This is the accepted manuscript (post-print version) of the article.
The content in the accepted manuscript version is identical to the final published version, although typography and layout may differ.

How to cite this publication
Please cite the final published version:


Publication metadata

Title: The Culturally Intelligent Way of Acculturating: Examining cultural intelligence and acculturation orientations among foreign workers in the Danish context of reception
Author(s): Simon Ozer & Seth J. Schwartz
Journal: Scandinavian Journal of Psychology
DOI/Link: https://doi.org/10.1111/sjop.12760
Document version: Accepted manuscript (post-print)
The Culturally Intelligent Way of Acculturating: Examining Cultural Intelligence and Acculturation Orientations among Foreign Workers in the Danish Context of Reception

Simon Ozer\textsuperscript{a,c}
Aarhus University, Denmark

Seth J. Schwartz\textsuperscript{b}
University of Miami, USA

\textsuperscript{a} Department of Psychology and Behavioural Sciences, Aarhus University, Bartholins Allé 11, 8000 Aarhus C, Denmark.

\textsuperscript{b} Department of Public Health Sciences, Leonard M. Miller School of Medicine, University of Miami, USA.

\textsuperscript{c} Corresponding author. Phone number: +45 8716 6176, e-mail: ozer@psy.au.dk.
CULTURAL INTELLIGENCE AND ACCULTURATION

Abstract:
In contemporary globalized societies, the number of foreign workers is increasing, resulting in greater intercultural contact and adaptation. Foreign workers apply their cultural intelligence when adapting to and working in multicultural environments, resulting in affiliations with both their cultural heritage and their destination cultural stream. We examined foreign workers’ (N=264) intercultural adaptation in the globalized context of Denmark. We found that cultural intelligence was directly and positively linked with adaptable work performance. Furthermore, cultural intelligence was indirectly and negatively associated with sociocultural adaptation difficulties through endorsement of Danish culture. Likewise, perceived negative context of reception was indirectly and positively associated with sociocultural adaptation difficulties through low endorsement of Danish culture. Additionally, perceived stress predicted adaptable work performance, whereas perceived context of reception and sociocultural adaptation difficulties did not. Overall, our results suggest involvement in the destination culture as a culturally intelligent way of applying one’s cultural capabilities, suggesting that the perceived context of reception is of great importance for helping foreign workers adapt to their destination cultural environments.

Keywords: Cultural intelligence, acculturation, foreign workers, Denmark, adjustment

Word count: 6088 (excluding abstract, tables, figures, and references)

The data that support the findings of this study are available from the corresponding author upon reasonable request.
The Culturally Intelligent Way of Acculturating: Examining Cultural Intelligence and Acculturation Orientations among Foreign Workers in the Danish Context of Reception

International migration has become widespread in contemporary globalized societies. One such group of migrants are foreign workers who migrate – often temporarily – as part of their employment. Although relocating to a new country provides important job opportunities, the acculturation process of balancing heritage cultural maintenance with participation in the destination culture—as well as performing in the new work environment—can be challenging and often requires important intercultural capabilities such as cultural intelligence (Ng, Van Dyne, & Ang, 2012).

The globalized Scandinavian country of Denmark has generally been associated with high levels of life satisfaction and enjoyment (Biswas-Diener, Vittersø, & Diener, 2010). However, these positive conditions were not reflected in a recent large survey among expatriates from other countries, who ranked the Danish context of reception as 48th out of 64 destination countries. Challenges related to migrating to Denmark were reflected in a ranking of 63rd out of 64 countries in terms of “ease of settling in”, an index comprising (1) the friendliness of the local population, (2) feeling at home in the local culture, (3) the local language, and (4) ease of finding friends (InterNations, 2019a). These rankings accentuate the importance of examining adaptation and adaptive work performance among foreign workers within the Danish context of reception.

The psychological study of sojourners’ intercultural adaptation process within a given context of reception has been approached through acculturation psychology (Smith & Khawaja, 2011; Zhang & Goodson, 2011), as well as through the theory of cultural intelligence (Ng et al., 2012; Ott & Michailova, 2018). Whereas intercultural psychology has emerged as an important contemporary research area, it is important to integrate various cultural competence models across dimensions of
attitudes, worldviews, and capabilities (Leung, Ang, & Tan, 2014). Although psychological approaches toward cultural intelligence and acculturation both propose important predictors of foreign workers’ adjustment and work performance, these two approaches have rarely been examined in relation to each other. One exception is Sharma and Hussain (2019), who found that cultural intelligence moderated the relationships of the assimilation (high destination and low heritage cultural orientation) and integration (high destination and heritage cultural orientation) acculturation strategies with psychological adaptation. Cultural intelligence also moderated the relationship between the separation strategy (high heritage and low destination cultural orientation) and sociocultural adaptation. These findings from the Kashmir region of India suggest ways in which cultural intelligence can facilitate adaptive acculturation to the destination society. Nevertheless, research is needed to examine how cultural intelligence can facilitate the development of cultural orientations vis-à-vis psychosocial and performance outcomes.

