Current Psychology
https://doi.org/10.1007/s12144-023-04641-x

The impact of cultural intelligence on burnout among practitioners working with migrants: an examination of age, gender, training, and language proficiency

Gabriele Puzzo[1] · Maha Yomn Sbaa[1] · Salvatore Zappalà[1] · Luca Pietrantoni[1]

Accepted: 1 April 2023

Abstract
Migrants are a vulnerable population that often requires specialized care and support. Practitioners who work with migrants must be knowledgeable about the unique challenges they face. Some first-line practitioners are better equipped to work in intercultural environments because they possess higher cultural intelligence (CQ). This study aims to examine the impact of cultural intelligence on burnout among practitioners working in 15 countries. It also compares levels of CQ in relation to age, gender, education, intercultural training, and language proficiency in the workplace. The participants in the study were professionals working primarily with migrants (N = 258) from 15 countries. The results indicate that motivational cultural intelligence significantly reduces burnout levels, while the cognitive and the behavioural dimensions do not have any effect. Practitioners who have undergone intercultural training have higher levels of cultural intelligence, and this type of training may be effective in improving cultural intelligence. The study provides organizations with insight on how to select and train first-line practitioners, focusing on developing cultural competencies and intrinsic motivation to prevent burnout among their staff and ultimately improve the quality of services.

Keywords Cultural Intelligence · Burnout · First-line practitioners · Migration · Intercultural training

Introduction

Migrants are a vulnerable population that often require specialized care and support. Practitioners who work with migrants need to be knowledgeable about the unique challenges they face and be able to provide culturally competent care. When working with migrants, practitioners need to be aware of language barriers, cultural differences, and lack of access to resources (Apostolidou, 2016). Practitioners need to be able to provide culturally competent care that considers these challenges. This can include providing interpreters, understanding cultural norms, and providing resources to help migrants access services (O'Donnell et al., 2016).

First-Line Practitioners (FLPs) are those practitioners who have direct professional contact with migrants or asylum seekers as soon as they physically reach the borders. They may be health and humanitarian aid workers, but also border guard and law enforcement officials, social workers in governmental and non-governmental welfare organisations, migrant advocacy organisations, or legal aid organisations (García-Carmona et al., 2021). FLPs are thus the first point of contact for migrants and asylum seekers when they reach their host country.

Over the last decade, there has been growing interest in identifying the specific challenges faced by these professionals in dealing with the refugee and migration crisis. A comprehensive understanding of these challenges is important to shape policy, improve the quality of services and create more equitable conditions for the vulnerable group of migrants. In a systematic review, Robertshaw and colleagues (2017) revised the literature on barriers and facilitators for health professionals providing primary health care to refugees and asylum seekers in high-income countries. They highlighted the emotional strain experienced by

✉ Luca Pietrantoni
luca.pietrantoni@unibo.it

[1] Department of Psychology, Alma Mater Studiorum – University of Bologna, Via Filippo Re, 10, Bologna (BO) 40126, Italy

Published online: 22 April 2023

professionals when to address the complex health and social needs of migrants in cross-cultural interactions, as they face challenges such as trusting relationships, communication, and cultural understanding. Healthcare professionals considered migrants' psychological conditions (i.e., psychological trauma related to war, torture, and other abuses) challenging to emotionally deal with. Postmigration stresses were also perceived to impact negatively on practitioners' mental health, such as the asylum and resettlement process, social isolation, and other social vulnerabilities. In a nutshell, health professionals are subject to impactful sources of stress when they engage with migrants, as hearing some of their stories could be emotionally difficult and distressing.

Increasing globalisation and cultural diversity have highlighted the importance of developing cross-cultural competencies such as cultural intelligence (Alexandra, 2022). The concept of cultural intelligence (CQ), which refers to a person's ability to function effectively in a culturally diverse environment and to successfully navigate a new cultural environment (Earley & Ang, 2003; Ang & Van Dyne 2008), has been continuously studied and developed in recent years. Today, this is a very important issue for both cross-border managers and practitioners. With increasing globalisation, employees in multinational companies must constantly interact with people from other cultures. Due to cultural differences, conflicts, misunderstandings, communication problems and cultural tensions can arise, especially in multinational aid organisations employing FLPs working across national and international borders. Some individuals may perform better than others in a cross-cultural work environment (Brancu et al., 2016) because they have a higher CQ level. This means that they can adapt effectively to changing cultural conditions and express themselves in different cultures (Bal & Kolakan, 2022). Investigating CQ is therefore important to find out how international aid managers and FLPs can deal with the challenges to ultimately improve the quality of services and provide more equitable services to migrants, refugees, and asylum seekers.

Although CQ has been the subject of various studies over the past decades, it is only recently that there has been interest in examining how CQ differs in terms of socio-demographic (e.g., age, gender, education level), organisational (e.g., participation in intercultural training) and workplace (e.g., number of languages spoken in the workplace) variables. Presbitero and Toledano (2017) found that the development of CQ improved among members of global teams after participating in intercultural training. More recently, Bal and Kolakan (2022) examined differences between gender, age, and education, to find that older academics who spoke more than one language in their daily work had higher levels of CQ on average. In addition, a growing body of research shows how CQ as a personal resource can predict various work outcomes, such as burnout. Recent findings show that burnout levels decrease when participants' CQ is high (Fu & Charoensukmongkol, 2021; Ramalu & Subramaniam, 2019).

Despite these recent developments, most of these studies focus on international businesspeople, business travellers (Tay et al., 2008) and academics working abroad (Doğru, 2021; Gordon 2018). Furthermore, there is no study that specifically examines the impact of CQ on burnout among humanitarian aid workers or professionals working with migrants. These are important gaps to address, as some authors emphasise the importance of studying cultural intelligence in organisations dealing with cultural diversity and crisis management (Livermore et al., 2022). Furthermore, previous research examining the impact of CQ on burnout has typically analysed data collected in a single country, neglecting the possibility of including more countries in the data collection (Fu et al., 2021).

The aim of this study is to investigate the impact of cultural intelligence on burnout among practitioners working in 15 countries. It also compares the levels of CQ in different groups of FLPs in terms of age, gender, and education level, as well as participation in intercultural training and the number of languages spoken at work. Little is known about CQ among FLPs, as most studies have focused on other samples and there is currently no study on CQ and burnout that has collected data from more than one country. Our study could provide a comprehensive picture of the competencies needed to effectively deal with cross-cultural challenges that could put burnout at risk, as well as useful information about practitioners' work environments (Luquis 2021). Professionals need the necessary knowledge, motivation, and attitude to develop appropriate and effective interventions in intercultural contexts.

Theoretical foundation

Cultural intelligence

Cultural intelligence (CQ) is defined as the ability to function and manage effectively in a culturally diverse environment (Earley & Ang, 2003; Alifuddin & Widodo, 2022). The concept of cultural intelligence marks a paradigm shift from a focus on intercultural comparison to intercultural skills (Ang, 2021). Cultural intelligence influences research in no less than twenty-three academic disciplines and shapes policy and practice in the private, public, educational, and non-profit sectors. Luquis (2021) pointed out that relying on cultural intelligence can be helpful for professionals working with diverse populations. While cultural intelligence shares some similarities with earlier terms (e.g.,

cultural competence), it differs in that it draws on intelligence research and emphasises understanding different cultures, problem solving and adaptations in multiple cultural settings.

Earley and Ang (2003) conceptualised CQ as encompassing four different dimensions. Cognitive Cultural Intelligence (CCQ) is the "knowledge of norms, practices and conventions in different cultures acquired through education and personal experience" (Ang & Van Dyne, 2008, p. 5). It indicates a person's knowledge of how their culture differs from others (Ang & Van Dyne, 2008). Metacognitive Cultural Intelligence represents higher-order cognitive processes involved in acquiring and understanding cultural knowledge. Motivational Cultural Intelligence (MCQ) reflects an individual's interest in other cultures, which leads him or her to become familiar with situations characterised by cultural differences and to enjoy interacting with different people. Finally, Behavioural Cultural Intelligence (BCQ) refers to an individual's ability to successfully interpret verbal or non-verbal actions when interacting with people from different cultural backgrounds (Van Dyne et al., 2012).

