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Nativity status and workplace discrimination in registered nurses: Testing the mediating role of psychosocial work characteristics

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Abstract**Aim:** To examine: (a) whether nativity status was associated with workplace discrimination, and (b) whether this association was mediated through psychosocial work characteristics (job strain, job demands, and job control) among registered female nurses.**Design:** Cross-sectional survey with a self-report questionnaire was conducted.**Methods:** A random sample of 610 native Registered Nurses and a total sample of 188 foreign-born Registered Nurses working in Finland were used. Data were collected between September–November of 2017 and analysed using a counterfactual approach in the causal mediation framework.**Results:** After adjusting for several potential confounders, foreign-born nurses scored higher on workplace discrimination than native nurses. Approximately 20% of the association between nativity status and workplace discrimination was mediated through job control. Job demands and job strain were unlikely to mediate this association.**Conclusion:** The study provides further evidence that migrant status is associated with a higher risk of workplace discrimination among nurses. Lower levels of control over one's own job may partly contribute to the higher risk of workplace discrimination in foreign-born women nurses.**Impact:** Our study addresses the relationship between nativity status and workplace discrimination among female nurses and its mediating factors. The findings suggest that healthcare organization leaders need to be aware of the increased risk of workplace discrimination among migrant nurses. Moreover, healthcare organizations need to consider psychosocial work characteristics, including job control, in the efforts aimed to prevent and reduce discrimination against their foreign-born employees.**KEYWORDS**

female nurses, job control, job demands, job strain, migrants, nativity status, nurses, workplace discrimination

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1 | INTRODUCTION

Global migration of healthcare professionals, such as Registered Nurses, has been on the rise in recent decades. The flow of the workforce has been predominantly from low- and middle-income countries to high-income countries (OECD, 2015). One of the major reasons for such a pattern of migration is the growing shortage of nursing personnel that many of the developed countries are facing due to the rapid ageing of their populations and the nursing workforce itself (Campbell, 2013; Simoens, Villeneuve, & Hurst, 2005) as well as high nurse turnover (Hayes et al., 2012). According to the latest estimates (OECD, 2015), foreign-born nurses accounted on average for a 14% share of the nursing staff in the OECD area during 2010–2011. New Zealand, Switzerland, Australia, and Luxembourg had the highest proportion of foreign-born nurses in the OECD with more than 30%. The USA, however, was the main country of destination for migrant nurses, receiving 44% of all foreign-born nurses. Finland still has a relatively low rate of foreign-born nurses (2.4%), although the proportion is increasing. During 2000–2012, the number of migrant nurses in the country has been shown to increase nearly fourfold (OECD, 2015).

A growing body of research (see a review in Schilgen, Nienhaus, Handtke, Schulz, & Mosko, 2017) has demonstrated that migrant nurses are at higher risk of workplace discrimination than their native counterparts. Evidence from a Danish study (Hogh, Carneiro, Giver, & Rugulies, 2011) showed that the prevalence of discrimination was 12.9% and 15.2% among nurses migrating from Western and non-Western countries, respectively, and 8.7% among native nurses during the first year of work after graduation. Moreover, both above-mentioned migrant groups of nurses were approximately five times more likely than native nurses to report the experience of discrimination from patients or residents. Despite this knowledge, little is known about the mediating factors that contribute to the increased risk of workplace discrimination in foreign-born nurses.

2 | BACKGROUND

Workplace discrimination faced by migrant nurses is one of the most important issues related to the international migration of nursing personnel (Kingma, 2006). This is because such form of discrimination may have significant health, social, and economic costs. For instance, the experience of discrimination in the workplace has been found to be the leading cause of impaired psychological and physical health among migrant and minority nurses (Schilgen et al., 2017). Furthermore, discrimination at work has been linked to long sickness absence spells (Slany et al., 2014), decreased work performance, and poorer staff morale (Pung & Goh, 2017). It has also been shown that nurses experiencing workplace discrimination have reduced job satisfaction, contributing to their increased turnover intention (Shields & Wheatley Price, 2002).

Previous studies have pointed to various factors that could be potential candidates for mediators of the association between nativity status and the experience of workplace discrimination. Those

factors are related, among others, to working conditions which, according to some indicators, appear to be poorer among migrant than native workers (see a review in Sterud et al., 2018). The evidence covers different categories of adverse working conditions, including psychosocial work characteristics mostly conceptualized by the Job Demand-Control (JDC) model (Karasek, 1979; Karasek & Theorell, 1990), one of the leading models describing the psychosocial work environment and its link to well-being (see a meta-analysis in Kivimaki et al., 2012).

