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Associations of Employment Frustration with Self-Rated Physical and Mental Health Among Asian American Immigrants in the U.S. Labor Force

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Abstract

Objective—This study examined the associations between employment frustration and both self-rated physical health (SRPH) and self-rated mental health (SRMH) among Asian American immigrants.

Design and Sample—A cross-sectional quantitative analysis was conducted utilizing data from 1,181 Asian immigrants participating in the National Latino and Asian American Study.

Measures—Employment frustration was measured by self-report of having difficulty finding the work one wants because of being of Asian descent. SRPH and SRMH were each assessed using a global one-item measure, with responses ranging from poor to excellent. Control variables included gender, age, ethnicity, education, occupation, income, whether immigrated for employment, years in the United States, English proficiency, and a general measure for everyday discrimination.

Results—Ordered logistic regression showed that employment frustration was negatively associated with SRPH. This relationship, however, was no longer significant in multivariate models including English proficiency. The negative association between employment frustration and SRMH persisted even when including all control variables.

Conclusions—The findings suggest that Asian immigrants in the United States who experience employment frustration report lower levels of both physical and mental health. However, English proficiency may attenuate the relationship of employment frustration with physical health.

Keywords

Asian Americans; immigrants; occupational health; self-rated health; social justice

Background

The recognition of racial disparities in health has prompted an emphasis on examining how social factors operate as determinants of health. Employment is one factor that has not been

fully explored in terms of its association with health among immigrants. Gainful employment brings with it salutogenic benefits of income, purchasing power (i.e., for food and housing), and, conventionally in the United States, health insurance. Employment also contributes to better psychological well-being (Llena-Nozal, 2009) by providing social identity, time structure, self-esteem, and social support (Jahoda, 1982; Johnson & Hall, 1988; Tharenou, 1979). Even in the World Health Organization Commission on Social Determinants of Health's (2008) report, titled "Closing the gap in a generation: Health equity through action on the social determinants of health," employment is recognized as having a powerful effect on physical and psychological health and as a means to directly and indirectly reduce health disparities. Conversely, prior studies have shown that unemployment and job insecurity are associated with a variety of physical and mental health consequences (Burgard, Brand, & House, 2009; Cooper, McCausland, & Theodossiou, 2006; Ferrie, Shipley, Stansfeld, & Marmot, 2002; Goldsmith, Veum, & Darity, 1996; McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Mossakowski, 2009; Thomas, Benzeval, & Stansfeld, 2005). While research on the relationship between employment and health is fairly substantial, it has tended to primarily focus on native-born populations.

For immigrants, employment may have distinctive significance because of its tie to notions of success in the context of the migration experience. Central to the immigrant story is the goal of finding work and improving socioeconomic status—the so-called *American Dream*. Immigrants typically endure demanding transitions requiring considerable financial resources to create and build lives in their host society, hence intensifying the importance of employment.

Finding and maintaining work, though, can be a struggle for many immigrants. Documentation status, lower education level, lack of training, and limited English proficiency may limit employment opportunities. It is not uncommon that immigrants are compelled to take low-skilled, hazardous jobs (de Castro, Fujishiro, Sweitzer, & Oliva, 2006; Seixas, Blecker, Camp, & Neitzel, 2008; Tsai & Salazar, 2007). Many immigrants experience an occupational downgrading or underemployment, particularly upon initial arrival into their host societies (Agudelo-Suarez et al., 2009; Akresh, 2008; De Jong & Madamba, 2001). Immigrants may also come up against barriers to job promotion—a so-called *Bamboo Ceiling* (Hyun, 2005). These challenges can be motivated by racial discrimination adding another dimension to the difficulties that immigrants encounter. Altogether, these experiences can play critical roles in determining job opportunities and employment status. How this manifests in terms of health consequences among immigrants, though, has not been systematically investigated.