While an important dimension in different working contexts, the current study does not consider the metacognitive dimension of CQ (MCCQ, i.e., the ability to plan, monitor, and evaluate one's own thinking and learning strategies in cross-cultural interactions). In fact, the job requirements of first-line practitioners who work with migrants may not require as much MCCQ as other professions. Previous research showed that the work of first-line practitioners in the migration sector often involves more immediate, task-focused interactions (Bayerl et al., 2020), rather than deep, reflective learning. Moreover, some authors argue that first-line practitioners require more practical skills, which are reflected in the cognitive, motivational, and behavioural dimensions of CQ (Livermore, 2010). In a nutshell, first-line practitioners who work with migrants primarily need to be able to communicate effectively and sensitively with migrants in their care, which requires a combination of CCQ, MCQ, and BCQ. Thus, these practitioners are more focused on providing direct services to migrants rather than engaging in the kind of reflective learning that MCCQ entails.

Few studies analysed the impact of specific dimensions of CQ among practitioners. Schelfhout et al. (2022) have shown that intercultural skills are the most important gateway to more effective intercultural behaviour. In particular, the motivation, cognition and behavioural dimensions of cultural intelligence appear to be key factors, making these dimensions an excellent target for training, practical interventions and identifying best practices that ultimately contribute to greater intercultural effectiveness. Other studies conducted on managers collaborating with migrant workers showed that managers' CQ fosters pro-diversity climates, contribute to reduce cultural discrimination in the workplace (Charoensukmongkol & Phungsoonthorn, 2022), and improves leader-member relationship (Charoensukmongkol, 2021).

Evidence on CQ variability between socio-demographic groups appears to be relatively incomplete, with the sparse literature providing mixed results. Alon and colleagues (2016) conducted a survey of businesspeople in five different countries and found no significant differences in CQ scores by gender or age, while education level was one of the most important variables predicting cultural intelligence. Attaining higher levels of education can foster greater receptivity and curiosity towards other individuals and cultures. This is due to the exposure to diverse paradigms and perspectives that education offers (Heckman & Kautz, 2012). For instance, studying varied subjects such as literature, science, mathematics, and art may expand an individual's mental framework. Education not only expands one's cognitive boundaries but also enables better interactions with diverse cultures: students who learn about different cultures directly from their peers and educators have more exposure to cultural diversity (Baehr, 2013).

Other research conducted with IT global team members (Presbitero & Toledano, 2017) and Chinese academics abroad (Fu & Charoensukmongkol, 2021) found no significant difference for CQ in terms of age and gender. Nevertheless, Bal and Kolakan (2022) recently conducted a survey of Turkish academics and found age differences at CQ, with older participants having higher cultural intelligence scores. This might be because older people tend to develop wisdom, a complex human trait that comes with improved emotional regulation and emotional intelligence (Vahia et al., 2020; Lee et al., 2018) which, in turn, positively foster CQ (Sharma & Singh, 2021). Likewise, women tend to report higher emotional intelligence than men (Cabello et al., 2016), a skill that should entail differences in CQ as well. Even though the literature does not provide strong evidence on this variability, researchers have advocated to keep researching this as it is an intriguing question (MacNab & Worthley, 2012).

The variability of cultural intelligence as a function of intercultural training programmes has been the subject of several studies in the last decade. Intercultural training refers to a planned intervention aimed at developing a person's ability to cope with cultural differences and appropriately modify their behaviour in culturally diverse contexts (Bhawuk & Brislin, 2000). Therefore, intercultural training is used by organisations as an effective tool to improve individual CQ. Manian and Naidu (2009) have shown that intercultural training can effectively encourage global team

members to be more culturally competent by teaching them about the cultures of others. Participation in intercultural training seems to be correlated with CQ (Lenartowicz et al., 2014): recently, an experimental study by Presbitero and Toledano (2017) hypothesised that participation in intercultural training develops and improves CQ of information technology service providers. Their hypothesis was confirmed as the CQ scores of the experimental group were higher than those of the control group.

The number of languages spoken in the job varies with CQ. Learning a new language is a difficult and time-consuming activity as the learner must spend numerous hours learning vocabulary, grammar, and context (Alon et al., 2016). Fluency in a foreign language can only be achieved by dedicating oneself to the task and adapting to the mindset of native speakers as the individual learns to adapt to the structure and logic of the foreign language (Werry, 2005). Shannon and Begley (2008) empirically investigated the relationship between language proficiency and CQ among students at an Irish university and found that learning new languages was positively related to cognitive and behavioural aspects of CQ. In 2016, Alon and colleagues conducted a cross-sectional study with business professionals and found that the number of languages spoken positively influenced cultural intelligence scores. This finding was recently confirmed by Bal and Kolakan (2022), who found that academics who speak more than one language in their daily work have higher levels of CQ. Moreover, Seriwatana and Charoensukmongkol (2020a) investigated the role of cultural intelligence (CQ) in shaping team relationship conflict and team trust in Thai and native cabin crew members. The findings revealed a negative correlation between CQ and team relationship conflict, and a positive correlation between CQ and team trust. Furthermore, the analysis indicated that the negative impact of CQ on team relationship conflict was less pronounced for Thai crew members who were proficient in the foreign language used by native members.

In summary, the literature on cultural intelligence differences based on socio-demographic characteristics (i.e., age, gender, and education) provides interesting theoretical foundations, despite being partially supported by mixed and contradicting results. In addition, studies examining CQ and participation in intercultural training, as well as the number of languages spoken in the workplace, have never used FLPs as a research sample. Considering these research gaps and reviewing the literature, the present study also aims to examine differences in CQ outcomes depending on age, gender, and education level, as well as participation in intercultural training and the number of languages spoken in the workplace.

Burnout

Burnout is an affective response to prolonged stress, the core content of which is the gradual depletion of an individual's intrinsic energy resources over time, resulting in emotional exhaustion, physical fatigue, and cognitive exhaustion (Maslach, 1999). According to Maslach's conceptualisation, burnout is a reaction to excessive stress at work, characterised by a sense of being emotionally drained and lacking emotional resources (emotional exhaustion), a negative and distant reaction to others and loss of idealism (depersonalisation), and a decline in feelings of competence and accomplishment at work (personal exhaustion) (Maslach, 1999). Although early research on burnout focused almost exclusively on people-oriented professions such as social workers and police officers, it is now well established in the literature that burnout threatens the well-being of all types of workers. Mental distress and burnout have been well described in several research applications involving humanitarian aid workers (Cardozo et al., 2012; Guskovict & Potocky, 2018; Veronese et al., 2022), as they are exposed to more stressors and psychological strain, which can lead to symptoms of trauma and burnout.

Some studies have found age, gender, and education level differences in relation to burnout. Ager and colleagues (2012) conducted a cross-sectional survey of humanitarian aid workers to examine socio-demographic factors that lead to burnout, and they found that female staff were affected by burnout to a greater extent than male staff. Jachens and colleagues (2018) conducted a cross-sectional study of 9,062 international and local aid workers and found that 36% of women and 27% of men reported high levels of emotional exhaustion, while older staff experienced less burnout than the younger counterparts. The relationship between gender and burnout is complicated, as gender differences may be due to differences in the type of occupation rather than gender itself (Schaufeli & Greenglass, 2001). Additionally, it has been suggested that men may be more likely to suppress their emotions and adopt cynical attitudes as a way of coping with stress, which could make them more susceptible to the depersonalization component of burnout than women (Schaufeli & Enzmann, 1998; Purvanova & Muros, 2010). Regarding the age differences in burnout, some authors argue that older individuals may have better stress management strategies, benefit from rich experience, and have higher occupational positions that ensure them respect, rewards, and diminished work–family conflict (Stevanovic & Rupert, 2004; Wang et al., 2014), to ultimately provide older workers with more personal and job resources to face burnout. Some literature reports that there are differences in workers' burnout based on the educational level as well. According to a study conducted by Wang and colleagues

(2020) on healthcare professionals, there is a noticeable distinction in personal accomplishment levels between those with lower and higher educational backgrounds. The study suggests that a lower level of education may contribute to decreased personal accomplishment, which can subsequently increase the risk of burnout.

These studies usually involve both international and national aid workers, although they are not comparable. International workers face unique challenges, such as separation from family and friends and adjustment difficulties abroad, while benefiting from unique rewards such as financial incentives (Black & Gregersen, 1999). National workers also exhibit unique characteristics at work, such as reporting tensions due to unequal treatment of foreign and national employees (Ager et al., 2012). In addition, there is little research that specifically evaluates burnout among first-line practitioners working with migrants in Europe and in the Mediterranean countries. In a recent qualitative study by Sanfelici (2021), Italian practitioners working with migrants' report to face a lack of autonomy and various problems, such as work-life interference. As part of an H2020 project, Bermejo et al. (2021) conducted interviews and focus groups with first-line practitioners and law enforcement officers in 14 countries to collect and compare their work experiences. They found that burnout can affect efficiency in the quality of services provided to migrants.

