The Work Environment of Immigrant Employees in Sweden—a Systematic Review

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Abstract

The aim of this systematic review was to summarize and synthesize research results focusing on the work environment of employees with an immigrant background in Sweden. We focus on the main conditions identified in the working environment of immigrant employees and how these conditions may affect their health and well-being. The concept of “minority stress” and the attachment theory are used to understand and interpret the findings. We systematically searched for literature published between the years of 1990 and 2020 in four databases, Web of Science, PubMed, SocIndex, and Academic Search Elite. We started the selection process by reading title and abstracts, then proceeded to read a selection of full-text studies and eliminated those that did not fulfil the inclusion criteria. We did a quality assessment on the full-text studies based on the MMAT-tool, and then performed a narrative synthesis of the results. The results show that immigrants experience several stressors in their work environment, including physical, psychological, and social risks. These risks are, among other things, associated with the nature of the jobs that immigrants are overrepresented in, with minority-related stressors such as discrimination, harassment, and threats on the basis of ethnic background, and with the lack of social support from managers and colleagues. Results also highlight beneficial factors in the immigrants’ working environment and show the importance of a supportive, inclusive, and empowering management. Our main conclusion is that Swedish workplaces need to introduce more active measures to raise awareness of and combat workplace discrimination, work harder to promote inclusion at the workplace, and eliminate physical, psychological, and social health hazards specific to immigrant employees. The leadership and management have an important role to play here, as does the employees’ trade unions and its special functions.

Keywords Work environment · Labor market · Working conditions · Workplace discrimination · Immigrant · Integration

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Introduction

In many ways, participating on the labor market is essential for a person's health. It provides economic security, an arena for social interaction, and can also help foster a sense of self-fulfilment (cf. Ahonen et al., 2007; Sterud et al., 2018). Nevertheless, working conditions can have both positive and negative impacts on people's physical, mental, and social health. The negative effect of an inadequate working environment on employees' health and well-being has been extensively highlighted within work environment and health research (see, e.g., de Vos & Kirsten, 2015; Karasek, 2008; Pien et al. 2019; Rasmussen et al., 2011; Stansfeld & Candy, 2006; Shen & Slater, 2021). Workplace health risks and poor working conditions often breed mental and physical health problems, leading to, e.g., sickness absence or even occupational fatalities (Takala et al., 2009).

In this study, the concept of work environment refers to a number of organizational and social conditions, both physical and psychosocial, that may have an impact on the health and well-being of employees. Problems in the physical work environment include, among other things, heavy physical and monotonous work assignments, harming/non-ergonomic physical work positions, and insufficient visual ergonomics (Kolstrup, 2012; Lund et al., 2006). Organizational and social conditions that have detrimental effects on employees' health and well-being may for example be inappropriate skill requirements and workload (Canivet et al., 2013), insufficient resources for managing the tasks and lack of control over the work process (Harvey et al., 2020), poor social support and collaboration with colleagues (Lowe et al., 2020), bullying and discrimination (Okechukwu et al., 2014), and shortcomings in management and governance (AFS, 2015:4).

These problems have shown to be even more aggravated in the case of immigrant workers across Western countries. As shown by Sterud et al. (2018) in a systematic review focusing on the occupational health of immigrants in Europe and Canada, bullying and perceptions of workplace discrimination are more prevalent among immigrants as compared to natives. The same applies to the risks of workplace injuries and disadvantages in terms of self-reported health and mental distress.

This also seems to be the case in Sweden (Svensson et al., 2015). For example, immigrant employees in the agricultural industry are exposed to more harmful working conditions, including an increased accident risk, exposure to chemicals that are harmful to health, threats and violence, discrimination, long working hours, and lower pay compared to the native-born population.

According to Statistics Sweden (2019), 1 048 000 immigrants in Sweden are economically active, whereas 955 000 of them are employed. Although a large and increasing share of the working population in Sweden is foreign-born, relatively few studies have focused on their working environment. Identifying and eliminating risk factors in immigrants' working environment contributes to a successful labor market integration. Risk factors can deteriorate the health of immigrant workers in a long-term manner and eventually lead to an early retirement and social exclusion (cf. Dunlavy & Rostila, 2017).

To our knowledge, there are no systematic reviews focusing on the working environment of immigrant employees in Sweden today. The Swedish case may be interesting in an international perspective, against the background of the long tradition of unionization and collective bargaining and an extensive legislation on work environment and anti-discrimination acts, in addition to a relatively large volume of receiving immigrants in recent decades. Traditionally, trade unions have played an important role for immigrant workers in Sweden, contributing to labor market inclusion for many newly arrived immigrants (Boräng et al., 2020). As in other countries with strong union movements, the trade unions in Sweden have insisted on narrowing the rights gap between native and immigrant workers over the years (Knocke, 2000). Nevertheless, many inequalities persist for immigrant employees at the Swedish labor market, and more knowledge is required to enhance an understanding of mechanisms involved in these inequalities. A more comprehensive picture of immigrant employees' working environment can be an important steppingstone to further studies in the area.

A systematic review was chosen as the design of the current study to identify and summarize the findings of studies published between 1990 and 2020 dealing with the working environment of immigrants in Sweden. In this review, an immigrant employee is defined as someone who is foreign-born and who actively participates in the labor market of the host country. We chose not to look at the country of origin of the immigrants, since there is a lack of data in respect to this in many studies. However, where studies report on this, we have taken immigrant background into account (e.g., as Western or non-Western background). Other aspects, such as religious belonging, migrant status, and length of stay in Sweden, are also interesting factors but we have considered them to be beyond the scope of this review.

The overall aim of this systematic review was to summarize and synthesize existing research results dealing with the work environment of immigrant employees in Sweden. This was investigated through the following two research questions:

1. What main physical and psychosocial work conditions are identified in studies about the work environment of immigrant employees in Sweden?
2. How, according to these studies, do these conditions affect the health and well-being of immigrant employees in Sweden?

Work Stressors and Their Impact on the Health and Well-Being of Immigrant Employees

This review employs the concept of “minority stress” and the attachment theory to analyze and interpret the results. In this section, we will provide an introduction of these two perspectives, and explain how they can enhance the understanding of immigrants' work environment and its impact on their health and well-being.

Like other minorities, people with an immigrant background may experience so-called minority stress at work, which, according to Meyer's (2003) definition, is “excess stress to which individuals from stigmatized social categories are exposed

as a result of their social, often a minority, position” (p. 675). Meyer (2003) initially developed the concept of minority stress to study stressors and coping mechanisms of members of the LGBT community and focused on the impact of such stressors and coping strategies on their health outcome. Since then, many scholars have used the minority stress model to show how marginalized groups of society face unique minority-related stressors that negatively affect their physical and mental health (Arbona & Jimenez, 2014; Botha & Frost, 2020; Frost et al. 2015; Lehavot & Simoni, 2011).

