wage theft	**1.90**	**1.17, 3.07**	**1.09**	**0.25, 1.93**

Note. Source: RIGHTS survey and CHIS, 2018-2020 (n = 2010). Estimates are weighted. OR = odds ratio; ß = difference in means; CI = confidence interval. All models controlled for age, sex, race/ethnicity, legal status, years in the US, living with a partner, educational attainment, employment status, occupation, and interview language. Boldface indicates statistical significance ($P < 0.05$).

Table 5
Adjusted associations between cumulative employment exclusions and (a) self-rated health and (b) psychological distress, by legal status.

	Labor market exclusion (index)						Workplace exclusion (index)					
	(a) Self-rated health			(b) Psychological distress			(a) Self-rated health			(b) Psychological distress		
	OR	95% CI	*P*	ß	95% CI	*P*	OR	95% CI	*P*	ß	95% CI	*P*
Legal status			0.48			0.38			1.00			0.75
Naturalized citizen	1.25	0.97, 1.60		**0.36**	**0.05, 0.67**		**1.45**	**1.06, 1.98**		**0.63**	**0.05, 1.21**	
Lawful permanent resident	1.02	0.71, 1.46		-0.09	-0.69, 0.51		1.46	0.98, 2.16		0.60	-0.08, 1.28	
Non-citizen without permanent status	1.37	0.96, 1.95		0.42	-0.08, 0.91		1.44	0.86, 2.42		**0.93**	**0.24, 1.61**	

Note. Source: RIGHTS survey and CHIS, 2018-2020 (n = 2010). Estimates are weighted. OR = odds ratio; ß = difference in means; CI = confidence interval. All models controlled for age, sex, race/ethnicity, years in the US, living with a partner, educational attainment, employment status, occupation, and interview language. Boldface indicates statistical significance ($P < 0.05$).

and health. First, in the face of employment challenges, immigrants must adapt to labor markets to achieve economic self-sufficiency (Gurrola & Ayon, 2018; Kim et al., 2023). When immigrants are unable to find work in their professional fields or their initial work options are not available, they are likely able to find work elsewhere (Nakphong et al., 2022; Hall et al., 2019). Another reason we might not see an association is because immigrants are often able to draw upon resources and leverage family ties and social capital to access social and economic resources that protect their health (Gilbert et al., 2013). Although underutilization of skills and occupational mismatch worsens health, immigrants are likely able to buffer against these negative effects (Fujishiro & Heaney, 2017). Protective factors such as community and family assets may shield against the harm of being excluded from the labor market (Tegegne, 2015). We observed that lacking work authorization was associated with worse self-rated health, but not with psychological distress. Although the experience of being at risk of losing work authorization is likely distressing, some respondents may have experienced this in the distant past or were resilient to these barriers by finding alternative work arrangements. Over time, however, the risk of losing work authorization could have longer term negative impacts to health if immigrants are unable to work in their profession. The unclear associations observed between the labor market exclusion measures and health may be attributed to these experiences functioning distally to health outcome and consequently resulting in weaker relationships.

The associations between workplace exclusions highlight clearer pathways to health. Exposure to dangerous jobs and work-related injuries directly places workers at risk of physical harm, which is likely to result in poor health and higher stress. Our findings demonstrate that even after controlling for occupation where some jobs expose workers to greater occupational hazards, having experienced dangerous work conditions may place workers at continued vulnerability to injury and harm. However, having experienced work injury was only associated with increased psychological distress, not self-rated health. Work injuries and occupational risks often occur in many work environments regardless of the industry or occupation. Because all workers are susceptible to some degree of injury, this measure of work injury may not entirely predict an association with self-rated health. Instead, future studies may want to consider examining if the frequency or magnitude of work injury is related to health. Moreover, some work injuries are temporary and not symptomatic of the working conditions (i.e., accidental), which may not be predictive of longer term morbidity. Finally, while experiencing wage theft does not immediately cause harm, wage theft limits access to health-promoting resources and may weaken labor standards that subsequently exacerbate violations (Robinson et al., 2011; Sorensen et al., 2021). Not only does this increase stress, but can over time, negatively influence health (Eisenberg-Guyot et al., 2022). Furthermore, the longer term social and economic implications of these individual workplace exclusions can disrupt and diminish quality of life through lost wages and productivity (Gleeson, 2015; de Castro et al., 2006).

We did not observe evidence of legal status modifying the associations between either of the employment exclusion indices and self-rated health or psychological distress. One reason may be that the category of non-citizen without permanent residence continues to encompass a wide range of legal statuses including temporary visa holders and undocumented immigrants. The variability in education, training, and employment opportunities among those without permanent status may obscure the findings. Future research should consider ways to better capture visa classifications to more accurately reflect the employment exclusions experienced.