Cultural intelligence and burnout

Like other types of intelligence, CQ may be an important predictor of work-related outcomes in cross-cultural work environments. Previous studies seem to support this idea. Research on expatriate cultural intelligence shows that CQ is related to cultural appraisal and cultural adaptation, task and job performance, and job satisfaction (Ang et al., 2008; Bal & Kolakan, 2022; Buecker et al., 2014). Min and colleagues (2021) found that the ability to cope with a multinational situation is predicted by cultural intelligence. There is a growing body of research suggesting that CQ is a critical personal resource for reducing worker burnout in cross-cultural contexts. According to the Job Demands-Resources model (Bakker & Demerouti, 2017), each job implies specific work or individual conditions - physical, social, or organisational aspects of the job and personal experience - that can be classified as either demands or resources. Occupational and personal demands require sustained physical or mental effort and are associated with psychological costs, while occupational and personal resources are functional in achieving work goals, reducing the costs associated with demands and promoting personal growth and development. Resources play a motivational role that both promote positive organisational outcomes and reduce burnout levels (Schaufeli, 2017).

In recent years, the role of CQ as a personal resource has been studied. Ramalu and Subramaniam (2019) examined the role of CQ on work engagement in a sample of 152 expatriate academics working in 20 public universities in Malaysia. Despite them being an under-represented sample in research on CQ, the increasing number of expatriate academics in Malaysia, a country known for its cultural, racial, and religious diversity, presents challenges to human resource managers in universities. Therefore, the authors investigated the impact of CQ on work engagement and the role of psychological needs satisfaction as a mediating factor. The results showed that psychological needs satisfaction partially mediated the relationship between CQ and work engagement, suggesting that the latter relationship is both direct and indirect, with personal needs satisfaction acting as a mediator and CQ being a personal resource that fosters work engagement.

Similarly, Seriwatana and Charoensukmongkol (2020b) studied the relationship between CQ of flight attendants and their burnout level and eventually found a negative correlation between the two. More recently, Fu and Charoensukmongkol (2021) examined the relationship between cultural intelligence (CQ) and burnout among 413 Chinese expatriates employed in 15 Chinese subsidiaries in Thailand. The study hypothesized that co-worker support from host country nationals, considering Thai culture's collectivist characteristics, mediated the relationship between CQ and burnout. Additionally, the authors explored whether the relationship between CQ and co-worker support was moderated by gender and job position of Chinese expatriates. The results confirm that co-worker support mediated the relationship between CQ and burnout, and the analysis showed that the positive association between CQ and co-worker support was stronger for male Chinese expatriates and those in lower job positions. The findings suggested that Chinese expatriates experienced less burnout because they were able to use CQ to gain social support.

Cavazotte and colleagues (2021) found that leader motivational (MCQ) and behavioural cultural intelligence (BCQ) was associated with lower expatriate burnout and higher expatriate engagement, and that purpose-driven leadership was associated with higher expatriate engagement but not lower burnout. The study pointed to actionable leadership skills that can promote expatriate engagement and prevent their burnout. In addition, a study by Presbitero and Teng-Calleja (2019) showed that perceived ethical leadership was positively and significantly related to individuals' ethical behaviour, and that perceived leader CQ as a moderator strengthened the relationship between perceived ethical leadership and individual members' ethical behaviour.

Doğru (2021) investigated the relationships between cultural intelligence, job burnout and task performance of expatriate (i.e., employees who are sent by their company to a host country for a certain period). Expatriates with high cultural intelligence face less job burnout and task performance tends to increase due to their cultural intelligence. Geil and Greenwald (2020) found in a sample of managers working full-time for international organisations that CQ and core trust were positively related to perceptions of global leadership effectiveness and that CQ was also associated with multitasking. In addition, Rafiq et al. (2020) found that cultural intelligence can have a moderating role between emotional labour and emotional exhaustion. This means that organisations that adopt cultural intelligence training strategies can minimise the negative impact of emotional labour on burnout.

Therefore, we argue that CQ may be explained as a personal resource that reduces job demands-related costs and, thus, burnout. Considering the current research trends and the scarce literature on CQ, we are interested in investigating the influence of CCQ, MCQ, and BCQ specifically on FLPs' levels of burnout, as they pertain to different psychological mechanisms and, thus, can have different effects.

As a matter of fact, Tay and colleagues (2008) examined effects of business travellers' Cognitive Cultural Intelligence, Motivational Cultural Intelligence, and Behavioural Cultural Intelligence on different outcomes, including burnout. Their findings show that only MCQ and BCQ alleviated business travellers' levels of burnout, while the effect of CCQ was not significant. More recently, Cavazotte and colleagues (2021) found correlations between MCQ and BCQ with burnout among expatriates, while Min and colleagues (2021) examined the impact of CCQ, MCQ, and BCQ on three key work-related outcomes (burnout, engagement, and job satisfaction) in a sample of 298 restaurant employees. They found that MCQ negatively predicted burnout and fostered engagement, while CCQ and BCQ did not significantly predict burnout.

These findings suggest that cognitive knowledge alone, without the ability and motivation to apply that understanding during intercultural interactions, is not a resource that can help managing stress or burnout. This goes in line with previous research that has suggested that the motivational and behavioural dimensions of CQ may be particularly important for cross-cultural work in service industries (Park et al., 2019). In fact, genuine interest and enjoyment in learning about other cultures seem to inherently motivate employees to interact with diverse people and is thus a protective factor against burnout. There are conflicting results regarding BCQ and burnout, with some studies highlighting that BCQ has no significant impact on workers' stress levels. However, we argue that perceptions of effectiveness in cross-cultural interactions could prevent burnout levels, as shown in studies with expatriates (Cavazotte et al., 2021) and business travellers (Tay et al., 2008). In other words, personal resources help individuals cope with job demands (Ma et al., 2019; Nielsen et al., 2017) so that they can ultimately focus on their work and experience less stress. Workers with high MCQ (e.g., motivation to interact with diverse people) and BCQ (e.g., adapting their behaviour to different cultural norms) have important personal resources that enable them to endure occupational stress from unfamiliar situations and ultimately experience less burnout (Min et al., 2021).

However, these findings are not exhaustive, and the literature does not specifically explore the role of CCQ, MCQ and BCQ in mitigating burnout among FLPs working with migrants. Considering this research gap and the review of the literature discussed earlier, we hypothesise the following in this study.

H1 CCQ will be negatively related to burnout.

H2 MCQ will be negatively related to burnout.

H3 BCQ will be negatively related to burnout.

Methods

Participants

The participants in the study were first line practitioners working with migrants (N = 258; 176 women, 82 men) in 15 countries: Albania, Armenia, Austria, Bangladesh, Belgium, Benin, Bulgaria, Cyprus, Germany, Greece, Italy, Netherlands, Slovakia, Spain, and United Kingdom. Participants were employed in Governmental (N = 85), Non-governmental (N = 125), and private (N = 48) organizations. Participants completed a questionnaire with different scales between March and April 2022, which was available in 10 languages (Albanian, Arabic, Bulgarian, Dutch, English, French, German, Greek, Italian, and Spanish). Participants could complete the questionnaire either on paper or in the online version using Qualtrics.

An informed consent form was also distributed to the participants to clarify their rights (e.g., voluntary, and confidential participation) and the study procedures. After agreeing to participate and receiving their instructions, participants completed the questionnaire at their convenience, with the option - in the case of the online version - to stop whenever they wanted and continue later. The survey was part of a larger EU Horizon 2020 project called PERCEPTIONS.

Table 1 Respondents' demographic and job-related characteristics information

Demographic factor / Job Characteristic	Descriptive statistics
Age	20–29 years old: 35 (13.6%) 30–39 years old: 87 (33.7%) 40–49 years old: 79 (31.6%) 50–59 years old: 42 (11.2%) 60–69 years old: 9 (3.9%)
Gender	Male: 82 (34.8%) Female: 176 (65.2%)
Education	Secondary Education: 6 (2.3%) Vocational Training: 12 (4.7%) Bachelor's Degree: 73 (28.3%) Master's Degree: 149 (57.8%) Doctorate: 18 (6.9%)
Intercultural training attendance	Yes: 174 (67.4%) No: 84 (32.6%)
Number of languages spoken	1: 61 (23.6%) 2: 122 (47.4%) 3: 63 (24.4%) 4 or more: 12 (4.6%)

Note. N = 258

The demographic and occupational data of the respondents are shown in Table 1.