A study by Finch, Catalano, Novaco, and Vega (2003) examined the notion of employment frustration among Mexican labor migrants. They noted that immigrants come up against both "institutions and individuals who choose not to hire migrants for reasons unrelated to skill or willingness to work." (p. 182). Because of strong aspirations for economic improvement, they hypothesized that immigrants experience feelings of anxiety, anger, and frustration in response to this sort of discriminatory employment denial, and, as a result, turn to alcohol consumption to cope with this stressor. They found, among a sample of over 1,500 Mexican immigrants in California, that those reporting employment frustration were at an increased risk for alcohol abuse/dependence. To our knowledge, no other study has been conducted examining employment frustration among immigrants in the United States.

Another possible facet of employment frustration occurs when the job undervalues a person's level of training, knowledge, or qualifications. For example, Smith and Frank (2005) found, among a general population sample of employed persons in Canada, that university-educated individuals working in a job for which they were overqualified were at

an increased risk for declines in self-rated health over time compared with those working in jobs for which they were qualified. This issue has not been systematically examined for immigrant populations in the United States. Given the indications from these studies, employment frustration has particular relevance in terms of being a determinant of social disadvantage that may contribute to disparate health for Asian immigrants in the United States, an understudied group.

Research question

The purpose of this study was to test the association between employment frustration and physical and mental health, using a nationally representative sample of Asian American immigrants. We specifically hypothesized that employment frustration is associated with lower levels of both self-rated physical health (SRPH) and self-rated mental health (SRMH) even when accounting for potential confounders, including demographic characteristics, socioeconomic factors, immigration-related factors, and general experiences of discrimination.

Methods

Design and sample

Data come from the National Latino and Asian American Study (NLAAS), a nationally representative household survey of the Latino and Asian American population in the United States. Data collection for the NLAAS was conducted in 2002–2003. The NLAAS used a complex probability sampling scheme to obtain a data set that was nationally representative of the Latino and Asian American populations in the United States without regard to geographic residential patterns. The study protocol and sampling methodology have been previously detailed elsewhere (Alegria et al., 2004; Heeringa et al., 2004; Pennell et al., 2004).

Briefly, the survey populations for the NLAAS study included all Latino and Asian American adults who resided in households in U.S. states and Washington, DC. Participants were recruited using one of three sampling methods. First, participants in the core sample were recruited using a multistage stratified area probability sampling design. Primary sampling units, defined as metropolitan statistical areas (MSAs) or county units, and secondary sampling units, comprising contiguous grouping of census blocks, were selected using probability proportionate to size, from which households were sampled. One member of the household was selected using standard Kish methods. Second, participants in the NLAAS high-density supplemental sample were recruited using a 5% density criterion, in which Latino or Asian target ancestry groups representing at least 5% of total households in a census block were oversampled. Individuals who were Latino or Asian and did not belong to the target ancestry group under which these geographical areas were classified were still eligible to participate. Therefore, individuals living in high-density areas had two opportunities for recruitment: through the NLAAS core sampling strategy and through the NLAAS high-density sampling strategy. Third, in addition to core and high-density sampling methods, second respondents were recruited from households in which one participant had already been interviewed. The second respondent sampling was utilized in order to increase the total sample of participants and to reduce study expenses. The three components of the NLAAS sampling design resulted in the construction of weighting corrections to take into account joint probabilities of selection. The Asian American study population of the NLAAS was also stratified based on eligible adults' ancestry or national origin (Chinese, Filipino, Vietnamese, and all other Asians), relying on self-reports by household members at the time of the household screening. Institutionalized persons (including those in prisons, jails, nursing homes, and long-term medical or dependent care

facilities) and military personnel living on military bases or military reservations were excluded.

Interviewers with linguistic and cultural backgrounds concordant with those of the target population administered the questionnaire. Participants were initially contacted with an introductory letter and study brochure, followed by screening, scheduling, and interviewing. Interviews were conducted in the preferred language indicated by the respondent using computer-assisted interviewing software. The questionnaire was administered face to face to participants in the NLAAS core and high-density samples, unless the respondent requested a telephone interview or a face-to-face interview was prohibitive. Second respondents were interviewed via telephone.