Our findings contribute to the literature by highlighting that while some individual measures of employment exclusion were associated with health, the collective and cumulative effect of multiple exclusionary conditions is indicative of the employment experiences that immigrants face in finding and maintaining work. This suggests that poor health outcomes among immigrants is not dependent on only one specific type of employment exclusion, but that these restrictive conditions act together in a way that systematically influences health (Burgard et al., 2013). The policy context assumes a central role in how it patterns the opportunities that are available to immigrants.

This study is not without its limitations. First, the use of contemporaneous cross-sectional data means that we cannot establish temporality, which is necessary for causality. Second, while this study included respondents from the two largest immigrant groups in the US, future studies should also include immigrants from other regions, such as Africa, who also likely face similar work and employment exclusions. Third, while we conceptualized our seven individual measures to each represent some aspect of employment exclusion, each of these measures reflect a distinct experience with tremendous heterogeneity in experience and relation to health outcomes. Based on the literature, there are many other ways in which immigrants may be denied work on the basis of the labor market or workplace, which may not be captured in our measures (e.g., non-standard work arrangements, psychosocial work environments, fissured workplace) (Sorensen et al., 2021; Burgard et al., 2013). Future research should consider the fuller extent to which employment exclusions influence health, and consider how they can be captured both independently and as an aggregate. Fourth, the independent variables represent lifetime exposure of employment exclusions, which may result in attenuated health effects that likely underestimate the influence of employment exclusions on health. Fifth, there is a great deal of heterogeneity in legal status and we are unable to measure the nuances, such as different visa types. Sixth, the distinct experiences that shape immigrants' decisions to migrate are varied and nuanced. Although we included a number of covariates that represent some of these experiences, further conceptualization of the historical and policy contexts driving migration should be considered for future work. Finally, although our study used representative data from California, findings from this study may not be generalizable to other states, given state-level differences in immigrant policies and demographics. Future research should explore whether the associations between employment exclusions and poor self-rated health and increased psychological distress are stronger in more exclusionary contexts.

5. Conclusion

As a system, immigration dictates opportunities, advantaging some while disadvantaging others. Restrictive immigration policies maintain a legacy of creating employment exclusions that have lasting effects on the health of immigrants. In this study, we found that the cumulative effect of experiencing workplace exclusions, and to a lesser extent labor market exclusions, were associated with both poor self-rated health and increased psychological distress. The implications for this type of research are important as immigrants engage and interact with multiple sectors of society, particularly in states like California where immigrants are long-residing and comprise a large proportion of the workforce, as well as in other states with newly arrived immigrants in the labor force. Despite being portrayed as a detriment to the US economy, immigrants are often relied upon as a solution to drive the US economy through participation in the labor market. In an effort to improve population health, the field of public health research must continue to interrogate the policy conditions at the federal, state, and local level that give rise to employment and work experiences for immigrants. To promote immigrant health, immigration and employment policies should advance the inclusion of immigrants in the workplace by reducing barriers to jobs and improving working conditions.

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CRediT authorship contribution statement

Kevin F. Lee: Writing – original draft, Formal analysis, Conceptualization. **Michelle K. Nakphong:** Writing – review & editing, Conceptualization. **Maria-Elena De Trinidad Young:** Writing – review & editing, Supervision, Funding acquisition, Conceptualization.

Declaration of competing interests

The authors have no competing interests to declare.

Data availability

The data that has been used is confidential.

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Appendix

Table A1
Adjusted associations between employment exclusions ever and (a) self-rated health and (b) psychological distress

	(a) Self-rated health		(b) Psychological distress	
	OR	95% CI	ß	95% CI
Labor market exclusion ever	**1.15**	**0.81, 1.64**	0.28	-0.34, 0.89
Workplace exclusion ever	**1.72**	**1.17, 2.53**	**1.31**	**0.89, 1.93**

Note. Source: RIGHTS survey and CHIS, 2018-2020 (n = 2010). Estimates are weighted. All models controlled for age, sex, race/ethnicity, legal status, years in the US, living with a partner, educational attainment, employment status, occupation, and interview language. Boldface indicates statistical significance ($P < 0.05$).

Table A2
Adjusted associations between cumulative employment exclusions and binary psychological distress

	OR	95% CI
Labor market exclusion (index)	1.09	0.87, 1.37
Workplace exclusion (index)	**1.73**	**1.23, 2.42**

Note. Source: RIGHTS survey and CHIS, 2018-2020 (n = 2010). Estimates are weighted. All models controlled for age, sex, race/ethnicity, legal status, years in the US, living with a partner, educational attainment, employment status, occupation, and interview language. Boldface indicates statistical significance ($P < 0.05$).

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