Measures

Along with single questions that collected demographic information (i.e., age, gender, and education), the questionnaire contained the following scales.

Cultural intelligence (CQ). CQ was measured with the Cultural Intelligence Scale (Ang et al., 2008). This 20-item scale encompasses four sub-scales: metacognitive, cognitive, motivational, and behavioural dimensions of CQ. For this study, we used the cognitive, motivational, and behavioural sub-scales – for a total set of 14 items. The metacognitive sub-scale was not included in the questionnaire because we deemed it less relevant for FLPs' working practices and aimed to avoid questionnaire fatigue. Participants were asked to self-assess their cultural skills on a 7-point Likert scale (from 1 = strongly disagree to 7 = strongly agree). The scale measures Cognitive Cultural Intelligence (CCQ) (5 items; e.g., "I know the cultural values and religious beliefs of other cultures") (α = 0.83); Motivational Cultural Intelligence (MCQ) (4 items; e.g., "I enjoy living in cultures that are foreign to me") (α = 0.76); and Behavioural Cultural Intelligence (BCQ) (5 items; e.g.: "I change my verbal behaviour - accent, tone of voice - when a cross-cultural interaction requires it") (α = 0.84).

Burnout. Burnout was measured using an adapted version of the Maslach Burnout Inventory (MBI) Abbreviated Version (Maslach, 2017). Participants were asked to rate how often they experience certain feelings on a 7-point Likert scale ranging from 1 = "never" to 7 = "every day". The 9-point scale reflects three dimensions: depersonalisation (3 items, e.g. "I feel like I treat some migrants like impersonal objects"), emotional exhaustion (3 items, e.g., "Working with people all day is really a strain on me") and personal coping (3 items, e.g. "I deal with people's problems very effectively") (α = 0.70).

Participation in intercultural training. Previous participation in intercultural training was captured by a single item. Participants were asked to indicate on a dichotomous scale (1 = Yes, 2 = No) whether they had participated in training during their professional career on how to deal with people from other cultures in their job.

Number of languages. Following the operationalisation of previous studies (Alon et al., 2016; Bal & Kolakan, 2022), a single item was used to measure the number of languages spoken in the workplace. Participants were asked how many languages they spoke in their daily work with migrants on a 4-point Likert scale (1 = One; 2 = Two; 3 = Three; 4 = Four or more).

Table 2 Means and Standard Deviations of dimensions of Cultural Intelligence and Burnout

	M	SD	Min	Max
Cognitive Cultural Intelligence (CCQ)	4.63	1.05	1.60	7.00
Motivational Cultural Intelligence (MCQ)	5.49	0.93	1.00	7.00
Behavioural Cultural Intelligence (BCQ)	5.25	1.07	1.80	7.00
Burnout	2.35	0.81	1.00	6.56

Analyses

T-tests, ANOVA and bivariate correlations were conducted to examine differences in CQ levels between groups in terms of age, gender, education, participation in intercultural training and number of languages spoken at work. A 3-level hierarchical regression was conducted to test the effects of CCQ, MCQ, and BCQ on burnout. The first step included demographic information (e.g., gender, age, and education level), while the second step included participation in intercultural training and the number of languages spoken in the workplace. The third and final step included the independent variables (e.g., CCQ, MCQ and BCQ). The outcome variable for each step of the hierarchical regression was burnout.

Results

Descriptive information about the variables is given below in Table 2. Overall, respondents have above average cultural intelligence, with medium to high scores on the CCQ (M = 4.63; SD = 1.05), MCQ (M = 5.49; SD = 0.93) and BCQ (M = 5.25; SD = 1.07). In general, they have moderate to

Table 3 Cultural Intelligence and Burnout Mean Differences

Measure	CCQ		MCQ		BCQ		Burnout	
	M (SD)	F/t	M(SD)	F/t	M(SD)	F/t	M(SD)	F/t
Age								
20–29	4.52 (1.11)		5.48 (1.10)		5.15 (1.10)		2.48[a] (0.70)	
30–39	4.72 (0.95)		5.56 (0.91)		5.47 (0.94)		2.40[a] (0.82)	
40–49	4.50 (1.15)	0.70	5.46 (0.88)	0.30	5.15 (1.13)	1.30	2.29[a,b] (0.75)	1.93*
50–59	4.77 (0.99)		5.38 (0.90)		5.17 (1.06)		2.16[a,b] (0.90)	
60–69	4.79 (1.30)		5.58 (1.09)		5.31 (1.12)		1.85[b] (0.37)	
Gender								
Male	4.59 (1.09)	−0.40	5.44 (1.01)	−0.48	5.07 (1.16)	−0.1.8	2.46 (0.90)	1.78
Female	4.64 (1.04)		5.50 (0.90)		5.32 (1.00)		2.27 (0.75)	
Education								
Secondary	5.00 (0.82)		5.63 (0.93)		5.00 (1.58)		2.28 (0.73)	
Vocational	4.47 (1.13)		6.04 (0.73)		5.72 (0.85)		2.14 (0.70)	
Bachelor	4.65 (1.10)	0.27	5.32 (1.11)	2.11	5.16 (1.12)	0.85	2.30 (0.90)	0.50
Master	4.62 (1.04)		5.48 (0.86)		5.28 (1.02)		2.40 (0.81)	
Doctorate	4.60 (0.94)		5.76 (0.70)		5.17 (1.24)		2.30 (0.57)	
Attendance Cul. training								
No	4.22 (1.11)	4.44***	5.16 (1.09)	3.91***	5.00 (1.07)	2.81**	2.51 (0.91)	2.07*
Yes	4.81 (0.97)		5.63 (0.80)		5.37 (1.04)		2.28 (0.76)	

Note. *p < .05, ** p < .01, *** p < .001

Table 4 Correlations Matrix for the variables

	1	2	3	4	5	6	7	8	9
1. CCQ	-								
2. MCQ	0.37***	-							
3. BCQ	0.57***	0.50***	-						
4. Burnout	−0.26***	−0.40***	−0.21***	-					
5. Gender[1]	0.03	0.03	0.11	−0.11	-				
6. Age[1,2]	0.04	−0.02	−0.02	−0.19**	−0.17**	-			
7. Education[1,2]	−0.01	0.01	−0.00	0.05	0.11	0.07	-		
8. Intercultural training[1]	0.26***	0.27***	0.18**	−0.13*	−0.17**	0.18**	−0.09	-	
9. Number of Languages[2]	0.30***	0.16**	0.10	−0.13*	−0.07	−0.03	0.00	0.13*	-

Note. *p < .05, ** p < .01, *** p < .001. [1] Gender (1 = Male; 2 = Female), Age (1 = 20–29; 2 = 30–39; 3 = 40–49; 4 = 50–59; 5 = 60–69), Education (1 = Secondary Education; 2 = Vocational Training; 3 = Bachelor's degree; 4 = Master's degree; 5 = Doctorate), Intercultural training attendance (0 = not attended; 1 = attended). [2]Spearman coefficients

low levels of burnout (M = 2.35; SD = 0.81) and speak 2 languages on average (M = 2.09; SD = 0.81).

Independent T-tests and ANOVA were conducted to test for statistical significance of score differences in the dimensions of cultural intelligence. As shown in Table 3, there are no significant differences in the mean scores of the dimensions of Cultural Intelligence depending on the age, gender, and education level of the participants. Older FLPs report lower levels of burnout: post-hoc tests show that 60–69-year-old practitioners experience significantly less burnout than the 20–29 (ΔM = −0.63; p < .05) and 30–39 (ΔM = −0.55; p < .05) age groups. There were significant differences in CQ scores according to participation in cultural training: FLPs who had participated in intercultural training in the past had higher average scores in CCQ (t = 4.44; p < .001), MCQ (t = 3.91; p < .001) and BCQ (t = 2.81; p < .01). Furthermore, FLPs who participated in this type of training experience significantly less burnout (t = 2.07; p < .05).

Table 4 shows the correlation matrix for the key variables of the study. No significant correlation was found between the dimensions of cultural intelligence and age or level of education. Participation in intercultural training is positively related to CCQ (r = .26; p < .001), MCQ (r = .27; p < .001) and BCQ (r = .18; p < .01). In summary, the number of languages correlated positively with higher scores for CCQ (r = .30; p < .001) and MCQ (r = .16; p < .01), while no significant correlation was found for BCQ (r = .10; p > .05). The number of languages spoken also correlates negatively with burnout (r = −.13; p < .05). In addition, burnout is negatively correlated with age (r = −.17; p < .01) and participation in intercultural training (r = −.13; p < .05).