Extending Meyer’s minority stress model to studying immigrants, one can assume that stress processes, including experiences of prejudices, discrimination, and social exclusion at work, can have a significant effect on the health outcome of immigrant employees. For example, Valentín-Cortéz et al. (2020) found that undocumented latinx immigrants experienced unique stressors related to their minority identity, leading to feelings of anxiety and a deteriorated psychological health. The sources of these unique stressors were, among other things, fear of being deported and discrimination, caused by a growing anti-immigrant social environment. In a similar vein, Jung et al. (2007) found a positive association between experiences of discrimination and depressive symptoms among international students in the USA.

However, research also shows that minority members are active agents who develop strategies to deal with such stressors. Saasa (2019), for example, found that African immigrants in the USA cope with discrimination and social exclusion by using active problem solving, religion, or by seeking support from others. Moreover, Showers (2015) found that African women use a coping strategy of distancing themselves from work areas with a higher risk of being discriminated against. These findings suggest that minority group members are not only passive recipients of minority-related stressors but that they also respond to negative or stressful situations in different ways.

Social exclusion, in particular, can be experienced as a huge stressor, since social support at work is important for the health and adjustment of workers (Nelson & Quick, 1991). Attaching emotional bonds with co-workers can mitigate the negative effect of work-related stress (Karasek & Theorell, 1990) and decrease the risk of burnout (Houkes et al., 2003). These findings are underlined by the influence of “attachment theory” in organizational research, where many scholars demonstrate the association between social relations at work and mental health, job adjustment, and job satisfaction (Yip et al., 2018; Littman-Ovadia et al., 2013; Tziner et al., 2014; Schirmer & Lopez, 2001). The attachment theory, initially developed by Bowlby (1982) and Hazan and Shaver (1990), is focused on the attachment behavioral system, a psychological program that governs the support-seeking behavior of individuals in distressed situations. The attachment behavioral system is triggered by events that result in feelings of insecurity, stress, and threat, and deactivated when receiving social support that reinstalls a sense of safety (Mikulincer et al., 2002).

In a workplace setting, scholars have found an association between managerial leadership and perceived stress, self-rated health, and the frequency of being on sick leave due to overstrain (Westerlund et al., 2010). An absent or inconsistent leadership support may activate more insecure, sensitive, and anxious types of behavior among employees (Hudson, 2013; Wu et al., 2014). In contrast, managerial support,

including acknowledging employees' contributions, being attentive to their health, and continuously providing feedback, has been found to foster more resilient and resourceful employees (Kuntz et al., 2017).

Methods

During October 2020, we searched systematically for the period 1990–2020 in the four databases *Web of Science*, *PubMed*, *SocIndex*, and *Academic Search Elite*. Literature found through these databases was then imported to Endnote for title and abstract screening. Once irrelevant articles and duplicates were removed, a second screening was conducted, including a full-text reading of the articles. The reference lists of these full-text articles were also screened for additional relevant articles. To map out the number of studies identified, included, and excluded, we used the PRISMA flow diagram (Fig. 1) for documentation during the screening of studies.

Fig. 1 The PRISMA 2009 flow chart

Search Strategy

To improve the focus and searches for the study, the PICO tool (see, e.g., SBU, 2017) was employed and resulted in the following outline: *(P)opulation*: immigrant workers in Sweden; *(I)ntervention*: work environment and working conditions; *(C)omparison*: where studies report on outcomes in both migrants and native workers, native workers will be the comparator — otherwise, comparison is not applicable; and *(O)utcome*: occupational health (mental, physical, or social), occupational well-being, occupational exposure, and work-related risks.

The literature searches were based on three search terms: *Work environment*, *Immigrants*, and *Sweden*. These three terms were used to find relevant key words, including synonyms and various types of spelling. To find more relevant search terms for our database searches, we complemented the list of key words by looking at title/abstracts of key articles and by searching the Cochrane library for other reviews close to our subject area.

The number of studies found in Web of Science was 26, in PubMed 195, in SocIndex 23, and in Academic Search Elite 72. Three additional studies were found by searching the reference lists of relevant full-text articles. After removing all duplicates, 264 records remained (see Fig. 1 for more details).

Inclusion/Exclusion Criteria

While reading the titles and abstracts, all articles that did not mention aspects related to working environment, immigrant populations, and in which the empirical data was not conducted in a Swedish context were excluded. All articles that were assessed as relevant or potentially relevant were read by one of the authors. Articles that did not fulfil the inclusion criteria were excluded (see Appendix Table 1). Moreover, pilot studies and reviews were excluded (although the reference lists of reviews were scanned for relevant papers that had not appeared in the database searchers). For inclusion, the articles had to meet the following criteria:

1. The study included and reported data for immigrant workers (foreign-born individuals participating in paid work).
2. The study focused directly on working environmental issues, e.g., working conditions, occupational health or exposures, and job satisfaction, of immigrant workers.
3. The study is based on empirical data from the year 1990 and onwards.
4. The study focused on Swedish workplaces.
5. The study was peer-reviewed.
6. The study was written in the Swedish or English language.

Quality Assessment

Although the included studies here were all peer-reviewed, it is still relevant to make a critical assessment of the quality of relevant studies (cf. Gough et al., 2012). Since we included both qualitative and quantitative studies in this review, and since some of the relevant studies used a mixed-methods approach, we decided to employ a tool that facilitates a quality assessment of various methodological studies, i.e., the Mixed Methods Appraisal Tool (MMAT). The MMAT checklist (Hong et al. 2018) allows for a quality assessment of five types of original studies (see Appendix 3 for details of how the included studies were assessed): qualitative studies, randomized and non-randomized quantitative studies, descriptive quantitative studies, and mixed-method studies (Hong et al., 2018; Pace et al., 2012). This review only includes qualitative, quantitative descriptive, and mixed-method studies, and so we have only applied questions relevant for these study types to assess the quality of the included studies. Depending on whether the answers to the screening questions were positive or negative, the studies were assessed as being of either low, medium, medium–high, or high quality. The quality of the studies was assessed according to the following logic:

- Answer to 0 questions is no/can't tell = High quality
- Answer to 1 question is no/can't tell = Medium–high quality
- Answer to 2 questions is no/can't tell = Medium quality
- Answer to 3–5 questions is no/can't tell = Low quality

All 16 studies that made it to the quality screening were assessed as having either medium ($n=3$ studies), medium–high ($n=6$ studies), or high quality ($n=7$ studies), and so were all included in the review. The overall high quality of the studies was most likely because the database searches only included peer-reviewed studies.