In the present study, we address these gaps in the literature by investigating how cultural intelligence shapes cultural affiliation vis-à-vis adjustment, and in turn work performance, among foreign workers in Denmark. Specifically, we examined a path model in which cultural intelligence and perceived context of reception are associated with both heritage and Danish cultural endorsement vis-à-vis perceived stress, sociocultural adaptation difficulties, and work performance. Overall, our aim was to examine how intercultural capabilities relate to the intercultural experiences and attitudes of foreign workers within the Danish context of reception and, consequently, to bridge the literatures on cultural intelligence and acculturation.

**Cultural Intelligence and Cultural Orientations in Intercultural Adaptation**

Adapting to intercultural situations generally requires individuals to negotiate situations involving cultural diversity (Ang & Van Dyne, 2008) as well as to participate in the destination cultural society while also maintaining one’s heritage cultural affiliation (Berry, 1997). As such,
CULTURAL INTELLIGENCE AND ACCULTURATION

cultural intelligence and acculturation strategies both reflect individual intercultural capabilities, as well as behavior and attitudes employed in cross-cultural transitions. Both cultural intelligence and acculturation strategies have been empirically well established and found to be highly relevant for examining functional, psychological, and sociocultural adaptation among migrants (Nguyen & Benet-Martínez, 2013; Ott & Michailova, 2018; Rockstuhl & Van Dyne, 2018).

The conception of cultural intelligence (CQ) draws on the extended multi-domain understanding of intelligence. Accordingly, CQ was conceptualized as the individual capability to grasp and reason correctly during intercultural contact and within culturally diverse settings (Ang & Van Dyne, 2008). Such cultural capability reflects an individual’s repertoire of cognitive, behavioral, and motivational capabilities to function and adapt effectively in multicultural environments and workplaces. That is, a high degree of CQ allows people to generate new interpretations and reactions when their learned cultural knowledge system does not fit their current situation (Ott & Michailova, 2018). CQ represents a complex and multifactorial understanding of (1) metacognitive intelligence, (2) cognitive intelligence, (3) motivational intelligence, and (4) behavioral intelligence. Metacognitive CQ refers to higher-order cognitive processes reflecting the capability to consciously acquire and understand cultural knowledge during intercultural interaction including planning, monitoring, and revising mental models of cultural norms and practices. Cognitive CQ reflects the individual’s knowledge of norms, practices, and conventions in different cultures as well as knowledge of the cultural environment including cross-cultural similarities and differences. Motivational CQ refers to the capability, interest, and vivacity to focus on learning and functioning during situations characterized by cultural diversity. Finally, behavioral CQ reflects the capability to employ the culturally appropriate verbal and non-verbal behavior during intercultural processes (Ang & Van Dyne, 2008). These capabilities for understanding and adapting to destination cultural interaction reflect a way of overcoming ethnocentrism and, consequently, represent a way of
learning to critically evaluate one’s heritage culture and open-mindedly approach the emic perspectives inherent within one’s destination cultural involvement (Triandis, 2006).

Whereas cultural intelligence reflects the capabilities needed to succeed within intercultural environments, cultural orientations represent strategies for handling one’s cultural affiliation during continuous contact with destination cultural streams (Berry, 1997). That is, cultural capabilities are needed to navigate and perform successfully in intercultural settings, whereas cultural affiliations both reflect and shape one’s rootedness and involvement in multicultural contexts. Psychological acculturation refers to individual changes that follow intercultural contact. Such changes are reflected within domains such as behavior (e.g., language, food preference, and peer groups) and attitudes (e.g., preference cultural elements and cultural identity; Berry, 1997; Ozer, 2017). Early acculturation psychological research primarily approached the question of cultural orientation as a unidimensional concept reflecting shedding one’s heritage cultural affiliation and adopting the destination cultural stream (Gordon, 1964). In contrast, Berry (1997) developed a bidimensional approach, conceptualizing orientations toward the heritage and destination cultures as independent dimensions reflected in the four acculturation strategies: integration, assimilation, separation, and marginalization (low destination and heritage cultural orientation). Consequently, individuals exposed to intercultural contact can maintain their heritage cultural affiliation while at the same time adopting the cultural streams reflected within the context of reception – resulting in various degrees of biculturalism (Schwartz, Birman, Benet-Martínez, & Unger, 2017).

**The Culturally Intelligent Way of Acculturating**

Cultural intelligence and cultural orientation toward one’s heritage and destination cultural streams have been empirically established as central concepts related to adaptation following international migration. However, to the best of our knowledge, the interplay between and among
these concepts has not been empirically studied. Such interplay would reflect how generic intercultural capabilities are expressed in particular settings of cultural negotiation.