Table 5 shows the results of the hierarchical regression models for predicting burnout. In the first stage of the model, significant demographic predictors were age (β = −0.20; p < .01) and gender (β = −0.15; p < .05), while education was not significant (β = 0.07; p > .05). The first step of the model was significant overall, explaining 5% of the variance in burnout (R2 = 0.05; p < .01). In the second step, adding the number of languages (β = −0.09; p > .05) and participation in intercultural training (β = −0.10; p > .05) did not significantly change the model (ΔR2 = 0.02; p > .05). In the final step of the hierarchical regression, where the dimensions of cultural intelligence were added, only MCQ (β = −0.38; p < .001) proved to be a negative predictor of burnout, as both CCQ (β = −0.03; p > .05) and BCQ (β = 0.01; p > .05) were not statistically significant. The final model explained a significant increase in variance (ΔR2 = 0.14; p < .001), with the total proportion of variance explained being 21% (R2 = 0.21; p < .001).

Table 5 Hierarchical regression predicting Burnout

Predictor Variable	Burnout	
	b (SE)	β
Step 1: Demographic information		
Age	−0.15 (0.05)	−0.20**
Gender	−0.23 (0.10)	−0.15*
Education	0.08 (0.06)	0.07
R^2		0.05**
Step 2: Cultural Training & Number of Languages		
Age	−0.14 (0.05)	−0.19**
Gender	−0.27 (0.10)	−0.17**
Education	0.07 (0.06)	0.08
Number of languages	−0.07 (0.06)	−0.09
Cultural training attendance	−0.18 (0.11)	−0.10
R^2		0.07**
ΔR^2		0.02
Step 3: Cultural Intelligence		
Age	−0.16 (0.04)	−0.21***
Gender	−0.21 (0.09)	−0.14*
Education	0.08 (0.06)	0.08
Number of languages	−0.03 (0.06)	−0.04
Cultural training attendance	−0.01 (0.10)	−0.01
CCQ	−0.02 (0.05)	−0.03
MCQ	−0.32 (0.06)	−0.38***
BCQ	0.01 (0.05)	0.01
Total R^2		0.21***
ΔR^2		0.14***

Note. SE = standard error, *p < .05, ** p < .01, *** p < .001

Discussion

The aim of this study was to test the role of cultural intelligence in predicting burnout levels among practitioners working with migrants. Another aim of the study was to examine differences in practitioners' cultural intelligence scores as a function of age, gender, and education level, as well as participation in intercultural training and the number of languages spoken at work. We hypothesised that cultural intelligence, specifically the cognitive, motivational and behavioural components, would significantly reduce burnout levels. After controlling for age and gender of the participants, we found that only motivational cultural intelligence had a significant effect on decreasing burnout levels, whereas the behavioural and cognitive dimensions did not show a significant impact.

The results offer a new perspective on the relationship between cultural intelligence and burnout, as they show that cognitive knowledge about different cultures and feeling competent in cross-cultural interactions are not sufficient resources to prevent burnout. On the other hand, intrinsic motivation to learn more about other cultures is an important protective factor. Humanitarian organisations tend to have more intrinsically motivated employees: Tassell and Flett (2011) conducted a qualitative study on the motivation of employees of humanitarian organisations in the health sector to keep their jobs. The authors found that intrinsic motivation was the main reason why staff in the health sector of humanitarian organisations were initially engaged in their work and motivated to continue.

Consistent with this research, our findings suggest that practitioners' motivational cultural intelligence leads them to feel more satisfied with their work despite objective infrastructural constraints, which in turn helps them cope with job challenges that put them at risk of burnout (Bermejo et al., 2021; Sanfelici, 2021). Motivational cultural intelligence can help practitioners create an inclusive work environment, manage conflict, communicate more effectively, adapt to cultural differences, and develop deeper and more meaningful intercultural relationships. This can help reduce stress, feelings of isolation, frustration, the risk of prejudice and discrimination, and ultimately reduce staff burnout. This may be particularly important for practitioners working with migrants in international aid organisations who face various issues related to work infrastructure, financial resources, and work-life balance.

On average, our participants partially agree that they are competent in CCQ and BCQ, while they agree that they have high MCQ. This is in line with previous research conducted with teachers (Yuksel et al., 2018). As we have discussed in the introduction, practitioners are expected to help migrants and asylum seekers solve their complex health

and social needs. To do this, a higher level of CQ is crucial to effectively engage in cross-cultural interactions and overcome specific challenges such as trusting relationships, communication, and cultural understanding (Robertshaw et al., 2017). In our study, first-line practitioners are partially motivated to interact with diverse people while having sufficient knowledge and behavioural competence to manage such a difficult task.

It is not surprising that younger practitioners experience higher levels of burnout: a cross-sectional study conducted on 615 healthcare professionals showed that younger age is a predisposing factor for burnout (Jalili et al., 2021). This finding supports the idea that older workers are provided with more personal and job resources (i.e., better stress management strategies, richer experiences, higher occupational positions, rewards, and diminished work-family conflict) that help them deal better with burnout (Stevanovic & Rupert 2004; Wang et al., 2014). Regarding the role of gender, our results show that men experience more burnout than women. This finding adds to research examining risk factors related to gender in first responders, as the current literature provides conflicting conclusions. In comparison to previous studies, Marchand and colleagues (2018) conducted a cross-sectional study of workers and reported that women are predisposed for burnout. However, in the same year, Adam and colleagues (2018) published research showing that male Hungarian operators had a higher risk of burnout than female operators. Our findings are largely consistent with a meta-analysis conducted by Purvanova and Muros (2010), who used 409 effect sizes from 140 studies to examine gender differences in burnout. They found a small effect of gender on burnout, refuting the common assumption that women experience more burnout than men. They found that men report more depersonalisation than women since they are more likely to suppress their emotions and adopt cynical attitudes as a way of coping mechanism (Schaufeli & Enzmann, 1998). Framing our findings within this study, it could be that practitioners' work environment, characterized by a lack of autonomy and work-life interference, make them more prone to adopt a coping mechanism that fosters depersonalisation, thus putting men at risk of experiencing more stress than women.

In addition, our results did not report any burnout or cultural intelligence difference in terms of education level. This finding is in contrast with previous literature that showed how education was one of the main predictors of cultural intelligence (Alon et al., 2016) and personal accomplishment levels (Wang et al., 2020). On the contrary, our findings support the idea that, for first-line practitioners, the receptivity and curiosity of cultural intelligence are developed in different ways other than attaining higher levels of education (Heckman & Kautz, 2012). Likewise, low education does not seem to be a burnout risk factor that decreases personal accomplishment for first-line practitioners (Wang et al., 2020), probably because they experience more intrinsic motivation than other types of workers (Tassell & Flett, 2011).

Moreover, our findings show that practitioners who have participated in intercultural training have higher cultural intelligence and experience less burnout. Although this result is not exhaustive, it suggests that this type of training could be effective in improving CQ, which is consistent with previous experimental findings (Presbitero & Toledano, 2017), and, in turn, represent a resource to prevent high burnout levels. This could also be related to organisational behaviours. Indeed, Alifuddin and Widodo (2022) found that cultural intelligence is significantly related to organisational citizenship behaviours, whose relationship is mediated by interpersonal communication and psychological capital.

Moreover, our findings support the general assumption that the number of languages is associated with cultural intelligence. The association found in our sample, namely with CCQ and MCQ, is only partially consistent with previous studies conducted with undergraduates, showing a correlation with cognitive and behavioural aspects of cultural intelligence (Shannon & Begley, 2008). Our findings suggest that professionals are more likely to rely on cognitive and motivational elements of cultural intelligence rather than behavioural ones to accomplish a difficult task such as speaking more than one language fluently in a cross-cultural work environment. Several interesting aspects could be further explored if organisational and workplace variables other than intercultural training and the number of languages spoken in the workplace are included in the relationship between CQ and burnout.

The study is subject to several limitations arising from its design and the conditions under which it was conducted. The first limitation is that it only considers burnout as an indicator of mental health impairment, while it does not consider workplace engagement as an operationalisation of positive mental health outcomes. This decision was made to prevent fatigue in filling out the questionnaire: indeed, the scales were inserted into a much larger survey that already included many questions, and it was therefore not possible to add too many scales. Future research should also investigate the impact of CQ on work engagement and other positive mental health outcomes. For example, Lam et al. (2022) examined the effects of cultural intelligence on workers' job satisfaction and found a positive effect of Cognitive CQ and Motivational CQ.