Among the total 2,095 Asian American NLAAS participants, this analysis utilized data from 1,181 immigrants reporting being in the labor force, either currently working or unemployed. We excluded students, homemakers, retirees, and those disabled, as well as 11 participants who had missing data either for the primary independent or dependent variables of interest.

Measures

The dependent variables of interest were *SRPH* and *SRMH*. Participants were asked “How would you rate your overall physical health?” as well as “How would you rate your overall mental health?” Ratings ranged from 1 = *poor* to 5 = *excellent*. The use of a global single-item measure of physical health has been established in previous studies (Idler & Angel, 1990; Idler & Benyamini, 1997; Idler, Hudson, & Leventha 1999). The use of a single-item measure to assess general mental health has been less frequent (Zuvekas & Fleishman, 2008), but we included it in this analysis as an alternative to physical health status. Both measures have been used in studies of Asian Americans (de Castro, Gee, & Takeuchi, 2009; Huh, Prause, & Dooley, 2008; Zhang & Ta, 2009).

Our primary independent variable of interest was *employment frustration*. Participants were asked, “Do you find it difficult to find the work you want because you are of Asian descent?” (0 = *no*, 1 = *yes*). This item was used by Finch and colleagues (2003) in a study of Mexican immigrants, although with the phrase “Mexican descent.”

We controlled for experiences of general discrimination by including a measure for *everyday discrimination* using a 9-item scale adapted from studies by Williams, Yu, Jackson, and Anderson (1997). Participants were asked how frequently they perceived experiences of chronic and routine unfair treatment. Examples of items are as follows: “You are treated with less courtesy than other people,” “People act as if they are afraid of you,” and “You are called names or insulted.” Responses ranged from 1 = *never* to 6 = *almost everyday*, and, were averaged to obtain an everyday discrimination score.

We adjusted for demographic characteristics (*gender*, *age* in years, and *ethnicity* [Vietnamese, Filipino, Chinese, and other Asian]); socioeconomic factors (*education* [<11 years, 12 years, 13–15 years, 16 years, or above], *occupation* [white collar, blue collar, service, other, unemployed], and *personal income in the past 12 months* [US\$0–US\$14,999; US\$15,000–US\$34,999; US\$35,000–US\$74,999; US\$75,000 and over]); and immigration-related variables (whether *immigrated for employment* [yes, no], *years in the United States*, and *English language proficiency* [poor/fair, good/excellent]).

Analytic strategy

All analyses were conducted using STATA version 10.0 statistical software (STATACorp LP, College Station, Texas). Survey weights were applied to the data to account for the

complex sampling design and to allow estimates to be nationally representative. Ordered logistic regression using the *svy ologit* command was used to test the bivariate associations between covariates and SRPH, an ordinal outcome. We then fit a multivariate ordered logistic model that included employment frustration and demographic characteristics (gender, age, ethnicity) in model 1, then adding socioeconomic factors (education, occupation, income) in model 2, immigration-related variables (immigrated for employment, years in the United States, English language proficiency) in model 3, and, finally, everyday discrimination in model 4. We used this same approach to investigate associations with SRMH as the outcome, although we tested an additional model that included 12-month depressive disorder as a control variable (see below). Institutional review board approval to conduct this study was obtained from the Human Subjects Division of the University of Washington.

Results

Table 1 displays the descriptive results for the sample. The sample had a higher proportion of males (53%) and had an average age of 41 years. The largest ethnic group was other Asian (33%), followed by Chinese (30%), Filipino (21%), and Vietnamese (17%). Most respondents had at least 16 years of education (46%), were employed in white-collar occupations (45%), and had an annual income between US\$15,000 and US\$34,999 (35%). The vast majority had immigrated for employment reasons (85%), and, overall, had spent an average of 16 years in the United States. Over 60% self-rated their English as good or excellent. The mean score for everyday discrimination was 1.8 (out of a possible range of 1–5). Regarding health status, SRPH and SRMH were reported to be good/very good/excellent, 88% and 92%, respectively. Slightly over 24% of the sample reported employment frustration, of which 5% were Vietnamese, 3% were Filipino, 10% were Chinese, and 6% were other Asians (not shown).