Although metacognitive CQ would reflect a more conscious consideration of how one would approach intercultural interactions, metacognitive CQ could also manifest itself through employment of greater reflectivity and selectivity in one’s endorsement and integration of diverse cultural elements resulting in an integrative sense of biculturalism and well-being (Ward, Tseung-Wong, Szabo, Qumseya, & Bhowon, 2018). Cultural CQ would reflect the knowledge needed for cultural participation and could, consequently, pave the way for both heritage and destination cultural engagement. Motivational CQ reflects interest in intercultural interaction, which could prompt acquisition of the destination culture. Lastly, behavioral CQ reflects behavioral adaptation to the cultural context of reception, which could include flexibility and capability vis-à-vis participation within one’s bicultural affiliation. Overall, intercultural abilities could be implemented via specific and informed ways of handling one’s endorsement of the heritage and destination cultural streams.

Overall, high levels of cultural intelligence could lead to critical reflections about, and evaluation of, one’s heritage cultural stream, along with an openness to understanding and adopting new norms and customs as well as cultural ways of doing things (Triandis, 2006). Consequently, employing cultural intelligence could lead to re-exploration and re-evaluation of one’s heritage cultural endorsement. Additionally, cultural intelligence might activate and encourage involvement and interaction with the destination cultural context, and therefore a higher degree of destination cultural participation. In one study, Schmitz and Schmitz (2012) examined the relationship between emotional intelligence (a domain of intelligence closely associated with CQ; Ang & Van Dyne, 2008) and acculturation orientations. They found that elements of emotional intelligence were positively associated with both destination cultural endorsement and biculturalism, but negatively
linked to both heritage cultural endorsement and the marginalization acculturation strategy. Consequently, individual differences in various aspects of intelligence appear to shape the acculturation process, and in turn, cultural adaptation.

**The Process of Intercultural Adaptation**

Psychological research examining foreign workers’ adaptation to their destination cultural environment has generally focused on individual differences in either cultural intelligence or cultural orientation. Whereas research on cultural intelligence primarily focuses on more immediate intercultural adjustment and work performance (Ott & Michailova, 2018; Rockstuhl & Van Dyne, 2018), research within acculturation psychology focus more on long-term adjustment of people who are residing in a country other than where they or their families were born (Nguyen & Benet-Martínez, 2013). The category of foreign workers includes various lengths of stay in the destination culture including temporary expatriates and foreign workers who are undecided about when to return to their heritage country. The length of stay could affect the level of involvement in the destination culture and the acquisition of new cultural streams.

Adjustment to international migration and intercultural environments has been differentiated into psychological and sociocultural domains (Demes & Geeraert, 2014). Psychological adjustment refers to affective reactions to migration examined in terms of anxiety, stress, and general psychological well-being, among other indicators. Sociocultural adjustment refers to the behavioral domain of acquiring culture-specific skills and ability to manage everyday life in the context of reception – such as ways of interacting with strangers and work-life balance expectations (Ozer, 2017; Ward & Kennedy, 1999). Especially relevant for expatriate workers is work performance, which is a multidimensional construct reflecting the behaviors needed to accomplish work-related goals. One key component of work performance is adaptive way of managing one’s tasks, including the ability to adjust to dynamic and changing work situations that often characterize culturally
diverse workplaces (Charbonnier-Voirin & Roussel, 2012). Whereas investigations of foreign workers have employed cultural intelligence as the central factor in regard to adjustment and work performance (Ott & Michailova, 2018; Rockstuhl & Van Dyne, 2018), cultural orientations have more often been explored in relation to psychological and sociocultural adjustment among international students and immigrants (e.g., Berry, 2017; Eshel & Rosenthal-Sokolov, 2000). Despite these differences in the populations among which CQ and acculturation have been examined, these two constructs could easily be examined within a single population.

Research on cultural intelligence vis-à-vis adjustment and performance has generally found a direct and positive association, with motivational CQ as the primary component underlying this link (Ott & Michailova, 2018; Rockstuhl & Van Dyne, 2018). For example, a longitudinal study of international students (Ward, Wilson, & Fischer, 2011) found motivational CQ to be negatively associated with sociocultural difficulties and psychological symptoms. The link between adjusting to a multicultural environment and work performance has been more complex (Ott & Michailova, 2018), with some indicators of psychological well-being—often affected by acculturation—predicting work performance in multicultural environments (Jyoti & Kour, 2017; Lee, Veasna, & Sukoco, 2014). Within acculturation psychology, biculturalism (representing Berry’s integration approach) has been positively associated with psychological adjustment and negatively linked with sociocultural challenges (Nguyen & Benet-Martínez, 2013). That is, simultaneously maintaining one’s heritage cultural affiliation and adopting the destination culture stream has been found to represent among the most positive ways of adapting cross-culturally—biculturalism is often more adaptive than only acquiring the destination culture or only retaining one’s cultural heritage.