The second limitation of the study pertains to the lack of Measurement Invariance (MI) analysis that is due to insufficient responses per country. In fact, as a rule of thumb,

some researchers suggest having a minimum of 100 participants per group to achieve sufficient statistical power for measurement invariance analysis, while other researchers recommend having at least 200 or more participants per group, particularly when dealing with complex models or multiple indicators (e.g., Cheung & Rensvold, 2002; Marsh et al., 2004; Vandenberg & Lance, 2000). Our sample consisted of 258 first-line practitioners working in 15 different countries; thus, it was challenging to conduct MI with a very small number of cases responding to the questionnaire per country. While this may limit the generalizability of our findings to different cultural and linguistic contexts, we argue that our study provides, nonetheless, valuable insights into the experiences of first-line practitioners working with migrants across 15 different countries. Moreover, we argue that the measures used in the current study – which are the Cultural Intelligence scale (Ang et al., 2008), and the Maslach Burnout Inventory Abbreviated Version (Maslach, 2017), are both well-established measures that have been used in numerous studies to assess cultural intelligence and burnout, respectively, allowing us to build confidence in the validity and reliability of our findings. However, we encourage future research to conduct larger-scale studies on this research topic to further strengthen the reliability and generalizability of our findings.

Finally, a critical point might be related to the measurement of cultural intelligence. We asked respondents to self-assess their competence in dealing with cross-cultural interactions. While this approach was appropriate in our study, using additional assessments and objective performance could provide new insights and different perspectives in future research. In line with this reasoning, Alexandra (2022) discussed methods for recalibrating CQ measures, which assess different types of changes in the development of CQ. Migrants' cultural intelligence can also be considered. For example, Ocampo et al. (2022) found that among migrant workers with high levels of cultural intelligence, the effects of occupational adaptability on work and mental health were stronger via work and general adjustment.

In summary, the present study examines the impact of cultural intelligence on burnout among first line practitioners working with migrants. The most important and far-reaching conclusion from the findings is that FLPs' intrinsic motivation to engage in cross-cultural interactions is an important personal resource that helps them cope with work demands and challenges, ultimately to reduce burnout levels. We anticipate that our study could have an impact on both a scientific and practical level. According to Ang (2021), we need to consider both academics and practitioners when researching cultural intelligence. Scientists are primarily concerned with the "what" and "why" questions, while practitioners focus more on the "how". They are like "two singing bowls" and the resonance of each bowl amplifies that of the other bowl, which stands for evidence-based practice and practice-based evidence.

This study offers humanitarian organisations insights into the selection and training of first-line practitioners. On the one hand, HR managers of organisations characterised by culturally diverse work contexts should focus on developing cultural competencies and intrinsic motivation to prevent burnout among their staff. On the other hand, organisations that expose their employees to cross-cultural interactions should adapt their selection processes to recruit practitioners with higher MCQ and intrinsic motivation to work in these settings, as they are less likely to experience burnout and put their mental health at risk. We argue that these interventions can promote mental health and cultural competencies among professionals to ultimately improve the quality of services and provide more equitable services to migrants, refugees, and asylum seekers.

Informed consent form

You are invited to participate in a survey about **best practices in migration-related work.** By best practices, we mean activities that successfully address challenges related to migration.

The survey is part of **PERCEPTIONS (Grant Agreement number: 833,870)**, a Horizon 2020 project which explores how Europe and the EU are perceived by current and potential migrants.

The information gathered through this survey will help the project to create tools to support both migrants and professionals working in the field of migration.

The main survey will take around **8 min** to answer. There is also an optional section on professional wellbeing and intercultural attitudes, which would take another 2 min.

Your participation in this study is **completely voluntary**, and you have the right to withdraw from the survey without any repercussions at any time.

Types of questions asked: This survey contains questions on challenges related to migration and best practices in migration-related work, and an optional section on work psychology. We will also ask some basic questions about you (e.g. age, gender identity, etc.). You will not be asked to provide any name or contact details, and no IP addresses will be stored or tracked.

Privacy and data security: No personally identifiable information is collected. There is no way to trace your responses back to you or your organisation. All data will be aggregated prior to analysis.

Data collection purpose: The data will be analysed by partners in the PERCEPTIONS project. The aggregated and

anonymised results of this survey will be included in scientific research databases, reports, presentations and conferences, and briefs for practitioners and policymakers.

Data retention: The anonymised and aggregated data will be securely stored and retained for a period of 24 months after the end of the project, namely until 2025 at the latest.

Data controller: Universidad de Granada

Contact points: If you have any questions about the research study, or want to receive a summary of the main findings, please send an email to (L.P.)

Thank you in advance for your participation!

By checking the box below, you confirm that you:

- Consent to participating in the survey

- Consent to the processing of the data from your responses for the purposes mentioned previously

- Are at least 18 years old

_ I Consent

Author Contribution All authors contributed to the study conception and design. The first two authors share the first authorship of the present paper. Material preparation, data collection and analysis were performed by Maha Yomn Sbaa and Gabriele Puzzo. The first draft of the manuscript was written by Gabriele Puzzo and Maha Yomn Sbaa and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Funding Open access funding provided by Alma Mater Studiorum - Università di Bologna within the CRUI-CARE Agreement.

Data Availability The data that support the findings of this study are available from the corresponding author upon reasonable request.

Declarations

Conflict of Interest The Authors declare that there is no conflict of interest.

Ethical approval The procedures used in this study adhere to the tenets of the Declaration of Helsinki. Ethics approval was obtained from the Ethics Committee of the PERCEPTIONS Project (Grant Agreement No 833,870).

References

Adam, S., Mohos, A., Kalabay, L., & Torzsa, P. (2018). Potential correlates of burnout among general practitioners and residents in Hungary: The significant role of gender, age, dependant care and experience. *BMC Family Practice*, *19*(193), 1–10. https://doi.org/10.1186/s12875-018-0886-3

Ager, A., Pasha, E., Gary, Y., Duke, G., Eriksson, C., & Cardozo, B. (2012). Stress, mental health, and burnout in national humanitarian aid workers in Gulu, Northern Uganda. *Journal of Traumatic Stress*, *25*, 713–720. https://doi.org/10.1002/jts.21764U34T

Alexandra, V. (2022). Optimizing cultural intelligence development by considering different types of change. *The International Journal of Human Resource Management Advance Online Publication*. https://doi.org/10.1080/09585192.2022.2081060

Alifuddin, M., & Widodo, W. (2022). How is cultural intelligence related to human behavior? *Journal of Intelligence*, *10*(1), 3. https://doi.org/10.3390/jintelligence10010003

Alon, I., Boulanger, M., Elston, J. A., Galanaki, E., Martínez de Ibarreta, C., Meyers, J., Muñiz-Ferrer, M., & Vélez-Calle, A. (2016). Business Cultural Intelligence Quotient: A five-country study. *Thunderbird International Business Review*, *60*(3), 237–250. https://doi.org/10.1002/tie.21826

Ang, S. (2021). Cultural intelligence: Two bowls singing. In X. Chen & H.K. Steensma (Eds.), *A journey toward influential scholarship: Insights from leading management scholars* (pp. 26–51). Oxfor University Press. https://doi.org/10.1093/oso/9780190070717.003.0002

Ang, S., & Van Dyne, L. (2008). Conceptualization of Cultural Intelligence: Definition, distinctiveness, and Nomological Network. In S. Ang, & Van L. Dyne (Eds.), *Handbook of Cultural Intelligence: Theory, measurement, and applications*. Armonk, NY: M. E. Sharpe.

Apostolidou, Z. (2016). Constructions of emotional impact, risk and meaning among practitioners working with asylum seekers and refugees. *Counselling and Psychotherapy Research*, *16*(4), 277–287.

Baehr, J. (2013). Educating for intellectual virtues: From theory to practice. *Journal of Philosophy of Education*, *47*(2), 248–262. https://doi.org/10.1111/1467-9752.12023

Bakker, A. B., & Demerouti, E. (2017). Job demands–resources theory: Taking stock and looking forward. *Journal of Occupational Health Psychology*, *22*(3), 273–285. https://doi.org/10.1037/ocp0000056

Bal, Y., & Kökalan, Z. (2022). The moderating effect of Cultural Intelligence on the Relationship between Emotional Intelligence and Job satisfaction. *Frontiers in Psychology*, *13*, 21–33. https://doi.org/10.3389/fpsyg.2022.900546

Bayerl, P., Saskia, D., Pannocchia, & Hough, K. (2020). Deliverable 2.2. Secondary Analysis of Studies, Projects, and Narratives. Available online: https://project.perceptions.eu/wp-content/uploads/sites/24/2020/07/PERCEPTIONS-D2.2-Secondary-analysis-of-studies-projects-and-narratives.pdf (accessed on 20 February 2023).