Data Analysis

The included studies were categorized in an overview (see Appendix Table 2), including information about author/title, aim, research design/method, and sample size/sample characteristics. Thereafter, a second reading of the full-text articles focused on results, discussion, and conclusions to identify themes. The results were finally formed into four themes based on the most prominent patterns that emerged from the findings. These themes were (1) discrimination and social exclusion at the workplace, (2) work-related physical and psychosocial risks, (3) inclusion at the workplace, and (4) the labor market segregation of immigrants.

As mentioned before, the included studies were of different methodological designs, 13 of the studies were of various quantitative designs, one had a qualitative, ethnographic approach, and two used a mixed-methods approach. As argued by Harden and Thomas (2005), including different study types in a review gives strength to the conclusions drawn by the review, since systematic reviews are focused on a set of questions rather than the used methodology of studies. Most

researchers would, however, agree that it is a challenge to synthesize evidence relying on research that uses different types of methods and designs (cf. Rodgers et al., 2009). Here, we chose to present the results using a narrative synthesis (cf. Arai et al., 2007) in which the results from all study types are analyzed, summarized, and described in text (Popay et al., 2006). This form of synthesis has been chosen since it facilitates a coherent description and discussion of the research, while also allowing for a common presentation of results deriving from several study types.

Results

Sixteen studies in total were included in this systematic review. Seven of the included studies had a cross-sectional design using survey data. Three had a panel design with at least two waves of data, which enabled comparisons over time. Three had an explanatory quantitative design, focusing on studying the relationship between two or more variables. Two had a mixed-methods approach and applied a sequential explanatory design where qualitative data was used to provide a deeper understanding of formerly collected quantitative data. Finally, one of the studies had an ethnographic, qualitative design and used participatory research and qualitative interviews to collect data.

Discrimination and Social Exclusion at the Workplace

One main pattern that emerges from the findings of this review is that immigrant workers perceive and experience discrimination at Swedish workplaces. Experiences of discrimination in the workplace are present for both male and female immigrants, and most prominent for people of a non-Western background, i.e., from countries outside of Northwest Europe and North America. A study using data from a survey of people employed in elderly care work by Malmö municipality in Sweden compares perceptions of discrimination among immigrant and native-born workers in Sweden, and finds that immigrants from non-Western countries in particular perceive higher degrees of discrimination in the workplace (Behtoui & Neergaard, 2009).

In a cross-sectional study examining work-related health factors for females (Akhavan et al., 2007), it was demonstrated that the perception of discrimination at work was three times higher for female immigrants in comparison to female native-born workers. Thus, female immigrants experience a unique form of discrimination related to their immigrant background in excess of the gendered discrimination faced by women in general on the Swedish labor market. These results are congruent with the basis of the minority stress model, presuming that some stressors are unique or magnified for minority group members (Meyer, 2003).

Workplace discrimination can have an important impact on the career opportunities of immigrant employees. In a more recent study, using a mixed-methods approach, Behtoui et al. (2020) find that discrimination of immigrant workers

led to exclusion from more powerful social networks at the workplace, and that immigrant workers thus have less access to valuable resources, leading to drawbacks in both occupational status and wages. These findings are in line with those of Akhavan et al. (2007), who showed that immigrants more often report a lack of opportunities in discussing wages and to upgrade their skills.

Because of frequent experiences of social exclusion and increased exposure at the workplace, immigrant workers have higher turnover intentions than native-born. Rosmond et al. (1996) report that immigrant workers were more often dissatisfied with their current work and colleagues and more frequently wanted to change their jobs. These findings demonstrate the importance of forming positive relations with others at work and is in line with the attachment theory which underscores that the absence of social support at work can be a significant source of stress. Moreover, this form of stress can cause individuals to develop various coping strategies, here exemplified by the desire to change one's job.

Dissatisfaction with colleagues was also reported in another study from the same authors evaluating the possible impact of work-related stressors on psychiatric health in immigrants compared to native-born Swedes (Rosmond et al., 1998). The findings further strengthen the assumption that absent or negative relations with co-workers are more frequently experienced by immigrant workers and can be detrimental for their health and well-being. Sundquist et al. (2003) show that immigrants with a low work-related social support (e.g., being able to interrupt work to talk to co-workers or meeting co-workers outside the workplace) ran a higher risk of long-term illness. From a minority stress perspective, these results indicate that work-related stressors, such as social exclusion at work, can have a long-term negative impact on the physical and psychological health of immigrant employees.

Work-Related Physical, Psychological, and Social Risks

Since non-Western immigrant workers are overrepresented among those employed in manual, unskilled jobs (Dunlavy et al., 2016), they also experience high levels of physical demands at work (Dunlavy & Rostila, 2013). Therefore, some workplace physical and psychological risks are due to labor market segmentation, i.e., that immigrant workers generally do not participate at the labor market at the same conditions as native-born and are thus confined to immigrant-dense, low-status jobs (cf. Urban & Slavnic, 2008). They more often tend to be employed in low-skilled jobs (Dunlavy & Rostila, 2013; Ilsøe, 2016; Slavnic & Urban, 2018), generally have lower occupational status (Behtoui et al., 2020), are more often in temporary employment (Akhavan et al., 2007), are more frequently working part-time (Ilsøe, 2016), and are overrepresented in jobs where they work long hours for lower pay in comparison to native-born (Slavnic & Urban, 2018). Some workplace risks in these low-skilled jobs are due to the nature of the job and experienced by people employed in that sector in general, while other risks are uniquely experienced by immigrants and related to their immigrant background.

However, work-related physical and psychological risks are not confined to the unskilled/low-skilled job market. These risks can also be present for immigrants working in high-skilled professions. Workplace risks in high-skilled sectors are, however, seldomly related to the nature of the job, but rather to the immigrant background of employees. For example, Eneroth et al. (2017) showed that general practitioners with a foreign-born background experienced threats or violence from patients to a significantly higher degree than native-born general practitioners (22% compared with 3%). These forms of threats and violence were often specifically related to their immigrant background as racist and xenophobic displays. Thus, immigrants who work in a majority context and in high-skilled professions can also experience unique physical risks related to their minority background. Eneroth et al. (2017) also showed how the general practitioners with an immigrant background had higher levels of turnover intentions due to these threats and violent attacks from patients. These results are in line with the minority stress perspective, explaining how minority members can develop coping strategies to deal with negative experiences at the workplace, such as changing one's job or workplace.