The Danish Context of Reception

Although research on foreign workers’ adaptation primarily has examined individual factors such as cultural intelligence and cultural orientations, discussions have emerged within the
academic literature emphasizing the importance of contextual, social-ecological, and interactional factors in the acculturation process (Schwartz, Unger, Zamboanga, & Szapocznik, 2010). That is, acculturating individuals are reacting to and interacting with influential factors in the immediate societal context, and such interactions affect their cultural adjustment (Horenczyk et al., 2013).

Context of reception refers to the general profile of contextual factors that drive the acculturation processes – such as opportunities available to immigrants and the overall degree of welcomeness directed toward migrants. Specifically, context of reception has been conceptualized as the opportunity structure, degree of openness versus hostility, and acceptance within one’s destination cultural community (Portes & Rumbaut, 2014). Accordingly, context of reception includes public discourses regarding foreigners, which in turn are reflected in the acculturating individual’s experience of feeling welcome, appreciated, and respected. Within many European countries, public discourse and media portrayals of immigrants have become increasingly hostile (Davidov & Semyonov, 2017; Giorgi & Vitale, 2017). In longitudinal research on international student sojourners (Ramos, Cassidy, Reicher, & Haslam, 2016), perceived discrimination was found to shape acculturation strategies by promoting greater maintenance of one’s heritage cultural affiliation, less involvement with the destination cultural environment, and avoidance of contact with destination cultural groups reflecting the rejection-identification model (Branscombe, Schmitt, & Harvey, 1999). Research among immigrants in the US (Schwartz et al., 2014) found context of reception to predict depressive symptoms more strongly than discrimination did. In one study of sojourners in Denmark, Ozer (2015) found social support to be negatively associated with stress and sociocultural difficulties and positively linked with self-esteem. Additionally, discrimination was positively associated with stress and sociocultural challenges and negatively linked with self-esteem.
As a small Scandinavian country, Denmark represents one of the most globalized societies in the world, as reflected in a KOF cultural globalization index score of 90.89 in 2017. For comparison, the world average KOF cultural globalization score was 54.53 in 2017 (Gygli, Haelg, Potrafke, & Sturm, 2019). Although Denmark represents a globalized environment, recent surveys have indicated that foreign workers in Denmark do not feel comfortable; social support and Danish cultural inclusion are especially difficult to achieve. For example, 70% of foreign workers in Denmark report that they find it difficult to make local friends, and only 10% report that they are friends primarily with local people (InterNations, 2019a). One specific quote by a Portuguese expatriate refers to the challenges of social life in Denmark: “The locals are not friendly towards foreigners” (InterNations, 2019b, p. 2). Although Denmark provides some generally supportive conditions for expatriate work life, between 2018-2019 the country fell 13 places in the list of best expatriate destinations to be, to 48th out of the 64 countries included in the survey (InterNations, 2019a).

**The Current Study**

The present study was conducted within the specific context of Denmark. Because Denmark is an important and globalized context for investigating the cultural adaptation of foreign workers (InterNations, 2019a), in the current study we tested four hypotheses examining how cultural intelligence and perceived context of reception are associated directly with work performance and indirectly with our outcome measures (perceived stress and sociocultural adaptation difficulties) through cultural endorsement. **Hypothesis 1**: Cultural intelligence is positively, and perceived negative context of reception negatively, associated with adaptable work performance (defined in terms of capacities to effectively understand and react to complex and changing circumstances). **Hypothesis 2**: heritage and Danish cultural orientations are both negatively associated with perceived stress and sociocultural adaptation difficulties. Furthermore, the simultaneous orientation
toward both cultural streams (biculturalism/integration) would be associated with low reports of stress and sociocultural difficulties as well as greater work performance and cultural intelligence.

**Hypothesis 3**: Cultural intelligence is indirectly and negatively, and perceived negative context of reception indirectly and positively, associated with stress and sociocultural adaptation difficulties through orientation toward one’s heritage, and especially through the Danish cultural stream.

**Hypothesis 4**: Adjustment difficulties are negatively associated with adaptable performance. Our study contributes to the understanding of the relationship between related (but heretofore not studied together) intercultural constructs reflecting different approaches to studying cross-cultural migration. The study also provides a better understanding of foreign workers’ adaptation to the specific working context in Denmark, indicating a culturally intelligent way of acculturating.

**Method**

Data were collected through an online English self-report questionnaire. An invitation letter asking foreign workers residing in Denmark to participate was circulated through a newsletter distributed to foreign workers in Denmark and, additionally, posted in various Danish expatriate Facebook groups.