Bermejo, R., Bazaga, I., & Tarnayo, M. (2021). Migration to the EU. A Review of Narratives and Approaches. https://project.perceptions.eu/wp-content/uploads/sites/24/2021/01/PERCEPTIONS-Brochure-A-Review-of-Narratives-and-Approaches.pdf

Bhawuk, D., & Brislin, R. (2000). Intercultural training: A review. *Applied Psychology*, *49*, 162–191. https://doi.org/10.1111/1464-0597.00009

Black, J. S., & Gregersen, H. B. (1999). The right way to Manage Expats. *Harvard Business Review*, *77*(2), 52.

Brancu, L., Munteanu, V., & Golet, I. (2016). Understanding cultural intelligence factors among business students in Romania.

Procedia - Social and Behavioral Sciences, 221, 336–341. https://doi.org/10.1016/j.sbspro.2016.05.123

Bücker, J. J., Furrer, O., Poutsma, E., & Buyens, D. (2014). The impact of cultural intelligence on communication effectiveness, job satisfaction and anxiety for chinese host country managers working for foreign multinationals. *The International Journal of Human Resource Management*, *25*(14), 2068–2087. https://doi.org/10.1080/09585192.2013.870293

Cabello, R., Sorrel, M. A., Fernández-Pinto, I., Extremera, N., & Fernández-Berrocal, P. (2016). Age and gender differences in ability emotional intelligence in adults: A cross-sectional study. *Developmental Psychology*, *52*(9), 1486–1492. https://doi.org/10.1037/dev0000191

Cardozo, B., Crawford, C., Eriksson, C., Zhu, J., Sabin, M., Ager, A., & Simon, W. (2012). Psychological distress, depression, anxiety, and burnout among international aid workers: A longitudinal study. *PloS One*, *7*, 1–13. https://doi.org/10.1371/journal.pone.004494834T

Cavazotte, F., Mello, S. F., & Oliveira, L. B. (2021). Expatriate's engagement and burnout: The role of purpose-oriented leadership and cultural intelligence. *Journal of Global Mobility*, *9*(1), 90–106. https://doi.org/10.1108/JGM-05-2020-0031

Charoensukmongkol, P. (2021). How chinese expatriates' cultural intelligence promotes supervisor-subordinate Guanxi with Thai Employees: The mediating effect of expatriates' benevolence. *International Journal of Cross Cultural Management*, *21*(1), 9–30. https://doi.org/10.1177/1470595821996735

Charoensukmongkol, P., & Phungsoonthorn, T. (2022). The effect of cultural intelligence of top management on pro-diversity work climate and work attitudes of Myanmar migrant workers in Thailand. *Equality Diversity and Inclusion: An International Journal*, *41*(5), 760–777. https://doi.org/10.1108/edi-11-2020-0339

Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, *9*(2), 233–255.

Doğru, Ç. (2021). The interactions between cultural intelligence, job burnout, and task performance of expatriates. In M. Khrosrow-Pour, S. Clarke, S., M.E. Jennex., & A. Anttiroiko (Eds.), *Research Anthology on Changing Dynamics of Diversity and Safety in the Workforce* (pp. 858–876). Igi Global. https://doi.org/10.4018/978-1-6684-2405-6.ch043

Earley, P. C., & Ang, S. (2003). Cultural intelligence: Individual interactions across cultures. *Choice Reviews Online*, *41*(08), 41–4760. https://doi.org/10.5860/choice.41-4760

Fu, L., & Charoensukmongkol, P. (2021). Effect of cultural intelligence on burnout of chinese expatriates in Thailand: The mediating role of host country national co-worker support. *Current Psychology Online Publication*. https://doi.org/10.1007/s12144-021-01728-1

García-Carmona, M., García-Quero, F., Guardiola, J., Moya Fernández, P., Perán, O., Edwards, J., J., & Whitworth, B. (2021). Migration to the EU: a survey of first-line practitioners' perceptions during the COVID-19 pandemic. https://www.perceptions.eu/migration-to-the-eu-a-survey-of-first-line-practitioners-perceptions-during-the-covid-19-pandemic/

Geil, M. A., & Greenwald, J. (2020). An investigation of characteristics of effective global leaders. *Journal of Business and Industrial Marketing*, *35*(10), 1505–1515. https://doi.org/10.1108/JBIM-01-2019-0035

Gordon, T. K. (2018). *An Exploration of the Relationship between Cultural Intelligence and Burnout among Expatriate Teachers in the United Arab Emirates*. Dissertation, available at https://www.proquest.com/dissertations-theses/exploration-relationship-between-cultural/docview/2136282029/se-2

Guskovict, K. L., & Potocky, M. (2018). Mitigating psychological distress among humanitarian staff working with migrants and refugees: A case example. *Advances in Social Work*, *18*(3), 965–982.

Heckman, J. J., & Kautz, T. (2012). Hard evidence on soft skills. *Labour Economics*, *19*(4), 451–464. https://doi.org/10.1016/j.labeco.2012.05.014

Jachens, L., Houdmont, J., & Thomas, R. (2018). Effort–reward imbalance and burnout among humanitarian aid workers. *Disasters*, *43*(1), 67–87. https://doi.org/10.1111/disa.12288

Jalili, M., Niroomand, M., Hadavand, F., Zeinali, K., & Fotouhi, A. (2021). Burnout among healthcare professionals during COVID-19 pandemic: A cross-sectional study. *International Archives of Occupational and Environmental Health*, *94*(6), 1345–1352. https://doi.org/10.1007/s00420-021-01695-x

Lam, R., Cheung, C., & Lugosi, P. (2022). The impacts of cultural intelligence and emotional labor on the job satisfaction of luxury hotel employees. *International Journal of Hospitality Management*, *100*, 1–25. https://doi.org/10.1016/j.ijhm.2021.103084

Lee, E. E., Depp, C., Palmer, B. W., Glorioso, D., Daly, R., Liu, J., Tu, X. M., Kim, H. C., Tarr, P., Yamada, Y., & Jeste, D. V. (2018). High prevalence and adverse health effects of loneliness in community-dwelling adults across the lifespan: Role of wisdom as a protective factor. *International Psychogeriatrics*, *31*(10), 1447–1462. https://doi.org/10.1017/s1041610218002120

Lenartowicz, T., Johnson, J. P., & Konopaske, R. (2014). The application of learning theories to improve intercultural training programs in MNCs. *The International Journal of Human Resource Management*, *25*(12), 1697–1719. https://doi.org/10.1080/09585192.2013.860384

Livermore, D. (2010). The cultural intelligence difference: The importance of CQ to global business success. *Journal of International Management*, *16*(2), 135–142.

Livermore, D., Van Dyne, L., & Ang, S. (2022). Organizational CQ: Cultural intelligence for 21st-century organizations. *Business Horizons*, *65*(5), 671–680. https://doi.org/10.1016/j.bushor.2021.11.001

Luquis, R. R. (2021). Integrating the concept of cultural intelligence into health education and health promotion. *Health Education Journal*, *80*(7), 833–843. https://doi.org/10.1177/00178969211021884

Ma, Z., Kim, H. J., & Shin, K. H. (2019). From customer-related social stressors to emotional exhaustion: An application of the demands–control model. *Journal of Hospitality & Tourism Research*, *43*(7), 1068–1091. https://doi.org/10.1177/1096348019849667

MacNab, B. R., & Worthley, R. (2012). Individual characteristics as predictors of cultural intelligence development: The relevance of self-efficacy. *International Journal of Intercultural Relations*, *36*(1), 62–71. https://doi.org/10.1016/j.ijintrel.2010.12.001

Manian, R., & Naidu, S. (2009). India: A cross-cultural overview of intercultural competence. In D. K. Deardorff (Ed.), *Sage handbook of intercultural competence (pp. 233–248)*. Thousand Oaks, CA: Sage.

Marchand, A., Blanc, M. E., & Beauregard, N. (2018). Do age and gender contribute to workers' burnout symptoms? *Occupational Medicine*, *68*(6), 405–411. https://doi.org/10.1093/occmed/kqy088

Marsh, H. W., Hau, K. T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling: A Multidisciplinary Journal*, *11*(3), 320–341.