According to the JDC model, job strain—the combination of high job demands and low job control—can result in the experience of psychological stress. Job demands are commonly operationalized as time pressure, a heavy workload, or highly demanding tasks. Job control consists of: (a) skill discretion referring to the level of skills and creativity required on the job and possibilities to decide which skills to use; and (b) decision authority, that is, control over job performance that allows the employee to make decisions about how and when a job task is completed. Indirect evidence suggests that job strain could potentially be one of the candidates for a mediator of the association between nativity status and the experience of discrimination in the workplace. Some studies (Sterud et al., 2018) have reported that migrant workers might be more likely to report lower levels of job control and higher levels of job demands compared with native workers. Lower levels of job control, in turn, have been associated with an increased risk of workplace discrimination among black workers (Meyer, 2014), whereas work stress interventions have been documented to improve communication and cooperation among healthcare employees (Niks, de Jonge, Gevers, & Houtman, 2018). Due to the indirect nature of this evidence, however, the mediating role of job strain (or its two components) in the relationship between nativity status and workplace discrimination remains uncertain.

It is plausible that the experience of lower job control and higher job demands among foreign-born nurses compared with their native-born counterparts may generate a sense of discrimination. It has previously been shown that migrant care employees working in Sweden had a higher workload than their native-born colleagues (Jonson & Giertz, 2013). Furthermore, in prior studies (Allan & Larsen, 2003; Gregory, 2018; Kingma, 2006), foreign-born nurses reported that their expertise and skills are often brought into question by physicians, colleagues, and student nurses; as a result, they are required to work under unnecessary supervision of native nurses, receiving low-level tasks where occasions to apply their skills and knowledge are limited. Another study also revealed that migrant nurses in the UK have less professional development opportunities compared with domestic nurses (Allan & Larsen, 2003).

3 | THE STUDY

3.1 | Aims

The aim of the present study was to examine: (a) whether foreign-born and native nurses differed in frequency of workplace

discrimination; and (b) whether psychosocial work characteristics mediated the association between nativity status and the experience of workplace discrimination among registered female nurses. These study objectives were explored using a counterfactual approach in the causal mediation framework suggested by Imai, Keele, and Tingley (2010), VanderWeele (2014), and Vansteelandt (2012).

3.2 | Design

In the present study, a cross-sectional design was used.

3.3 | Participants

Information on all Registered Nurses in Finland is stored in the Central Register (JulkiTerhikki) held by the National Supervisory Authority for Welfare and Health (Valvira). We drew two independent samples – a sample of native Finnish nurses and a total sample of foreign-born nurses working in Finland.

The native nurses' sample consisted of 2001 persons selected randomly from the total population of Registered Nurses in Finland ($N = 114,668$; data obtained from the Central Register in 2018). Our inclusion criteria were: born in or after 1950, licensed to practice nursing in Finland, and having a postal address in Finland.

The Central Register also contains information on 617 foreign-trained Registered Nurses meeting the criteria. Since this group could include native Finns who had completed their education outside the country, we excluded nurses whose mother tongue was either Finnish or Swedish (the two official languages in Finland; $N = 128$). Consequently, a sample of 489 foreign-born nurses was obtained.

Of these two samples, e-mail or postal addresses were obtained for 1,790 native nurses and 474 foreign-born nurses. We sent an e-mail invitation with a link to the questionnaire (available in Finnish and Swedish for native nurses and in Finnish, Swedish, Estonian, Russian, and English for foreign-born nurses) to nurses whose e-mail addresses were obtained and a postal invitation to the electronic survey questionnaire to nurses for whom e-mail addresses were not available. Thereafter, we sent two reminders to those nurses who had not responded during the first round (in the second reminder, a printed version of the questionnaire available only in Finnish was included). In total, 781 (43.6%) native nurses and 222 (46.8%) foreign-born nurses responded to our survey. We excluded those respondents from the native nurses' sample who had not been born in Finland ($N = 26$) and those respondents from the foreign-born nurses' sample whose country of birth was Finland ($N = 3$). Furthermore, because the minimum retirement age in Finland is 63, nurses aged 63 and over were excluded ($N = 18$). Due to a small number of men in the group of migrant nurses ($N = 12$), all male nurses were also excluded ($N = 79$). Lastly, we excluded nurses with missing values on any of the study variables ($N = 79$; more detailed information on the number of missing values is presented in Table S1 in Supporting

Information). Thus, our final sample comprised 610 native nurses and 188 foreign-born nurses.