Table 2 shows the results of ordered logistic regression analyses for SRPH. We expected that respondents who reported employment frustration would report lower levels of SRPH. When we tested the zero-order correlation, we did find that employment frustration was significantly associated with SRPH in the hypothesized direction. The multivariate analyses revealed that the negative association between employment frustration and SRPH remained statistically significant when controlling for gender, age, ethnicity (model 1), and when subsequently including education, occupation, and income (model 2). However, in model 3, the association between employment frustration and SRPH was no longer statistically significant when English language proficiency (and other immigration-related variables) was included. The positive relationship between English language proficiency and SRPH was statistically significant both in model 3 and model 4, which controlled for everyday discrimination. Findings indicated that greater English proficiency had a more meaningful effect on SRPH than employment frustration.

Table 3 shows the results of bivariate and multivariate analyses for SRMH. In bivariate analyses, employment frustration, as expected, was negatively associated with SRMH. Multivariate analyses revealed that employment frustration was associated with lower levels of SRMH, even when controlling for demographic characteristics (model 1); socioeconomic factors (model 2); immigration-related variables, including English language proficiency (model 3); and everyday discrimination (model 4).

As a check for analyses involving SRMH, we tested a fifth model (not shown) that included 12-month depressive disorder (major depressive disorder or dysthymia). In the NLAAS, the World Mental Health Survey Initiative of the World Health Organization Composite International Diagnostic Interview (WMH-CIDI) was used to assess the presence of at least

one depressive disorder within 12 months of being interviewed (Demyttenaere et al., 2004). Participants' responses were used to classify an individual as meeting the criteria of the *Diagnostic and Statistical Manual of Mental Disorders*, 4th Edition (DSM-IV; American Psychiatric Association, 1994), for a mental disorder or not. This measure has been used in previous studies of Asian Americans (Chatterji, Alegria, Lu, & Takeuchi, 2007; Gee, Spencer, Chen, Yip, & Takeuchi, 2007; Takeuchi et al., 2007). In our analysis, the relationship between employment frustration and SRMH remained statistically significant even when controlling for 12-month depressive disorder.

We also explored potential interactions between employment frustration and the various demographic characteristics and socioeconomic factors, but found none to be statistically significant. Additionally, we did consider region of residence in the United States (Northeast, South, Midwest, West) in multivariate modeling, but excluded it in the final analyses because of nonsignificance. Further, we used the same analytic approach to test whether employment frustration was associated with 12-month depressive disorder as the outcome of interest, but found no statistically significant estimate.

Discussion

The primary goal of this study was to examine associations of employment frustration with both physical and mental health among a nationally representative sample of Asian immigrants in the United States. Employment frustration is operationally defined in this study as the perceived difficulty of finding the work one wants because of being of Asian descent. Overall, almost one-quarter of our sample reported experiencing employment frustration.

We observed that employment frustration was associated with lower levels of both SRPH and SRMH. These associations might be explained by either denial of entry into the labor force or denial of advancement (either by transitioning to better jobs/positions or promotion). Employment frustration in this sense may not only result in material deprivation of income, which translates into one's ability to make health-promoting purchases (i.e., quality of housing, food, health care services), but may also operate as a stressor having adverse consequences for both physical and mental well-being. Our findings are consistent with previous reports citing the important role that employment plays as a determinant of health (Commission on Social Determinants of Health, 2008; Cooper et al., 2006; Dooley, 2003; Ferrie et al., 2002; Goldsmith et al., 1996; Lindstrom, 2005; McKee-Ryan et al., 2005).