Moreover, a study conducted by Rosmond et al. (1996) demonstrates differences in psychosocial status associated with the working environment between immigrant and native-born workers in Sweden. Rosmond et al. (1996) compared native-born male workers with immigrant male workers in Gothenburg, Sweden, and showed that immigrants generally experienced higher degrees of psychological distress than did natives. The immigrant workers were more often in shift-work, less satisfied with their work, dissatisfied with co-workers, and felt that they had less influence on their work situation.

In another study, Rosmond et al. (1998), using the same dataset, reported that immigrant male workers were less affected by their working conditions, except for dissatisfaction with co-workers which was an important work-related stressor. It is important, however, to bear in mind that the sample used by Rosmond et al. (1996, 1998) mainly consisted of Scandinavian immigrants, largely from Finland. More recent studies report that immigrants from non-Western countries are at particular risk of being negatively affected by work-related psychosocial stressors, for example, because of a higher degree of over-education (Dunlavy et al., 2016), financial strain, and mental distress (Sundin et al., 2011). These differing results indicate that the outcome of studies from the twentieth century can be significantly different from those of the twenty-first century, which, among other things, is due to the ethnic variety of the immigrant population of Sweden during these time eras.

Psychosocial risk factors in the working environment may have many long-term negative effects for immigrants. For example, psychosocial distress at the workplace associated with high burnout scores has been reported as a particular risk for female immigrants in Sweden. Using a sample of 6,000 randomly selected women from the general population, of which 3,591 participated, Soares et al. (2007) showed that women with high burnout scores were more often foreign-born. However, according to the authors, this was not due to their foreign-born status per se, but rather associated with, e.g., being on sick leave more often, experiencing financial strain, lower control, and low social support at work. Consequently, when Sundin et al. (2011) controlled for other factors, such as distress, being foreign-born was no longer an

important factor for high burnout scores. This suggests that foreign-born women, in comparison to their native-born counterparts, are more often distressed, and experience negative socioeconomic aspects related to their working environment, which in a long-term perspective leads to higher burnout scores.

Aspects Fostering a Beneficial Working Environment for Immigrant Employees

Only a few of the studies identified for this review deal with factors that promote a positive working environment for immigrant employees in Sweden. One important beneficial aspect in respect to this is good leadership at the workplace. According to Eneroth et al. (2017), factors that positively affected the working environment of immigrant employees were control over work pace, i.e., having the ability to control the amount of work assigned to oneself, being able to decide when to take a break, and setting one's own work hours. However, Eneroth et al. (2017) also found that immigrant workers who feel that they are well taken care of in the organization, rewarded for a job well done, and where the employer is engaged in their health and well-being have a higher propensity to stay at their workplace. These findings are in line with the basis of the attachment theory, underlining that people who feel supported by their managers are more inclined to find ways to cope with other stressors at work, and thus stay put at the workplace.

Another aspect that positively affect immigrants' job satisfaction is the ethnic composition of co-workers at the workplace. Bygren (2004) found that immigrants have a greater tendency to stay at workplaces where relatively many immigrants work. This is especially the case for non-Western immigrants, which Bygren (2004) interprets as associated with perceptions of social inclusion; the more different a person feels from the majority-population, the higher the tendency to stay put at workplaces where others are perceived as different as well. In line with the attachment theory, these findings underscore how crucial a sense of social belonging is for job satisfaction, and that many immigrant employees may have a more natural way of experiencing such belongingness among other immigrant employees.

There are also results demonstrating how social belonging can emerge for immigrant employees in workplaces with many native-born co-workers, through the use of certain strategies employed by the immigrant workers. Nelson (2014) shows how immigrant employees in Swedish workplaces use joking and swearing, among other things, to foster good relations at work. Studying industrial and office workers at a major company in Sweden, she discovers that immigrants learn workplace culture and employ several techniques, such as handling small talk, humor, compliments, and greetings to create good relations at the workplace, which foster their workplace integration. According to Bowlby (1982), the attachment behavioral system is triggered by situations or events that expose a person to physical or psychological threat, here exemplified by entering a workplace where there is a risk of being socially excluded. Such threats trigger responses that focus on fulfilling one's innate attachment needs, for example, by seeking other people's support. Nelson's (2014) study exemplifies this process in terms of using language to create a sense of belonging and to form emotional bonds to one's co-workers.

Discussion and Conclusions

The aim of this systematic review was to summarize and synthesize research results dealing with the working environment of immigrant employees in Sweden. We focused on two main aspects. First, what main physical and psychosocial working conditions are identified in studies about the working environment of immigrant employees in Sweden? Second, how, according to these studies, do working conditions affect the health and well-being of immigrant employees in Sweden? To reach a better understanding of the results, we used the concept of “minority stress” and the attachment theory to interpret our findings. The minority stress perspective has mostly been used to explain how members of the LGBTQ community face minority-related stressors which negatively impact their health and well-being. In this review, we have demonstrated how such stressors are also uniquely experienced by immigrants at the workplace.

The review shows that immigrant employees are generally more exposed to several physical hazards and work under poor psychosocial conditions in their working environment as compared to their native-born colleagues in Sweden. This result is in line with the results of reviews focusing on immigrant employees in Western countries (e.g., Ahonen et al., 2007; Wang & Jing, 2018). The unprivileged work conditions of the immigrant employees are, to some extent, due to the nature of the low-skilled jobs that immigrants are overrepresented in, e.g., heavy, monotonous work for longer hours and lower pay, which is often considered as a characteristic of a segmented labor market where many immigrants are forced into low-status jobs (cf. Urban, 2013; Wang & Pandit, 2007).

Some researchers have depicted labor market segmentation as a problem for societal integration in general, since working in immigrant-dense workplaces provides immigrant employees with few chances to form relations with native-born people (cf. Ejrnæs, 2008). Our review shows that labor market segmentation also means an increased vulnerability for risks in the working environment which are detrimental for health and well-being. In the long run, this may lead to an early exit from the labor market for immigrant employees, due to higher frequencies of sick leave or early retirement (cf. Dunlavy & Rostila, 2017). Ethnic segmentation in the labor market has, among other things, been attributed to the unequal opportunity structures of ethnically homogeneous networks and discrimination in recruitment (cf. Meyer & Vasey, 2020). Moreover, the employment protection legislation for fixed-term and temporary employment contracts in Sweden has weakened in recent decades. While the temporarily employed face smaller risks than the unemployed, the weakened employment protection legislation for this group put them in a marginalized position vis-à-vis the permanently employed, thus paving the way for a segmented labor market (Svalund & Berglund, 2018).