3.4 | Data collection

Data were collected using a self-report questionnaire in the fall of 2017 (14 September–5 November) in Finland as part of the COPE (Competent Workforce for the Future) project.

3.5 | Instruments

3.5.1 | Workplace discrimination

Discrimination was measured by asking whether during the past 12 months the participants had experienced personal discrimination in their workplace from: (a) superiors or management; (b) colleagues; or (c) patients/clients. Discrimination was defined as the unequal treatment of people (without an acceptable reason) and placing them in an unfavourable position on the basis of their belonging to a certain group. Three items were judged on a scale of 1 (*rarely or never*) – 5 (*very often or continuously*). The mean score of the responses was calculated. Workplace discrimination was treated as a continuous variable.

3.5.2 | Psychosocial work characteristics

Job demands were measured with two items derived from the Nurse Stress Index (NSI; Harris, 1989; Kivimaki & Lindstrom, 1992). The items were as follows: *Constant rush and pressure due to uncompleted work* and *Not enough time to perform work properly*. The respondents were asked to rate on a 5-point Likert scale (1 = *hardly ever* – 5 = *very often or continuously*) to what extent these issues had disturbed, worried, or stressed them in their job during the past 6 months. Job control was measured with three items derived from the Skill Discretion subscale from Karasek's Job Content Questionnaire (Karasek, 1985). The items were: *I am required to learn new things in my job*, *I get to do a variety of things in my job*, and *I have an opportunity to develop my personal special abilities*. The participants were asked to assess to what degree these statements describe their job using a 5-point Likert scale (1 = *fully disagree* – 5 = *fully agree*). The Decision Authority subscale was not included in our study questionnaire to make the survey less time-consuming. As migrant healthcare professionals have previously been shown to work in low-level positions, which do not use their skills and qualifications (Aalto et al., 2014; Mick, Lee, & Wodchis, 2000), we expected that Skill Discretion may be more important than Decision Authority for studies involving migrant employees. For job demands and job control (both used as continuous variables), the mean score of the responses was computed.

Job strain was calculated as a linear term by subtracting the mean job control score from the mean score of job demands

(Landsbergis, Schnall, Warren, Pickering, & Schwartz, 1994). The use of job strain as a continuous variable was motivated by the fact that data-driven cut-off points may create difficulty in comparing results across different studies and that dichotomization may lead to a loss of statistical power and, as a result, to an imprecise estimation (MacCallum, Zhang, Preacher, & Rucker, 2002). Furthermore, in the continuous form of job strain, the contributions of job demands and job control are equally weighted (Landsbergis et al., 1994).

3.5.3 | Potential confounders

In addition to age, we included frequency of contacts with patients from different cultures and frequency of contacts with colleagues from different cultures as potential confounders and treated them as continuous variables. These two variables were assessed by the following questions: *How often on average do you meet patients from different cultures in your work?* And: *To what extent do you deal with colleagues with a different cultural background in your workplace?* The response alternatives were: 1 (*not at all*); 2 (*daily*); 3 (*weekly*); 4 (*monthly*); and 5 (*less than monthly*). For the purpose of statistical analysis, the alternatives were classified into three categories: 1 (*less than monthly/not at all*), 2 (*monthly*), and 3 (*daily/weekly*).

3.6 | Ethical considerations

The study was approved by the ethics committee of the National Institute for Health and Welfare in Finland (number 2/2017, §753–755). Completion and submission of the questionnaire was considered evidence of consent to participate. The survey script reminded the respondents of no obligation to complete and submit the questionnaire.

3.7 | Data analysis

The statistical analysis was conducted in four steps. First, we tested the mean differences in workplace discrimination between native and foreign-born nurses using the analysis of variance (one-way ANOVA). Second, we evaluated whether the association between nativity status and workplace discrimination was robust to confounding by age and frequency of contacts with patients and colleagues from different cultures using the marginal structural modelling (MSM) approach with inverse probability weighting for exposure (Robins, Hernan, & Brumack, 2000; VanderWeele, 2009). This approach produces a pseudo-population where the joint distribution of covariates (potential confounders) is balanced between two exposure groups. Third, we conducted linear regression models adjusting for age and frequency of contacts with patients and colleagues from different cultures to examine whether foreign-born and native nurses differed in levels of job strain, job demands, or job control and whether these three psychosocial

work characteristics were associated with workplace discrimination (six models in total). Fourth, we ran a causal mediation analysis with the psychosocial work characteristics as potential mediators adjusting for age and frequency of contacts with patients and colleagues from different cultures. The effect decomposition of the total effect into the natural direct and indirect effects was conducted in the causal mediation analysis framework. The 95% confidence intervals were calculated using robust standard errors based on the sandwich estimator and the proportions mediated were calculated as a ratio of the natural indirect effect to the total effect (VanderWeele, 2013).