It is also possible that employment frustration reflects dissatisfaction with one's current job, which has also been found to be associated with negative health outcomes (Evans et al., 2006; Faragher, Cass, & Cooper, 2005; Fischer & Sousa-Poza, 2009). In a study of Filipino immigrants in the United States, de Castro, Gee, and Takeuchi (2008) found that job dissatisfaction was associated with psychological distress as well as physical health conditions. Related to job dissatisfaction, immigrants may experience job mismatch or being employed in jobs for which they are overqualified or underutilize their skills and training (De Jong & Madamba, 2001). Other phrases have been used to describe this issue, particularly in reference to limited job opportunities for immigrants during the initial years after arrival in the receiving country, such as occupational downgrading (Akresh, 2008), downward occupational mobility (Strully, 2009), and occupational demotion (Tsai, 2003). Given that employment is a primary reason why individuals migrate (85% in our sample), our findings reveal the significance that labor market participation bears upon the health status of immigrant populations.

In our study, employment frustration captured experiences of job denial in the form of racial discrimination. While the adverse impact of generalized racial discrimination on health has been well documented (Williams & Mohammed, 2009; Williams, Neighbors, & Jackson, 2008), including among Asian Americans (Gee, 2002; Gee, Ro, Shariff-Marco, & Chae, 2009; Gee, Spencer, Chen, Yip, et al., 2007; Gee, Spencer, Chen, & Takeuchi, 2007), few studies have specifically examined associations with health in an employment- or a work-related context (Fujishiro, 2009; Pavalko, Mossakowski, & Hamilton, 2003; Rospenda, Richman, & Shannon, 2009). Even fewer have specifically investigated this in the immigrant context.

As noted, the study by Finch and colleagues (2003) found an association between employment frustration and alcohol abuse/dependence among Mexican immigrants in California. In Spain, Agudelo-Suarez and colleagues (2009) reported that immigrant workers reported that racial discrimination limited employment opportunities often to hazardous jobs and resulted in feelings of stress and anxiety. Another study by Bhui and colleagues (2005), which included Black Caribbeans, Indians, Pakistanis, and Bangladeshis in the United Kingdom, showed that racial discrimination in the workplace (including job denial and unfairness regarding advancement) was related to anxiety and depression. Lastly, Beiser and Hou (2006) observed associations between both racial discrimination and unemployment with depression among Southeast Asian refugees in Canada. Our results contribute to the collective findings from these previous studies by examining this issue among Asian immigrants in the United States.

We recommend, though, that future research investigate more specific mechanisms by which immigrants are denied the employment they desire. For example, examining employer/organizational policies and practices with regard to hiring immigrant workers and what job titles and job tasks they are assigned may shed light on institutionalized systems that create and promote inequalities for immigrants in the context of work. Additionally, obtaining qualitative data (e.g., through key informant interviews or focus groups) would provide a richer understanding of how immigrants in the United States actually experience employment frustration. Our findings also suggest the potential importance of public policies that encourage fair hiring practices and support job programs for immigrants. The benefits can go beyond simply earning a paycheck, having a positive influence on physical and mental health and well-being.

Interestingly, though, we found that English language proficiency may be more meaningful for physical health. Previous studies among Asian immigrants have reported associations between higher levels of English proficiency and higher ratings of physical health (Gee, Walsemann, & Takeuchi, 2009; Mui, Kang, Kang, & Domanski, 2007; Pottie, Ng, Spitzer, Mohammed, & Glazier, 2008). Proficiency in the receiving society's language may bring with it advantages that directly influence health. For example, English proficiency can reduce barriers to accessing health care services (Pippins, Alegria, & Haas, 2007; Ponce, Ku, Cunningham, & Brown, 2006) and having health insurance (Alegria et al., 2006). Also, it may be possible that immigrants with better English language skills are hired into better jobs (e.g., in terms of prestige, pay, security, and safety), thereby increasing the likelihood of job satisfaction. Studies have shown that immigrants with lower English proficiency are commonly hired into precarious and dangerous jobs, which places them at an increased risk for work-related injury and illness, and thus overall poorer physical health (de Castro et al., 2006; Premji, Messing, & Lippel, 2008; Tsai & Bruck, 2009). This finding calls attention to the potential that English proficiency has to mitigate societal challenges that immigrants encounter as they relate to health status. We recommend that future studies investigating the relationships between host society experiences and health among immigrant populations consider how English proficiency might play a role with respect to the health outcomes of