Moreover, the current review also shows that physical and psychosocial work conditions that negatively influence the health and well-being of immigrant employees also exist in high-skilled jobs where many of the employees are native-born. The findings highlight an increased exposure to minority stress among immigrant employees, e.g., experiences of discrimination, threats, and violence uniquely

experienced by immigrant employees. In contrast to the risks that derive from labor market segmentation, minority-related stressors have nothing to do with the nature of the job but are merely related to employees' immigrant background. Workplace inequalities can seriously deteriorate the health and well-being of immigrant employees and are associated with increased burnout scores and a higher risk for sick leave. In light of this, the results of this review were consistent with prior literature (e.g., Jung et al., 2007; Meyer, 2003; Valentín-Cortéz et al., 2020), linking minority stressors with increased psychological distress. We interpret these results to be a confirmation of the thesis that immigrant employees are exposed to minority stress at the workplace, i.e., excess stress experienced by people belonging to marginalized and stigmatized social categories.

The results also show how immigrant employees can deal with various stressors at the workplace, through coping mechanisms such as changing their job or receiving social support from managers. Feeling a sense of belonging and receiving social support from managers and colleagues, in particular, was crucial for fostering a beneficial working environment for immigrant employees. These findings are consistent with the attachment theory, which highlights the relationship between forming emotional bonds and social relations at work and employees' mental health and job satisfaction. Taken together, the perspectives of minority stress and attachment theory increase our understanding of results in this review showing how stressors at the workplace can be dealt with. Although facing the risks of minority stress, immigrant employees can form a work-related resilience that contribute to their overall health and well-being at the workplace, through emotional bonds, social support from co-workers, and managerial support.

Against this background, we would like to highlight the important role of an inclusive and empowering leadership. Managers play a crucial part in creating and preserving a sound, democratic, and inclusive working environment and social climate at the workplace. Our conclusion is underlined by previous research demonstrating how leadership is related to employee health, well-being, job satisfaction, and engagement in the company (Andersen et al., 2019; Kuoppala et al., 2008; Ljungblad et al., 2014; Nielsen et al., 2013; Perko et al., 2016; Swedish Agency for Work Environment Expertise, 2020). Not paying attention to discrimination, social exclusion, and harassment at work shows shortcomings in complying with current Swedish laws and regulations, e.g., the Work Environment Act (1977:1160) and the Discrimination Act (2008:567). The responsibilities of a manager go far beyond making sure that safety regulations are followed, and it is pivotal that the management addresses and takes actions to improve the situation for vulnerable groups that face risks in their physical and psychosocial working environment. Apart from a functioning legal system and necessary supervision mechanisms, an awareness of questions related to the working environment and health of immigrant employees as well as the managerial behaviors related to this should continuously be raised. A manager may through his/her own example and by acting according to and adopting an inclusive leadership behavior inspire others to act and approach each other in inclusive and non-discriminatory ways (Eriksson, 2011).

In addition to the important role of the management, the role of employees' trade unions and functions, such as safety representatives and occupational health care

services, should be mentioned here. As discussed in the “[Introduction](#)” of this paper, the trade union movement has been important when it comes to the inclusion of immigrant workers in the labor market and the narrowing of a rights gap between native and immigrant workers. Nevertheless, as the results of this review demonstrate, a higher awareness of inequalities in minority ethnic group members’ working environment is needed, and more active measures to combat these inequalities must be taken before their rights can be implemented in practice.

There are, however, important knowledge gaps here, and more studies are needed to form a deeper understanding and analysis of conditions in the working environment for immigrants in Sweden and the influence of such conditions on their health and well-being. There are, for example, a lack of studies using large-scale data focusing on aspects such as birth country or ethnic background, religion, reason for migration, and length of stay in the destination country. There are also very few studies looking at more beneficial aspects for creating a positive working environment for immigrant employees. More specific information on these dimensions focusing on different groups of immigrants would make it easier to draw conclusions and to propose relevant political and organizational measures.

Limitations and Strengths of the Review

Since we only searched for original and peer-reviewed studies, we may have missed some important publications (cf. Cooper, 2009), e.g., reports or book chapters. Another disadvantage of the review is that many of the included studies “lump” together immigrants as one single group, and do not provide information about birth country, age, gender, religion, and other important variables that can shed light on diversities in the working environment of immigrants in Sweden. A strength of the review is that we included data from various study types, which although it aggravates the ability to synthesize the findings, also strengthens the general conclusions that are drawn, since these are confirmed by a variety of data sources. Nevertheless, the heterogeneity of the included studies, for instance in regard to their research aims and approaches, makes comparing and analyzing the findings in a more detailed manner complicated, if not impossible. The results of this review must therefore be interpreted with caution and viewed as a general summary and synthesis of the information that is available today about immigrants’ working environment in Sweden. Still, we believe that the general conclusions drawn from this review can provide important insights into the conditions that immigrant employees face in their working environment and how these can affect their health and well-being. These insights may be built upon in planning future initiatives and studies focusing on immigrant employees’ health and well-being at the workplace.

Appendix 1

Table 1 List of excluded studies with reason

Author/title	Reason for exclusion
Bonlokke, J.H., Bang, B., Aasmoe, L., Abdel Rahman, A.L., Syron, L.N., Andersson, E., Dahlman-Höglund, A., Lopata, L. & Jeephay, M. (2019) Exposures and health effects of bioaerosols in seafood processing workers—A position statement. <i>Journal of Agromedicine</i> , 24(4): 441–448, https://doi.org/10.1080/1059924X.2019.1646685	The article is not based on original research
Grossi, G., Soares, J.J.F., Ängeslevä, J., Perski, A. (1999). Psychosocial correlates of long-term sick-leave among patients with musculoskeletal pain. <i>Pain</i> , 80: 607–619	The article does not report data specifically about the association between work environment of immigrant workers and how it is related to the prevalence of sick leave and pain
Hellgren, Z. (2015). Markets, regimes and the role of stakeholders: Explaining precariousness of migrant domestic/care workers in different institutional frameworks. <i>Social Politics</i> , 22(2): 220–241	The article is not based on empirical data
Johansson, B., Helgesson, M., Lundberg, I., Nordquist, T., Leijon, O., Lindberg, P. & Vingård, E. (2012). Work and health among immigrants and native Swedes 1990–2008: A register-based study on hospitalization for common potentially work-related disorders, disability pension and mortality. <i>BMC Public Health</i> , 12: 845	The article reports data about the health status of immigrants regarding mortality, disability pension, and hospitalization for lung, heart, psychiatric, and musculoskeletal disorders — but not about the relationship between these aspects and work environment issues