Maslach, C., & Leiter, M. P. (1999). Teacher burnout: A Research Agenda. *Understanding and Preventing Teacher Burnout*, 295–303. https://doi.org/10.1017/cbo9780511527784.021

Maslach, C., & Leiter, M. P. (2017). Understanding burnout: New models. In C. L. Cooper, & J. C. Quick (Eds.), *The handbook of stress and health: A guide to research and practice* (pp. 36–56). Wiley Blackwell. https://doi.org/10.1002/9781118993811.ch3

Min, H., Kim, H. J., & Agrusa, J. (2021). Serving diverse customers: The impact of cultural intelligence on employee burnout, engagement, and job satisfaction. *Journal of Hospitality and Tourism Research Online Publication*. https://doi.org/10.1177/10963480211016031

Nielsen, K., Nielsen, M. B., Ogbonnaya, C., Känsälä, M., Saari, E., & Isaksson, K. (2017). Workplace resources to improve both employee well-being and performance: A systematic review and meta-analysis. *Work & Stress*, *31*(2), 101–120. https://doi.org/10.1080/02678373.2017.1304463

O'Donnell, C. A., Burns, N., Mair, F. S., Dowrick, C., Clissmann, C., van den Muijsenbergh, M., & RESTORE Team. (2016). Reducing the health care burden for marginalised migrants: The potential role for primary care in Europe. *Health Policy*, *120*(5), 495–508.

Ocampo, A. C. G., Restubog, S. L. D., Wang, L., Garcia, P. R. J. M., & Tang, R. L. (2022). Home and away: How career adaptability and cultural intelligence facilitate international migrant workers' adjustment. *Journal of Vocational Behavior*, 138. https://doi.org/10.1016/j.jvb.2022.103759

Park, S. Y., Song, H. J., & Lee, J. A. (2019). The effects of service employees' cultural intelligence on job satisfaction, perceived service quality, and service value: The mediating role of customer orientation. *Journal of Hospitality and Tourism Research*, *43*(1), 24–48.

Presbitero, A., & Quita, C. (2017). Expatriate career intentions: Links to career adaptability and cultural intelligence. *Journal of Vocational Behavior*, *98*, 118–126. https://doi.org/10.1016/j.jvb.2016.11.001

Presbitero, A., & Teng-Calleja, M. (2019). Ethical leadership, team leader's cultural intelligence and ethical behavior of team members: Implications for managing human resources in global teams. *Personnel Review*, *48*(5), 1381–1392. https://doi.org/10.1108/PR-01-2018-0016

Purvanova, R. K., & Muros, J. P. (2010). Gender differences in burnout: A meta-analysis. *Journal of Vocational Behavior*, *77*(2), 168–185. https://doi.org/10.1016/j.jvb.2010.04.006

Rafiq, N., Abbasi, A. S., Sair, A., Mohiuddin, S., M., & Munir, I. (2020). Emotional labor and its association with emotional exhaustion through cultural intelligence. *Transnational Corporations Review*, *12*(4), 406–419. https://doi.org/10.1080/19186444.2020.1846670

Ramalu, S. S., & Subramaniam, C. (2019). Cultural intelligence and work engagement of expatriate academics: The role of psychological needs satisfaction. *International Journal of Cross-Cultural Management*, *19*(1), 7–26.

Robertshaw, L., Dhesi, S., & Jones, L. (2017). Challenges and facilitators for health professionals providing primary healthcare for refugees and asylum seekers in high-income countries: A systematic review and thematic synthesis of qualitative research. *BMJ Open, 7*(8). https://doi.org/10.1136/bmjopen-2017-015981

Sanfelici, M. (2021). The impact of the COVID-19 Crisis on marginal migrant populations in Italy. *American Behavioral Scientist*, *65*(10), 1323–1341. https://doi.org/10.1177/00027642211000413

Schaufeli, W. B. (2017). Applying the job Demands-Resources model. *Organizational Dynamics*, *46*(2), 120–132. https://doi.org/10.1016/j.orgdyn.2017.04.008

Schaufeli, W., & Enzmann, D. (1998). *The Burnout Companion to study and practice: A critical analysis*. London: Taylor and Francis.

Schaufeli, W. B., & Greenglass, E. R. (2001). Introduction to special issue on burnout and health. *Psychology & Health*, *16*(5), 501–510. https://doi.org/10.1080/08870440108405523

Schelfhout, S., Vandecasteele, R., De Maesschalck, S., D'Hondt, F., Willems, S., & Derous, E. (2022). Intercultural competence predicts intercultural effectiveness: Test of an integrative framework. *International Journal of Environmental Research and Public Health*, *19*(8), 1–21. https://doi.org/10.3390/ijerph19084490

Seriwatana, P., & Charoensukmongkol, P. (2020a). Cultural intelligence and relationship quality in the cabin crew team: The perception of members belonging to cultural minority groups. *Journal of Human Resources in Hospitality &Amp Tourism*, *20*(2), 147–173. https://doi.org/10.1080/15332845.2020.1821431

Seriwatana, P., & Charoensukmongkol, P. (2020b). The effect of cultural intelligence on burnout of thai cabin crew in non-national airlines moderated by job tenure. *ABAC Journal*, *40*(1), 1–19.

Shannon, L. M., & Begley, T. M. (2008). Antecedents of the four-factor model of cultural intelligence. In Van L. Dyne, & S. Ang (Eds.), *Handbook of Cultural Intelligence: Theory, measurement, and applications* (pp. 41–55). Armonk, NY: M. E. Sharpe.

Sharma, T., & Singh, S. (2021). Relationship of emotional intelligence with cultural intelligence and change readiness of indian managers in the service sector. *Journal of Organizational Change Management*, *34*(7), 1245–1256. https://doi.org/10.1108/jocm-05-2017-0193

Stevanovic, P., & Rupert, P. A. (2004). Career-Sustaining behaviors, satisfactions, and stresses of Professional psychologists. *Psychotherapy*, *41*(3), 301–309. https://doi.org/10.1037/0033-3204.41.3.301

Tassell, N., & Flett, R. (2011). Motivation in humanitarian health workers: A self-determination theory perspective. *Development in Practice*, *21*(7), 959–973. https://doi.org/10.1080/09614524.2011.590889

Tay, C., Westman, M., & Chia, A. (2008). Antecedents and consequences of cultural intelligence among short-term business travellers. In Van L. Dyne, & S. Ang (Eds.), *Handbook of Cultural Intelligence: Theory, measurement, and applications (part II)* (pp. 126–144). Armonk, NY: M. E. Sharpe.

Vahia, I. V., Jeste, D. V., & Reynolds, C. F. (2020). Older adults and the Mental Health Effects of COVID-19. *Journal Of The American Medical Association*, *324*(22), 2253. https://doi.org/10.1001/jama.2020.21753

Van Dyne, L., Ang, S., Ng, K. Y., Rockstuhl, T., Tan, M. L., & Koh, C. (2012). Sub-dimensions of the four factor model of Cultural Intelligence: Expanding the conceptualization and measurement of Cultural Intelligence. *Social and Personality Psychology Compass*, *6*(4), 295–313. https://doi.org/10.1111/j.1751-9004.2012.00429.x

Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, *3*(1), 4–70.

Veronese, G., & Pepe, A. (2022). Psychological distress, professional burnout, and trauma in palestinian health care helpers: A two-wave quantitative longitudinal study. *Psychological Trauma: Theory Research Practice and Policy*, *14*(4), 523–534. https://doi.org/10.1037/tra0000941

Wang, Z., Xie, Z., Dai, J., Zhang, L., Huang, Y., & Chen, B. (2014). Physician burnout and its Associated factors: A cross-sectional study in Shanghai. *Journal of Occupational Health*, *56*(1), 73–83. https://doi.org/10.1539/joh.13-0108-oa

Wang, J., Wang, W., Laureys, S., & Di, H. (2020). Burnout syndrome in healthcare professionals who care for patients with prolonged disorders of consciousness: A cross-sectional survey. *BMC Health Services Research*, *20*(1). https://doi.org/10.1186/s12913-020-05694-5

Werry, C. (2005). Rhetoric and reflexivity in cognitive theories of language. *Language & Communication*, *25*, 377–397. https://doi.org/10.1016/j.langcom.2005.07.002

Yüksel, A., & Ereş, F. (2018). The correlation between global citizenship perceptions and cultural intelligence levels of teachers. *Universal Journal of Educational Research*, *6*(5), 1069–1076. https://doi.org/10.13189/ujer.2018.060528