interest. The effect of English proficiency deserves further exploration, given its particular relevance for reducing health disparities for immigrant groups. Moreover, public policy efforts to build and enhance English language skills among immigrant populations may serve as an effective public health intervention. For example, accessible community-based programs that offer English as a Second Language classes may indeed achieve unanticipated positive benefits for health.

Limitations

Our findings should be viewed in light of the following limitations. Because our results are based on cross-sectional data, causal relationships may not be evaluated. A longitudinal study that examines employment frustration while tracking occupational transitions from the point of an immigrant's arrival forward would provide a better insight into specific contexts when it is experienced. Also, the employment frustration item was only asked among immigrants and not U.S.-born Asians. Asking both immigrant and U.S.-born participants this question would have allowed comparison based on nativity. We further note that the one-item measure for employment frustration is generic and may overlook finer aspects—such as whether one could not get hired into a job compared with not getting promoted within a job. A multifaceted measure that distinguishes various nuances of employment frustration would be helpful in future studies. Moreover, our measure of employment frustration focuses on perceived job denial because of racial identity (Asian descent). It is possible that being denied employment could be attributable to multiple other reasons; however, our data do not allow for an objective assessment of employment frustration. Additionally, one's residential geography at multiple levels (i.e., from national region to state to zip code to neighborhood) may possibly influence the experience of employment frustration. While our analysis did not find U.S. region of residence to be a statistically significant covariate, future studies may wish to consider finer levels or even multiple characterizations of residential geography. Lastly, all data were based on self-report, which may have introduced the potential for recall bias.

Conclusion

While employment seeking is a principal motive for migration, immigrants may encounter difficulties participating in the U.S. workforce. They may be denied entry into the labor market, promotion within one's job, or upward occupational transition. These frustrating experiences, especially if rooted in racial discrimination, can be harmful to both physical and mental health. Considering the importance of employment in the immigrant story, the examination of employment-related issues has particular relevance in terms of elucidating determinants of health disparities. There, however, may be other factors, such as English language proficiency, that may empower immigrants in the host society, thus counteracting the detrimental effects of employment frustration.

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TABLE 1

Weighted Percents and Means for the Total Sample (N = 1,181)

Gender	
Male	53.0
Age (years), mean (<i>SD</i>)	40.5 (12.2)
Ethnic group	
Vietnamese	16.8
Filipino	20.6
Chinese	29.6
Other Asian	33.0
Education	
<12 years	16.0
12 years	15.9
13–15 years	21.9
16+years	46.3
Occupation	
White collar	45.3
Blue collar	11.0
Service	5.6
Other	29.0
Unemployed	9.2
Personal income	
US\$0–US\$14,999	23.4
US\$15,000–US\$34,999	34.7
US\$35,000–US\$74,999	30.7
US\$75,000 and over	11.3
Immigrated for employment	84.7
Years in United States, mean (<i>SD</i>)	16.0 (10.2)
English language proficiency	
Fair/poor	37.8
Good/excellent	62.2
Everyday discrimination, mean (<i>SD</i>)	1.8 (.7)
Employment frustration (yes)	24.3
SRPH (1 = <i>poor</i> , 5 = <i>excellent</i>)	
Poor	1.8
Fair	10.1
Good	37.0
Very good	33.7
Excellent	17.5
SRMH (1 = <i>poor</i> , 5 = <i>excellent</i>)	
Poor	1.0
Fair	6.8

Good	25.9
Very good	33.2
Excellent	33.1

Note. *SD* = standard deviation, SRMH = self-rated mental health, SRPH = self-rated physical health.