To test for differences between nurses included in the final sample and nurses with missing values on the study variables and for differences between native and foreign-born nurses in descriptive characteristics, we used the one-way ANOVA and the Mann-Whitney *U* test. Data analysis was conducted using R statistical software version 3.5.1 (the medflex package) and Stata/SE 14 software.

3.8 | Validity and reliability

The measures of workplace discrimination, job demands, and job control have previously been used in studies among native and foreign-born healthcare professionals working in Finland (Aalto et al., 2014; Heponiemi, Hietapakka, Lehtoaro, & Aalto, 2018) which supported their predictive validity. Those scales have not, however, undergone a complete psychometric validation. In the present study, the three measures showed acceptable to high internal consistency reliability ($\alpha = .61$, $\alpha = .91$, and $\alpha = .80$, respectively).

4 | RESULTS

The analysis showed that nurses included in the final sample and nurses who had missing information on at least one of the study variables did not differ in any of the study variables (all *ps* > .05). The characteristics of the study participants by nativity status are presented in Table 1. Foreign-born nurses were older than native nurses (mean = 42.19, *SD* 9.62, range = 24–61 vs. mean = 34.36, *SD* 8.87, range = 23–61, *p* < .001). Migrant nurses reported higher frequency of workplace discrimination compared with native nurses (mean = 1.85, *SD* 0.82 vs. mean 1.57, *SD* 0.66, *p* < .001).

After inverse probability weighing, the distribution of covariates was balanced between native and foreign-born nurses and as can be seen in Table 2, the MSM fitted relatively well and was effective in balancing the covariates across groups. The weighted estimate for the association of nativity status with workplace discrimination was significant (*b* = 0.26, 95% CI [0.09, 0.43], *p* = .003) providing evidence that the association between nativity status and workplace discrimination was unlikely to be confounded by age or frequency of contacts with patients and colleagues from different cultures.

TABLE 1 The Characteristics of the Study Sample Stratified by Nativity Status ($N = 798$)

	Native nurses ($N = 610$)		Foreign-born nurses ($N = 188$)		<i>p</i> for difference
	<i>N</i> (%)	Mean (<i>SD</i>)	<i>N</i> (%)	Mean (<i>SD</i>)	
Age		34.36 (8.87)		42.19 (9.62)	<.001 ^a
Frequency of contacts with patients from different cultures					.598 ^b
Less than monthly/not at all	189 (31.0)		72 (38.3)		
Monthly	147 (24.1)		27 (14.4)		
Daily/weekly	274 (44.9)		89 (47.3)		
Frequency of contacts with colleagues from different cultures					<.001 ^b
Less than monthly/not at all	231 (37.9)		27 (14.4)		
Monthly	65 (10.7)		11 (5.9)		
Daily/weekly	314 (51.5)		150 (79.8)		
Job demands		3.76 (1.06)		3.47 (1.18)	.001 ^a
Job control		4.38 (0.76)		4.11 (0.96)	<.001 ^a
Job strain		-0.62 (1.30)		-0.64 (1.64)	.867 ^a
Workplace discrimination		1.57 (0.66)		1.85 (0.82)	<.00

Abbreviations: Job strain, job demands minus job control; *N*, number of participants; *p*, probability; *SD*, standard deviation.

^a*p*-value derived from the one-way ANOVA.

^b*p*-value derived from the Mann–Whitney *U* test.

TABLE 2 Distribution of covariates between native and foreign-born nurses from inverse probability weighting (pseudo-samples)

	Native nurses ($N = 801.42$)	Foreign-born nurses ($N = 798.54$)	<i>SMD</i>
	Mean (<i>SD</i>)	Mean (<i>SD</i>)	
Age	36.42 (10.19)	37.10 (8.86)	0.071
Frequency of contacts with patients from different cultures	2.14 (0.86)	2.23 (0.87)	0.108
Frequency of contacts with colleagues from different cultures	2.26 (0.91)	2.17 (0.94)	0.088

Abbreviations: *N*, number of participants; *SD*, standard deviation; *SMD*, standardized mean difference.