Appendix 2

Table 2 Overview of included studies

Author/year of publication/title	Research aim	Research design/method	Sample characteristic/size
Akhavan, S., Bildt, C. & Wamala, S. (2007). Work-related health factors for female immigrants in Sweden	To study work-related health factors for female immigrants	Cross-sectional design. Data from a questionnaire survey conducted in a Swedish municipality	Study population consisted of 2,429 native and immigrant female employees. No information about how many in the sample consisted of immigrant and native-born respondents, respectively. No clear definition of the concept of immigrant. No information about immigrants' birth country
Behtoui, A., & Neergaard, A., (2009). Perceptions of discrimination in recruitment and the workplace	(1) To investigate the extent to which natives and immigrants perceive discrimination against immigrants in the Swedish labor market, (2) to examine and compare the discrepancy between concrete and abstract attitudes about discrimination among natives and immigrants, and (3) to examine and compare the strength of the assimilation perspective and of the consciousness perspective in explaining immigrants' perceptions of discrimination	Quantitative, descriptive design. Data from a questionnaire survey of individuals employed by Malmö municipality. Further information (age, educational level, and birthplace) obtained from longitudinal register databases of Statistics Sweden	3,702 received the questionnaire, and 2,504 completed the survey. The final sample consisted of 2,438 respondents. No information about how many in the sample consisted of immigrants and natives, respectively. "Immigrant" is defined as being born outside the country. Distinction made between western immigrants and non-Western immigrants

Table 2 (continued)

Author/year of publication/title	Research aim	Research design/method	Sample characteristic/size
Behtoui, A., Boréus, K., Neergaard, A. & Yazdanihan, S. (2020). Why are care workers from the Global South disadvantaged? Inequality and discrimination in elderly care work	To investigate inequalities in occupational status and wages between native-born and foreign-born employees in elderly care institutions in Sweden	Mixed-methods, sequential explanatory design. Quantitative data from telephone survey in 2013 with employers providing contact details of their employees. Further information (age, education, gender, income, and birthplace) was obtained from SCB register databases. In 2014, participant observations and qualitative, semi-structured interviews were conducted	The sample contains nursing assistants and assistant nurses. Of 510 individuals surveyed, 304 answered. No information is given on how many of these were native-born/foreign-born Participant observations were conducted in 7 to 8 days each at three different wards at two elderly care institutions. Semi-structured interviews were performed with 30 employees — over half of these worked at the same wards as those for the participant observations. The rest worked at other units/departments Among the female interviewees, ten were foreign-born. Five of the interviewees were men, and only one of these was native-born
Bygren, M. (2004). Being different in the workplace—Job mobility into other workplaces and shifts into unemployment	To investigate whether, and in what direction, the workplace share of natives is associated with the unemployment risks and workplace shift probabilities of natives and immigrants	Panel design. Data from the 1991 Swedish Establishment Survey, a national probability sample of private and public sector employers with more than 10 employees. Information pertaining to all employees in these workplaces in 1991 has been collected from a variety of sources. Data about employers and employees is combined for many Swedish organizations	Only workplaces with less than 1,000 employees are included in the sample. Only those within the age span 25–55 (age of labor market attachment) is included Immigrant is defined as born outside the country — and the author distinguishes between Western and non-Western immigrants

Table 2 (continued)

Author/year of publication/title	Research aim	Research design/method	Sample characteristic/size
Dunlavy, A.C. & Rostila, M. (2013). Health inequalities among workers with a foreign background: Do working conditions matter?	To assess whether health inequalities exist between native Swedish and foreign-born workers and if exposure to adverse psychosocial and physical working conditions contributes to the risk for poor health among foreign-born workers	Data were derived from the 2010 wave of the Swedish Level of Living Survey (LNU) and the Level of Living Survey for Foreign Born Persons and their Children (LNU-UFB), conducted in parallel, and combined into one dataset. Data on native-born workers from the LNU 2010 was combined with data on foreign-born workers from the LNU-UFB The survey has a panel design so that longitudinal comparisons can be made. A stratified sampling technique was utilized in order to ensure that statistically enough foreign-born persons from different regions of origin were represented in the data cross-sectional design	The LNU data is a representative sample of the entire Swedish population aged 18–75. In total, 3,451 face to face interviews were conducted between 2010 and 2012 by trained interviewers from SCB. Unemployed individuals were excluded, as were the self-employed and farmers. The total study population ($n = 4,021$) was comprised of currently employed adults aged 18–65, working at least 20 h per week. The study utilized 66% of the LNU 2010 interviews and 51% of the LNU-UFB interviews
Dunlavy, A.C., Garcy, A.M. & Rostila, M. (2016). Educational mismatch and health status among foreign-born workers	The study aims to explore associations between educational mismatch and health status among foreign-born workers in Sweden	Cross-sectional design. Data from the 2010 wave of the Swedish Level of Living Survey (LNU) and the Level of Living Survey for Foreign-Born Persons and their Children (LNU-UFB) were used, conducted in parallel, and combined into one dataset	The LNU is a representative sample of the entire Swedish population aged 18–75. The LNU-UFB sample was comprised of persons aged 18–75 who had been living in Sweden for at least 5 years The total study population ($n = 4148$) included currently employed adults aged 18–75, 88 respondents were excluded due to missing information

Table 2 (continued)

Author/year of publication/title	Research aim	Research design/method	Sample characteristic/size
Eneroth, M., Sendén Gustafsson, M., Gustafsson Schenck, K., Wall, M. & Fridner, A. (2017). Threats or violence from patients associated with turnover intention among foreign-born GPs—A comparison of four workplace factors associated with attitudes of wanting to quit one's job as a GP	The study aims to explore the reasons to why foreign-born General Practitioners (GPs) may intend to quit their job	A survey containing in total 126 questions was sent out as an electronic version that could be downloaded via an email link, and the data collection took place from December 2012 to January 2013. The study was conducted in a public health care region in central Sweden and is part of a longitudinal research program	GPs permanently employed and actively working ($n = 698$; women = 61%) were invited to participate From the total sample, 283 general practitioners, including residents, participated (women = 63%, response rate = 41%). 26% of the participants were foreign-born. The ages of the respondents were categorized into three groups: 44 years or younger (40.6%), between 45 and 54 (27.2%), and 55 or older (32.2%). Background questions about age, position, gender, civil status, number of children, and place of birth were included
Ilssøe, A. (2016). From living wage to living hours—The Nordic version of the working poor	Examines how working hours and worker profiles have changed in two low-wage service sectors in the period from 2007 to 2013	Cross-sectional design. Employs confidential micro-data from the European Labour Force Survey (LFS) and were granted access by Eurostat to cross-sectional annual data from 2007 to 2013 in the Sweden, Denmark, and Norway. The European LFS is a large household sample survey providing quarterly results on the labor participation of people aged 15 and over as well as on persons outside the labor force	Focus on two different groups of non-standard workers: migrant workers (foreign-born workers) and young workers (<27 years of age). Focuses on two sectors within private services in Denmark, Norway, and Sweden — retail and hotels/restaurants