TABLE 2

Bivariate and Multivariate Ordered Logistic Regression Models for SRPH

	Bivariate	Model 1	Model 2	Model 3	Model 4
Employment frustration	-0.64 [-0.99, -0.29]**	-0.50 [-0.89, -0.10]*	-0.46 [-0.87, -0.06]*	-0.36 [-0.78, 0.05]	-0.31 [-0.73, 0.10]
Male	0.28 [-0.04, 0.60]	0.29 [-0.07, 0.65]	0.20 [-0.17, 0.56]	0.18 [-0.20, 0.56]	0.21 [-0.16, 0.57]
Age	-0.02 [-0.03, -0.00]**	-0.02 [-0.03, -0.00]*	-0.02 [-0.03, -0.00]**	-0.01 [-0.03, 0.00]	-0.01 [-0.03, -0.00]*
Ethnic group					
Other Asian (reference)					
Vietnamese	-0.31 [-0.66, 0.03]	-0.27 [-0.65, 0.11]	-0.24 [-0.63, 0.15]	0.11 [-0.31, 0.53]	0.02 [-0.37, 0.42]
Filipino	-0.09 [-0.43, 0.25]	-0.05 [-0.42, 0.33]	-0.07 [-0.45, 0.31]	-0.13 [-0.54, 0.27]	-0.10 [-0.51, 0.31]
Chinese	-1.02 [-1.28, -0.75]**	-0.93 [-1.23, -0.63]**	-0.98 [-1.26, -0.71]**	-0.80 [-1.09, -0.50]**	-0.82 [-1.12, -0.52]**
Education	0.10 [-0.04, 0.24]		-0.01 [-0.16, 0.14]	-0.13 [-0.30, 0.05]	-0.12 [-0.30, 0.06]
Occupation					
White collar (reference)					
Blue collar	-0.01 [-0.31, 0.29]		0.03 [-0.30, 0.36]	-0.03 [-0.41, 0.35]	-0.05 [-0.46, 0.35]
Service	0.15 [-0.23, 0.53]		0.46 [0.03, 0.89]*	0.49 [0.06, 0.92]*	0.45 [-0.01, 0.90]
Other	-0.12 [-0.48, 0.24]		0.01 [-0.36, 0.38]	0.03 [-0.36, 0.41]	-0.03 [-0.43, 0.37]
Unemployed	0.03 [-0.43, 0.50]		0.29 [-0.28, 0.87]	0.26 [-0.30, 0.81]	0.22 [-0.35, 0.78]
Personal income					
US\$0-US\$14,999 (reference)					
US\$15,000-US\$34,999	0.11 [-0.26, 0.47]		0.18 [-0.23, 0.60]	0.17 [-0.25, 0.59]	0.12 [-0.31, 0.54]
US\$35,000-US\$74,999	0.39 [-0.02, 0.80]		0.51 [0.06, 0.96]*	0.34 [-0.08, 0.77]	0.32 [-0.09, 0.73]
US\$75,000 and over	0.39 [-0.06, 0.83]		0.54 [-0.07, 1.15]	0.39 [-0.17, 0.95]	0.36 [-0.18, 0.91]
Immigrated for employment	0.26 [-0.16, 0.67]			0.29 [-0.09, 0.67]	0.27 [-0.12, 0.66]
Years in the United States	0.01 [-0.01, 0.03]			0 [-0.02, 0.02]	0 [-0.02, 0.02]
English language proficiency					
Fair/poor (reference)					
Good/excellent	1.07 [0.84, 1.31]**			0.98 [0.57, 1.38]**	0.95 [0.57, 1.33]**
Everyday discrimination	-0.13 [-0.39, 0.12]				-0.21 [-0.48, 0.05]

Note. SRPH = self-rated physical health.