**Participants**

Participants were 264 foreign workers in Denmark. These participants held citizenship from UK (12.8%), USA (8.1%), Italy (5.6%), India (5.1%), Germany (4.9%), Romania (4.9%), Australia (4.5%), Poland (4.1%), among other countries. Participants’ ages ranged from 20 to 65 ($M_{age}=35.09$, $SD=9.38$), and 72.3% were female. Participants differed with regard to the size of the company they were working for, with 15.9% affiliated with a micro size (1-10 employees), 16.3% affiliated with a small size (10-50 employees), 19.0% affiliated with a medium size (50-250 employees) and 48.8% affiliated with a large size company (more than 250 employees). Furthermore, participants differed with regard to how long they had resided in Denmark (ranging from 1 month to 33 years; $M=59.0$)
months, $SD=67.1$) and for how long time they were planning to stay (ranging from 6 months to undetermined about when to return if ever). With regard to work city, 35.8% worked in Aarhus, 28.1% in Copenhagen, 11.5% in Odense, 2.7% in Aalborg, and 2.3% in Billund.

**Measurement**

Besides providing demographic information, participants completed the following self-report scales:

The *Cultural Intelligence Scale* (CQS; Van Dyne, Ang, & Koh, 2009) measures an individual’s capability to understand, act, and manage effectively in culturally diverse settings. The scale consists of 20 items tapping into the dimensions of metacognition (four items), cognition (six items), motivation (five items), and behavior (five items). Sample items include: “I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me” and “I use pause and silence differently to suit different cross-cultural situations.” Participants responded to these items using a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). Cronbach’s alpha in the present sample was .89.

The *Brief Acculturation Scale* (Demes & Geeraert, 2014) is a bidimensional acculturation measure assessing orientations toward the heritage and destination cultures separately. In the current study, the destination culture sub-scale was adapted to refer specifically to Danish culture. With four items for each cultural dimension, the measure taps into the domains of cultural friendship, traditions, characteristics, and actions. Sample items include “It is valuable for me to have Danish friends” and “It is valuable for me to hold on to my home country characteristics.” Participants completed the scale using a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). Internal consistency was acceptable ($\alpha_{\text{Heritage}}=.87$ and $\alpha_{\text{Danish}}=.77$).

*Perceived context of reception* was assessed using a measure developed for this study to refer to the particular context of Denmark. The measure examined perceived negative attitudes toward
CULTURAL INTELLIGENCE AND ACCULTURATION

foreigners working in Denmark. The four items on this scale read: (1) “The Danish media generally portrays foreigners living in Denmark in a negative way”, (2) “In general, I have experienced negative attitudes among Danes regarding foreigners working in Denmark”, (3) “Danes generally speak in a negative way about people who come from other countries to work in Denmark”, and (4) “I sense a general assumption in the Danish society suggesting that foreigners working in Denmark are a problem.” Participants answered the scale using a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). Internal consistency was good (α=.91).

The Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983) is widely used to measure one’s perception of stress by tapping into the experience of unpredictability, uncontrollability, and overload in one’s life experienced during the last month. The scale consists of 10 items, including: “In the last month, how often have you felt nervous and ‘stressed’?”. Responses were provided on a 5-point Likert scale ranging from 1 (Never) to 5 (Very often). Cronbach’s alpha was .86.

The Sociocultural Adaptation Scale (SCAS; Ward & Kennedy, 1999) assesses difficulties experienced by foreigners when adjusting in the host cultural context by acquiring cultural skills and negotiating interactive aspects of the new environment. The SCAS was developed as a flexible instrument that can easily be modified to fit a specific group and context. We included eight items. A sample item inquires about how much difficulty the respondent experienced in Denmark while “Making yourself understood.” All items were answered using a 5-point Likert Scale ranging from 1 (No difficulty) to 5 (Extreme difficulty). Cronbach’s alpha was .82.

The Adaptive Performance Scale (Charbonnier-Voirin & Roussel, 2012) measures an individual’s ability to change his or her behavior to meet the demands of a new work environment. The scale was developed to be applicable across a wide range of job contexts. We included five items tapping into the domains of creativity and reactivity in unpredictable situations. A sample item reads: “Within my department, people rely on me to suggest new solutions.” Participants rated
each item using a 7-point Likert scale ranging from 1 (Strongly disagree) to 7 (Strongly agree). Cronbach’s alpha was .76.

**Analyses**

All analyses were conducted in SPSS and Mplus 8 (Muthén & Muthén, 1998-2011) employing maximum likelihood estimation with robust standard errors. As guidelines for evaluating model fit, as suggested by Kline (2012), we defined adequate fit as Comparative Fit Index (CFI)≥.90 and Root Mean Square Error of Approximation (RMSEA)≤.08. The CFI indexes the extent to which the specified model represents an improvement over a null model with no paths or latent variables; and the RMSEA evaluates the extent to which the covariance structure implied by the model deviates from the covariance structure observed in the data.

**Results**

**Structural Equation Model**

We tested a hypothesized path model (see Figure 1) employing a total disaggregation (using scale items as indicators for corresponding latent scale variables) of all self-report measurements (CQS was included as a second order construct; all factor loadings≥.40). Gender and length of stay in Denmark were controlled for vis-à-vis their effects on the mediating and outcome variables. Initially, the model did not yield acceptable fit to the data, CFI=.836; RMSEA=.051; 95%CI [0.047; 0.054]. However, with some similarly worded items allowed to covary¹, the model fit was acceptable, CFI=.900; RMSEA=.040; 95%CI [0.036; 0.044].