Table 2 (continued)

Author/year of publication/title	Research aim	Research design/method	Sample characteristic/size
Nelson, M., (2014). 'You need help as usual, do you?': Joking and swearing for collegiality in a Swedish workplace	Aimed to identify communicative factors that have a positive impact on the integration of second-language speakers in the workplace and in their immediate work team	Qualitative, ethnographic design. Data from the KINSA-project. Qualitative interviews were conducted with 18 s-language speakers. Five of the 18 interviewees were subsequently selected for case studies involving participant observation	The second-language speakers taking part in the study all came to Sweden as adults from countries outside the Nordic region and from non-Germanic language backgrounds. 3 of the individuals selected for participant observation were office workers and two where industrial workers. Their first languages where Spanish, Polish, Slovene, Konkani/English, and Serbo-Croat
Rosmond, R., Lapidus, L., & Björntorp, P. (1996). A comparative review of psychosocial and occupational environment in Native Swedes and immigrants	To evaluate potential differences in psychosocial status and work environment between native Swedes and immigrants living in Gothenburg, Sweden	In 1992, a self-administered questionnaire containing 68 items about previous and present diseases, present medication, smoking habits, alcohol use, a detailed history of working conditions, social situation, and lifestyle factors was sent out to all men born during the first 6 months in 1944 living in Gothenburg ($n = 1302$) and selected from the Revenue Office Register	1040 men responded, resulting in a participation rate of 79.9% of 79.9%. Immigrant status was defined as being born outside Sweden. Current citizenship disregarded. One-hundred-and-eighty-two (18.0%) men of the total number who responded to the question ($n = 1013$) about ethnic origin stated that they were born outside Sweden and subsequently immigrants; 831 (82.0%) stated that they were native-born

Table 2 (continued)

Author/year of publication/title	Research aim	Research design/method	Sample characteristic/size
Rosmond, R., Lapidus, L., & Björntorp, P. (1998). A cross-sectional study of self-reported work conditions and psychiatric health in native Swedes and immigrants	To evaluate the possible impact of work-related stressors on psychiatric health in immigrants compared to native Swedes	Same as above. The survey questionnaire contained 68 items about earlier and present diseases, present medication, smoking habits, alcohol use, a detailed history of working conditions, social situation, and lifestyle factors. The questions were generally designed as closed-ended, i.e., the participants were asked to answer by choosing from several predetermined alternate responses	Same as above. The study included a cluster selected cohort of 1,040 men born in 1944 (participation ratio = 79.9%), living in Gothenburg, Sweden. Of these, 182 (18.0%) were immigrants, defined as being born outside Sweden

Table 2 (continued)

Author/year of publication/title	Research aim	Research design/method	Sample characteristic/size
Slavnic, Z. & Urban, S. (2018). Meandering rides of the Swedish taxi industry: Flourishing entrepreneurship or ethnic segmentation?	To study the interplay between policies, rules, and regulations that have altered the ethnic composition and incomes in the Swedish taxi industry since the deregulation in the 1990s	Mixed-methods study, sequential explanatory design. Qualitative interviews, scrutiny of relevant policy documents, and statistical data of the Swedish population between 1992 and 2012	The quantitative part used register data, including the number and proportions of the population between the ages of 16 and 24 years active from 1992 to 2012, in order to describe longitudinal change in ethnic composition and income The qualitative data came from 20 exploratory interviews conducted between 2007 and 2015 in Malmö, Lund, and Stockholm. Informants were, among others, taxi drivers, taxi company owners, tax authority officials, municipal and regional procurement officials, and trade union representatives. The study also included a systematic survey and an analysis of several hundred newspaper articles about the taxi industry, as well as about most of the official documents from and about the taxi industry since the beginning of the 1990s
Soares, J.J.F., Grossi, G. & Sundin, O. (2007). Burnout among women: Associations with demographic/socio-economic, work, lifestyle and health factors	To examine the occurrence of low/high burnout among women and the demographic/socioeconomic, work, lifestyle and health correlated of high burnout	Cross-sectional design. Data were collected during 8 consecutive weeks with two reminders in between. The names and addresses of the participants (with a code number) were obtained from the AdressKompaniet, which is a company with data on the population living in Sweden. The sample was chosen by the AdressKompaniet using a random selection program	The participants consisted of 6,000 randomly selected women, aged 18–64 years, from the general population resident in Stockholm County. Of the contacted women, 3,591 participated in the study. 362 women were excluded because they had moved to unknown addresses or had poor fluency in Swedish language, and 25 due to incomplete burnout data

Table 2 (continued)

Author/year of publication/title	Research aim	Research design/method	Sample characteristic/size
Sundin, Ö., Soares, J., Grossi, G. & Macassa, G. (2011). Burnout among foreign-born and native Swedish women: A longitudinal study	To study burnout experiences over time in relation to other factors, such as distress, sleep difficulties, and job demands, among foreign-born and native-born Swedish women living in Stockholm	Longitudinal panel survey with two waves 1 year apart. Data were collected by mailed, self-administered questionnaire during 8 consecutive weeks (February–March) with two mailed reminders in-between	In the first wave, 3,616 of 6,000 randomly selected women took part, and 2,300 of the initial 3,616 women also participated in the second wave; 427 were foreign-born women, and 1,873 were Swedish native women
Sundquist, J., Östergren, P.-O., Sundquist, K. & Johansson, S.-E. (2003). Psychosocial working conditions and self-reported long-term illness: A population-based study of Swedish-born and foreign-born employed persons	To analyze associations between high psychological job demands and low decision latitude, work-related social support, and long-term illness among foreign-born and native-born Swedish people	Cross-sectional design. Combines four annual simple random samples covering 1994–1997 from the Swedish Annual Level of Living Survey (SALLS)	A sub-sample, including only employed persons and consisting of 10,072 Swedish-born persons, 710 labor migrants and 333 refugees aged 25–64 years, was analyzed
Urban, S. & Slavnic, Z. (2008). Rekommodifieringen av taxi-branschen—förändring av ekonomiska förhållanden och etnisk sammansättning. (The re-commodification of the taxi-business—A change in economic relations and ethnic composition)	To analyze ethnic background, income, and education among those who obtained their largest income from the taxi-business	Data derive from a longitudinal database containing information about education, income, and occupation (LOUISE) in 1990–2004	Respondents born in Sweden are compared with those born outside Sweden, and immigrants from north-west countries are compared with those born outside North-Western countries

Appendix 3. Quality assessment according to MMAT

Quantitative descriptive studies

Screening questions:

1. Is the sampling strategy relevant to address the research question?
2. Is the sample representative of the target population?
3. Are the measurements appropriate?
4. Is the risk of nonresponse bias low?
5. Is the statistical analysis appropriate to answer the research question?