*
 $p<.05$,
**
 $p<.01$.

TABLE 3

Bivariate and Multivariate Ordered Logistic Regression Models for SRMH

	Bivariate	Model 1	Model 2	Model 3	Model 4
Employment frustration	-0.87 [-1.22, -0.51]**	-0.74 [-1.16, -0.33]**	-0.59 [-0.99, -0.19]**	-0.53 [-0.93, -0.12]*	-0.51 [-0.93, -0.09]*
Male	0.39 [0.04, 0.74]*	0.44 [0.04, 0.83]*	0.23 [-0.17, 0.63]	0.20 [-0.20, 0.60]	0.21 [-0.20, 0.61]
Age	0.00 [-0.01, 0.01]	0.00 [-0.01, 0.01]	0.00 [-0.02, 0.01]	0.00 [-0.01, 0.02]	0.00 [-0.01, 0.02]
Ethnic group					
Other Asian (reference)					
Vietnamese	-0.61 [-0.98, -0.25]**	-0.55 [-0.92, -0.18]**	-0.44 [-0.81, -0.08]*	-0.18 [-0.53, 0.17]	-0.21 [-0.59, 0.18]
Filipino	-0.19 [-0.74, 0.36]	-0.19 [-0.79, 0.42]	-0.20 [-0.77, 0.36]	-0.24 [-0.77, 0.30]	-0.22 [-0.75, 0.31]
Chinese	-1.09 [-1.45, -0.74]**	-0.99 [-1.32, -0.65]**	-1.06 [-1.38, -0.74]**	-0.92 [-1.23, -0.61]**	-0.92 [-1.24, -0.61]**
Education	0.25 [0.07, 0.43]**		0.09 [-0.11, 0.29]	-0.01 [-0.23, 0.20]	-0.01 [-0.22, 0.20]
Occupation					
White collar (reference)					
Blue collar	-0.18 [-0.63, 0.28]		0.08 [-0.48, 0.65]	0.11 [-0.39, 0.62]	0.11 [-0.40, 0.62]
Service	-0.25 [-0.81, 0.31]		0.23 [-0.41, 0.87]	0.25 [-0.42, 0.93]	0.25 [-0.44, 0.93]
Other	-0.52 [-0.85, -0.19]**		-0.29 [-0.69, 0.11]	-0.25 [-0.62, 0.12]	-0.26 [-0.65, 0.13]
Unemployed	-0.77 [-1.13, -0.40]**		-0.43 [-1.00, 0.13]	-0.40 [-0.94, 0.14]	-0.41 [-0.96, 0.13]
Personal income					
US\$0-US\$14,999 (reference)					
US\$15,000-US\$34,999	0.05 [-0.43, 0.53]		-0.04 [-0.54, 0.47]	-0.02 [-0.51, 0.48]	-0.04 [-0.53, 0.46]
US\$35,000-US\$74,999	0.76 [0.28, 1.24]**		0.58 [-0.07, 1.24]	0.49 [-0.13, 1.10]	0.48 [-0.13, 1.09]
US\$75,000 and over	0.89 [0.32, 1.46]**		0.66 [-0.16, 1.48]	0.58 [-0.17, 1.34]	0.58 [-0.17, 1.33]
Immigrated for employment	0.00 [-0.41, 0.42]			0.04 [-0.37, 0.45]	0.03 [-0.39, 0.45]
Years in the United States	0.01 [-0.01, 0.03]			-0.01 [-0.03, 0.01]	-0.01 [-0.03, 0.01]
English language proficiency					
Fair/poor (reference)					
Good/excellent	1.16 [0.91, 1.40]**			0.86 [0.55, 1.17]**	0.85 [0.54, 1.15]**
Everyday discrimination	0.03 [-0.21, 0.27]				-0.06 [-0.30, 0.18]

Note. SRMH = self-rated mental health.

*
 $p<.05$,
**
 $p<.01$.