Results from linear regression models showed that foreign-born nurses had lower levels of job control ($b = -0.29$, 95% CI [-0.43, -0.16], $p < .001$) but also lower levels of job demands ($b = -0.35$, 95% CI [-0.54, -0.15], $p < .001$) compared with native nurses. There was no difference in levels of job strain between the two groups ($b = -0.06$, 95% CI [-0.31, 0.19], $p = .662$). Higher levels of job demands ($b = 0.11$, 95% CI [0.06, 0.15], $p < .001$) and job strain ($b = 0.12$, 95% CI [0.09, 0.16], $p < .001$) as well as lower levels of job control ($b = -0.18$, 95% CI [-0.24, -0.12], $p < .001$) were associated with higher frequency of workplace discrimination. Thus, the associations between the psychosocial work characteristics and workplace discrimination had expected directions. However, because

TABLE 3 The results of the mediation analysis with job control as a mediator ($N = 798$)

	<i>b</i>	95% CI	<i>p</i>
NDE	0.21	[0.07, 0.34]	.004
NIE	0.05	[0.02, 0.08]	.001
TE	0.25	[0.11, 0.39]	<.001

Note.: Models adjusted for age and frequency of contacts with patients and colleagues from different cultures.

Abbreviations: *b*, unstandardized regression coefficient; CI, confidence interval; *p*, probability; NDE, natural direct effect; NIE, natural indirect effect; TE, total effect.

job strain was not associated with nativity status and because job demands were associated with nativity status in the unexpected direction, only job control was tested as a potential mediator in the further analysis. The results of the mediation analysis performed on the whole sample are presented in Table 3. We found that approximately 20% of the association between nativity status and workplace discrimination was estimated to be mediated through job control ($p = .001$).

5 | DISCUSSION

The results of the present study showed that foreign-born nurses reported higher frequency of workplace discrimination compared with native nurses. Furthermore, foreign-born nurses had lower levels of job control and, unexpectedly, lower levels of job demands than

their native counterparts. There was also no difference in job strain levels between the two groups. Thus, job demands and job strain were unlikely candidates for mediators of the association between nativity status and workplace discrimination. We found that in the fully adjusted model, the association between nativity status and the experience of workplace discrimination was partly mediated through job control.

A mixed-method study (Stevens, Hussein, & Manthorpe, 2011) showed that migrant care workers in England experience workplace discrimination. Similar results have been reported by a review of quantitative and qualitative studies on migrant nurses in the US, Canada, and the UK (Walani, 2015). Moreover, a recent literature review including 14 empirical studies (Schilgen et al., 2017) has concluded that migrant and minority nurses are more likely to face discrimination in their workplace compared with their native counterparts. Given this, our study provides further evidence for an increased risk of discrimination among foreign-born nurses.

Our findings concerning the mediating role of job control are in line with the conclusion of a literature review (Sterud et al., 2018) that, compared with natives, migrant employees are at higher risk of having jobs with a lower level of autonomy and opportunities for development. Similarly, Chinese nurses working in Australia reported having little chances for further professional training, thus little opportunities for career advancement (Ho, 2008). Moreover, in agreement with the present results, our previous study (Heponiemi et al., 2018) found that job control is negatively associated with integration-related stress and workplace discrimination among foreign-born physicians. Prior research (Eneroth, Gustafsson Senden, Schenck Gustafsson, Wall, & Fridner, 2017) has also shown that migrant physicians with lower control over their work pace have an increased risk of turnover intention. Overall, it seems that low control over one's own job is a common problem among migrant nurses and that this may predispose migrant women nurses to a more frequent experience of workplace discrimination.

Our results suggest that job demands and job strain may not contribute to the increased risk of workplace discrimination among overseas nurses. While in the above-mentioned review by Sterud et al. (2018) nine studies showed either higher levels of job demands among migrants than natives or non-significant differences between the two groups, only one study provided compatible evidence with our results. This unexpected finding could be explained by the fact that migrant nurses' skills and qualifications are often undermined, resulting in the allocation of more duties to native nurses (Allan & Larsen, 2003; Gregory, 2018; Kingma, 2006). In addition, native-born nurses are likely to be asked to incorporate migrant nurses into the work life which means an increase in native nurses' workload (Kingma, 2006). Lower levels of job demands among migrant nurses could further account for a lack of differences between native and foreign-born nurses in job strain, which was observed in our data. To our knowledge, no previous research has investigated such differences by nativity status. There is, however, evidence suggesting that

the risk of reporting job strain is similar across different racial/ethnic groups among high-skilled workers, including Registered Nurses (Hurtado et al., 2012).