Results (Table 2 and Figure 1) indicated that cultural intelligence was positively associated with Danish cultural orientation [β=.29, p=.002, 95%CI=0.11 to 0.46] and with adaptive performance [β=.40, p<.001, 95%CI=0.24 to 0.55]. Perceived negative context of reception was

---

¹ The following items were allowed to co-vary: Behavior CQ 4 with 5, Motivation CQ 1 with 2, heritage cultural orientation 3 with 4, Danish cultural orientation 1 with 2 as well as 3 with 4, perceived stress 4 with 5, 6 with both 9 and 10, 7 with 8, as well as 9 with 10; and adaptive work performance 1 with 2.
negatively linked with Danish cultural orientation \([\beta=-.21, p=.012, 95\%\text{CI}=-.37 \text{ to } -.05]\). Danish cultural orientation was negatively linked with perceived stress \([\beta=-.21, p=-.011, 95\%\text{CI}=-.37 \text{ to } -.05]\) and with sociocultural adaptation difficulties \([\beta=-.34, p<.001, 95\%\text{CI}=-.51 \text{ to } -.17]\). Furthermore, heritage cultural orientation was positively associated with sociocultural adaptation difficulties \([\beta=.26, p=.001, 95\%\text{CI}=.11 \text{ to } .41]\). Finally, perceived stress was negatively associated with adaptable work performance \([\beta=-.20, p=.039, 95\%\text{CI}=-.40 \text{ to } -.01]\).

Besides the direct association between cultural intelligence and adaptable performance, two significant indirect paths emerged. Cultural intelligence was indirectly and negatively associated with sociocultural difficulties through Danish cultural endorsement \([\beta=-.10, p=.021, 95\%\text{CI}=-.18 \text{ to } -.01]\). Whereas, perceived negative context of reception was positively associated with sociocultural difficulties through Danish cultural orientation \([\beta=.07, p=.046, 95\%\text{CI}=.00 \text{ to } .14]\).

**Acculturation Strategies in Relation to Outcome Measures**

To test whether biculturalism/integration was the most adaptive and culturally intelligent way to acculturate, we examined the four acculturation strategies vis-à-vis perceived stress, sociocultural difficulties, and adaptive performance by categorizing each participant into one strategy using a median split of their cultural orientation scores \((\text{Mdn}_{\text{Danish}}=5.00; \text{Mdn}_{\text{heritage}}=4.75)\). We found significant differences in regard to perceived stress, \(F(3,257)=2.71, p=.046, \eta^2=.07\) indicating that participants in the separation strategy \((M=3.03, SD=0.70)\) reported higher levels of stress as compared to both assimilation \((M=2.77, SD=0.63, p=.046, d=0.39)\) and integration \((M=2.68, SD=0.67, p=.005, d=0.50)\). Similarly, significant differences emerged in relation to sociocultural adaptation difficulties, \(F(3,254)=5.70, p<.001, \eta^2=.12\). The separation strategy \((M=2.53, SD=0.77)\) was associated with greater levels of sociocultural difficulties as compared to marginalization \((M=2.18, SD=0.74, p=.008, d=0.47)\), assimilation \((M=1.99, SD=0.59, p<.001, d=0.79)\) and
integration ($M=2.19$, $SD=0.65$, $p=.006$, $d=0.48$). Moreover, acculturation strategies differed with regard to adaptive performance $F(3,247)=3.07$, $p=.029$, $\eta^2=.08$, indicating that integration ($M=5.36$, $SD=0.89$) was associated with greater levels of adaptive performance as compared to marginalization ($M=4.94$, $SD=1.06$, $p=.015$, $d=0.43$) and separation ($M=4.88$, $SD=1.14$, $p=.010$, $d=0.47$). Although there were no significant difference between acculturation strategies and cultural intelligence $F(3,263)=2.15$, $p=.095$, $\eta^2=.02$, the integration ($M=5.19$, $SD=0.69$, $p=.055$, $d=0.36$) and assimilation ($M=5.21$, $SD=0.74$, $p=.055$, $d=0.37$) strategies came close to reflecting a significantly more cultural intelligent way of acculturating as compared to the separation strategy ($M=4.93$, $SD=0.80$).

**Cultural Intelligence During Negative Context of Reception**

As an exploratory post-hoc analysis, we examined whether the effects of cultural intelligence on the three outcome variables would be stronger when the perceived context is more negative. In a moderation analysis through the Process macro in SPSS (Hayes, 2013), the results did not yield significant interaction effects between cultural intelligence and perceived context of reception in regard to neither perceived stress [$\beta=.05$, $p=.170$, 95%CI=−.02 to .11], sociocultural adaptation difficulties [$\beta=.06$, $p=.088$, 95%CI=−.01 to .12], nor adaptive work performance [$\beta=.05$, $p=.354$, 95%CI=−.05 to .14].