Study	Q1:	Q2:	Q3:	Q4:	Q5:	Quality:
Akhavan, S., Bildt, C. & Wamala, S. (2007). Work-related health factors for female immigrants in Sweden	Yes	To a certain extent	Yes, but could have included other relevant measurements	Yes	Yes	Medium–high
Bygren, M. (2004). Being different in the workplace—Job mobility into other workplaces and shifts into unemployment	Yes	Yes	Yes	Yes	Yes	High
Dunlavy, A.C. & Rostila, M. (2013). Health inequalities among workers with a foreign background: Do working conditions matter?	Yes	Representative of native-born population, but only to a certain extent of the immigrant working population	Yes	There is a possibility of non-response bias	Yes	Medium

Study	Q1:	Q2:	Q3:	Q4:	Q5:	Quality:
Dunlavy, A.C., Garcy, A.M. & Rostila, M. (2016). Educational mismatch and health status among foreign-born workers	Yes	Same as above	Yes	Yes	Yes	Medium–high
Eneroth, M., Sendén Gustafsson, M., Gustafs- son Schenck, K., Wall, M. & Fridner, A. (2017). Threats or violence from patients associated with turnover intention among foreign-born GPs—A comparison of four work- place factors associated with attitudes of wanting to quit one's job as a GP	Yes	Yes	Yes, but could have included more detailed measure- ments for one variable	Yes	Yes	High
Ilseøe, A. (2016). From living wage to living hours—The Nordic version of the working poor	Yes	Yes	Yes	Yes	Yes	High

Study	Q1:	Q2:	Q3:	Q4:	Q5:	Quality:
Rosmond, R., Lapitus, L., & Björntorp, P. (1996). A comparative review of psychosocial and occupational environment in Native Swedes and immigrants	Partly. The RQ deals with immigrants generally, but the sample only includes men	Partly. Representative to male native-born and immigrant workers	Yes	There is a possible response bias	Yes	Medium
Rosmond, R., Lapitus, L., & Björntorp, P. (1998). A cross-sectional study of self-reported work conditions and psychiatric health in native Swedes and immigrants	Same as above	Same as above	Yes	There is a possible response bias	Yes	Medium
Soares, J.J.F., Grossi, G., & Sundin, Ö. (2007). Burnout among women: Associations with demographic/ socioeconomic, work, lifestyle and health factors	Yes	Partly. Since women with poor fluency in Swedish where excluded, the sample is not entirely representative of foreign-born female workers	Yes	Yes. High non-response rate and limited possibilities to analyze differences between responders and non-responders — but risk of bias seems to be low	Yes	Medium–high

Study	Q1:	Q2:	Q3:	Q4:	Q5:	Quality:
Sundin, Ö., Soares, J., Grossi, G. & Macassa, G. (2011). Burnout among foreign-born and native Swedish women: A longitudinal study	Yes	Partly. Only women in Stockholm recruited. Also, only foreign-born women who were fluent in Swedish could answer the question- naire	Yes	Yes. High non- response rate, but low risk of bias since responders and non- responders do not differ	Yes	Medium–high
Sundquist, J., Öster- gren, P-O., Sundquist, K. & Johansson, S-E. (2003). Psychosocial working con- ditions and self-reported long-term illness: A population- based study of Swedish- born and foreign-born employed persons	Yes	Yes	Yes	Yes	Yes	High
Urban, S. & Slavnic, Z. (2008). Rekommodi- fieringen av taxi- branschen— förändring av ekonomiska förhållanden och etnisk samman- sättning. (The re-com- modification of the taxi- business—A change in economic relations and ethnic com- position)	Yes	Yes	Yes	Can't tell	Yes	Medium–high

Study	Q1:	Q2:	Q3:	Q4:	Q5:	Quality:
Behtoui, A., & Neergaard, A., (2009). Perceptions of discrimination in recruitment and the workplace	Yes	Yes, but only for those employed in Malmö and in the public sector	Yes	Yes	Yes	High

Qualitative studies

Screening questions:

1. Is the qualitative approach appropriate to answer the research question?
2. Are the qualitative data collection methods adequate to address the research question?
3. Are the findings adequately derived from the data?
4. Is the interpretation of results sufficiently substantiated by data?
5. Is there coherence between qualitative data sources, collection, analysis and interpretation?

Study	Q1:	Q2:	Q3:	Q4:	Q5:	Quality:
Nelson, M., (2014). 'You need help as usual, do you?': Joking and swearing for collegiality in a Swedish workplace	Yes	Yes	Yes	Yes	Yes	High

Mixed-methods studies

Screening questions:

1. Is there an adequate rationale for using a mixed methods design to address the research question?
2. Are the different components of the study effectively integrated to answer the research question?
3. Are the outputs of the integration of qualitative and quantitative components adequately interpreted?
4. Are divergences and inconsistencies between quantitative and qualitative results adequately addressed?
5. Do the different components of the study adhere to the quality criteria of each tradition of the methods involved?

Study	Q1:	Q2:	Q3:	Q4:	Q5:	Quality:
Behtoui, A., Boréus, K., Neergaard, A. & Yazdanpanah, S. (2020). Why are care workers from the Global South disadvantaged? Inequality and discrimination in elderly care work	Yes	Yes	Yes	No divergencies or inconsistencies presented	Yes, but some minor aspects to consider. For example, there is a possible bias in the case of part-time positions in the data	Medium–high
Slavnic, Z. & Urban, S. (2018). Meandering rides of the Swedish taxi industry: Flourishing entrepreneurship or ethnic segmentation?	Yes	Yes	Yes	Yes	Yes	High

Availability of Data and Material Not applicable.

Code Availability Not applicable.

Declarations

Ethics Approval Not applicable.

Consent to Participate Not applicable.

Consent for Publication Not applicable.

Conflict of Interest The authors declare no competing interests.

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