5.1 | Study limitations and strengths

The results of the present study need to be interpreted in light of several limitations. Our study was based on cross-sectional data that limit the possibility of drawing causal inferences. This refers especially to the association between job control and discrimination in the workplace, the direction of which has not yet been well-established. To our knowledge, only one prospective study has addressed this gap (Tuckey & Neall, 2014), suggesting that the association may go from workplace bullying to job resources. Overall, given the sparse evidence for the direction of this relationship, we recommend that more longitudinal studies are needed to determine whether the association of interest is more likely to be unidirectional or bidirectional. Furthermore, the use of self-report measures may have introduced reporting and common method bias. To mitigate the risk of reporting bias, we assured the participants about the anonymity and confidentiality of their information. To reduce the risk of common method bias, we used only measures with an acceptable level of reliability ($\alpha > .60$). In addition, to make sure that the sample of foreign-born nurses would not include native nurses who had obtained their education abroad, those nurses whose mother tongue was either Finnish or Swedish were excluded. In consequence, the foreign-born nurses' sample did not include nurses who had been born in Sweden. Nonetheless, it has previously been shown that Swedish nurses constitute a rather small proportion (approximately 10%) of the migrant nurses in Finland (Ailasmaa, 2015). Moreover, because our study was observational (i.e., no influence on the study variables was involved), the possibility of bias due to residual or unmeasured confounding cannot be ruled out. Further, the response rate to the survey questionnaire was relatively low (43.6% for native nurses and 46.8% for foreign-born nurses), therefore non-response bias may have occurred. Given, however, that a response rate of 41.0% has been reported to be adequate for an initial sample of 1,000 participants (Nulty, 2008), the risk of non-response bias in the native nurses' group was low. Similarly, the risk of biased results due to missing values among those nurses who responded to the questionnaire (incomplete response bias) cannot be excluded. The fact, however, that nurses included in the final sample and nurses with missing values did not differ in any of the study variables suggests that such risk was rather low. Finally, the measures used in our study have not undergone a complete validity testing. Future studies with fully validated scales are needed to verify our results. The strength of our study lies in the inclusion of a relatively large, random sample of native nurses selected from the entire population of Registered Nurses in Finland and a total population of foreign-born Registered Nurses licensed to work in Finland, increasing the generalizability of the results. Moreover, we implemented recently

developed methods to assess mediation in the causal mediation framework.

6 | CONCLUSION

Our results provide further evidence that migrant status is associated with a higher risk of workplace discrimination among nurses. Furthermore, lower levels of opportunities to control one's own job may contribute to the increased risk of experiencing workplace discrimination among foreign-born nurses. Given the above-mentioned evidence, we recommend that healthcare organization leaders are aware of the increased vulnerability to workplace discrimination among migrant nurses and that they consider means to reduce it. For instance, helping nurses to improve their cross-cultural empathy (sensitivity in cross-cultural encounters) through cross-cultural training, both previously documented to be associated with lower likelihood of workplace discrimination among foreign-born physicians (Heponiemi et al., 2018), could be beneficial. Similarly, mindfulness-based interventions, which have been shown to be effective in increasing empathy in healthcare professionals (Lamothe, Rondeau, Malboeuf-Hurtubise, Duval, & Sultan, 2016), could also be of value. In addition, we recommend that healthcare organizations need to consider psychosocial work characteristics, such as job control, in the efforts aimed at preventing and reducing discrimination against their foreign-born employees. For example, providing migrant nurses with equal opportunities as their native-born counterparts for learning new skills and increasing the variety of tasks assigned to their jobs could be helpful. To do so, it may be relevant to designate human resource professionals to conduct regular and anonymous surveys to ascertain a satisfactory level of job control among foreign-born nurses. In case of lower levels of job control, human resource personnel and healthcare managers should consider job restructuring that would diversify nurse job content and, in turn, help nurses to acquire new competencies. Such restructuring may require offering training programs to prepare nurses to fulfil newly assigned duties.

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CONFLICT OF INTEREST

No conflict of interest has been declared by the authors.

AUTHOR CONTRIBUTIONS

All authors have agreed on the final version and meet at least one of the following criteria [recommended by the ICMJE (*<http://www.icmje.org/recommendations/>)]: substantial contributions to conception and design, acquisition of data or analysis, and interpretation of

data; drafting the article or revising it critically for important intellectual content.

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