**Discussion**

In the present study, we examined how cultural intelligence, perceived context of reception, and cultural endorsement are associated with foreign workers’ adaptive work performance, as well as adjustment through perceived stress and through sociocultural difficulties. Our results indicated that cultural intelligence, but not context of reception, was reflected in adjustment vis-à-vis work performance, partly confirming our first hypothesis. Furthermore, the cultural intelligent way of
acculturating was reflected in strong endorsement of the Danish cultural stream, coupled with some maintenance of one’s heritage cultural stream, being associated with favorable sociocultural adaptation. The perception of a negative context of reception was associated with less endorsement of Danish culture and, in turn, greater sociocultural difficulties. These findings partly confirm our second and third hypotheses, as the indirect effects reflected sociocultural difficulties but not stress. Furthermore, our third hypothesis was partly confirmed as biculturalism/integration emerged as more adaptive compared to the separation acculturation strategy. Additionally, stress, but not sociocultural difficulties, was associated with limited abilities to adapt in relation to one’s work performance, partly confirming our fourth hypothesis. Overall, although Danish cultural endorsement appeared to play a large role in the culturally intelligent way of acculturating, heritage cultural endorsement appeared to be statistically nonsignificant. We discuss these results in terms of the key roles of cultural intelligence and the specific local intercultural processes among foreign workers in Denmark.

**Cultural Intelligence and the Capability to Acculturate in a Positive Way**

Research on cultural intelligence among foreign workers in globalized multicultural contexts has generally found this aspect of intelligence to represent an adaptive capacity with potential to improve both cultural adjustment and work adjustment (Ott & Michailova, 2018; Rockstuhl & Van Dyne, 2018). The association of cultural intelligence with adaptable work performance might reflect ways in which the capacities to effectively understand and react to complex and changing circumstances could help culturally intelligent foreign workers meet the demands of a new multicultural work environment, including its need for creativity and handling unforeseen situations (Charbonnier-Voirin & Roussel, 2012). Additionally, research has suggested that general adjustment might function as a mediating variable linking cultural intelligence with work performance (Malek & Budhwar, 2013). These prior results, together with our current findings,
CULTURAL INTELLIGENCE AND ACCULTURATION

could reflect a transitional process of adapting to the destination cultural context and, furthermore, might suggest that foreign workers who have become habituated to their destination cultural context perform better at work. In our results, this association was only related to perceived stress, suggesting that psychological well-being is of primary importance vis-à-vis productivity and adjustment within one’s workplace. This finding could be explained by our focus on adaptable performance related to the ability to adapt one’s behavior in accordance with the demands from the environment (Charbonnier-Voirin & Roussel, 2012). Overall, our path model reflects various dimensions of intercultural transitions, including the immediate intercultural situation (cultural intelligence and adaptive performance) as well as longer-term cultural adaptation (cultural orientation and adjustment). These shorter- and longer-term processes represent central aspects of the process of negotiating one’s cultural affiliation while adapting to a globalized, culturally diverse context.

In our path model, we bridged two relevant concepts that are influential during cross-cultural migration. Specifically, our model frames cultural intelligence as a general intercultural capability expressed in destination, but not less so in heritage, cultural endorsement. This framing suggests that the culturally intelligent way of acculturating includes a greater orientation toward and involvement with the destination cultural stream while not changing one’s level of heritage cultural endorsement. The intercultural capabilities of cultural intelligence can facilitate new cultural acquisition, whereas it might increase the salience of one’s heritage culture through greater cultural awareness – perhaps leading to an overall experience of being culturally rooted. Such a pattern was reflected in the associations of assimilation and integration strategies with adaptation outcomes. In turn, biculturalism reflects involvement with both heritage and Danish cultural streams, and ostensibly greater levels of adjustment. In accordance with international research (Nguyen & Benet-Martínez, 2013) our study suggest that some form of biculturalism would be optimal for foreign
workers in Denmark. Wagstaff and colleagues (2020) found that cultural intelligence partially mediated the association between bicultural identity and positive attitudes toward cultural diversity, suggesting CQ as a central mechanism in managing one’s cultural affiliation and openness to destination cultural streams within multicultural work environments.

In contemporary globalized societies, foreign workers adapt to greater cultural complexity than is reflected in new and heritage cultural endorsement. Specifically, foreign workers are likely also exposed to the cultural streams of other foreign workers and foreign media (including globalized English-language media). Intercultural interactions through social media, as well as involvement with an international community within the destination country, represent a common way of facilitating contact with people from both one’s heritage, destination as well as other cultural streams. Indeed, social media has become an influential factor shaping the cultural dynamics during cross-cultural transitions (Li & Tsai, 2015). Among sojourners in the Netherlands, Hofhuis, Hanke, and Rutten (2019) found that use of social media with home-country friends and family members was positively associated with both psychological alienation and heritage cultural endorsement. Further, although heritage cultural endorsement was positively associated with well-being, psychological alienation was negatively associated with well-being. Moreover, in that Dutch study, mediated contact with Dutch, and especially home-country, friends and relatives was linked with perceived online social support, and in turn, with well-being. Nevertheless, research in China and Taiwan has indicated that contextual differences in whether foreign workers work at a local or international organization influence their adjustment, with foreign workers working at local organizations reporting greater general and interaction with destination country nationals (Selmer, Lauring, Normann, & Kubovcikova, 2015). This pattern could reflect the adaptive benefits of engaging with the local community, rather than just interacting with the international community or with heritage cultural peers. Most participants in our study work in larger Danish cities and in large
organizations, both of which provide access to an international community and social network. However, some participants might hold jobs that does not include a high degree of collaboration and intercultural contact, limiting the possibilities of acquiring the Danish cultural stream. Accordingly, beneficial social support can stem from many types of relationships and can serve as a significant facilitator for expatriate adaptation.

**Foreign Workers in the Local Context of Denmark**

A recent survey on foreign workers (InterNations, 2019a) portrayed Denmark as a challenging context of reception to adapt to. This could reflect an increasingly negative attitude toward foreigners within European societies, emphasizing the importance of examining not only individual but also contextual factors associated with cross-cultural transitions. These negative attitudes among the majority can include sociocultural concerns (e.g., impact on traditional society and cohesion) and economic concerns (e.g., low wages undermining the local labor union) often proliferated in public media (Davidov & Semyonov, 2017; Giorgi & Vitale, 2017). Such discourses might target some areas of work more than others, making these discourses more influential among specific groups of foreign workers (e.g., craftsmen, especially from Eastern Europe, are often blamed for undermining the workers’ rights and minimum wage in Denmark).

The acculturation process of foreign workers represents a dynamic interaction between individual and societal acculturation preferences and behavior. Discrimination has been found to be a general potential acculturative stressor linked to low psychological well-being, especially among sojourners from Africa, Asia, Middle East, India, and Latin America (Smith & Khawaja, 2011). These patterns may differ across destination societies – heritage cultural endorsement has been associated with greater levels of perceived discrimination than destination cultural endorsement is in both Finland and Israel but not in Germany (Jasinskaja-Lahtı et al., 2003). Specifically, within the context of Denmark, experiences of discrimination were strongly associated with various
aspects of adjustment among sojourners (Ozer, 2015). This could reflect how gravitating toward the
general Danish cultural stream could provide a sense of inclusion and belonging to offset adversities
associated with discrimination. We found that perceptions of negative Danish attitudes toward
foreigners were associated negatively with Danish cultural endorsement, suggesting that foreign
workers’ cultural affiliation is associated with their perceptions of the context of reception.

This finding where perceived negative context of reception was negatively associated with
Danish cultural endorsement could reflect a preference for assimilation within Denmark, in which
foreign workers are expected to adopt Danish ways of being. Consequently, a perceived negative
context of reception could reflect a discordance between majority members’ expectation for foreign
workers’ cultural adaptation and the actual cultural orientation of these foreign workers (Jasinskaja-
Lahti et al., 2003). Such an understanding emphasizes the importance of the destination cultural
context and its expectations for immigrants and foreigners. That is, even though there might be a
culturally intelligent way of navigating the acculturation process, the context of reception influences
this process in important ways. Specifically, as outlined within rejection-identification
(Branscombe, Schmitt, & Harvey, 1999) and reactive ethnicity (Rumbaut, 2008) approaches,
migrants who perceive themselves (or their cultural group) as rejected by the majority cultural
stream are likely to withdraw from that stream and endorse their cultural heritage more strongly.

Limitations

The present study should be considered in the light of some important limitations. First,
although our invitation to participate in the study was widely distributed through an expatriate
newsletter, the use of Facebook to recruit participants involves limitations. For example, most
participants will have some degree of social network engagement and therefore, the results might
not be generalizable broadly across foreign workers in Denmark who might perceive less social
support from not engaging with such Facebook groups. Second, our cross-sectional design does not
allow us to draw directional or causal conclusions. For example, although cultural intelligence could prompt specific ways of managing biculturalism, engagement and adoption of destination cultural elements could further encourage and develop the individual’s CQ, reflecting some degree of bidirectionality. Third, our results should be examined with some caution, given that common-method-bias associated with relying solely on self-report measures could potentially inflate the correlations we found. Fourth, although we examined heritage and Danish cultural affiliations, foreign workers might acculturate toward more of an international, hybrid “third” culture characterized by cosmopolitanism and reflecting the international environment in Denmark. Fifth, our measure of perceived context of reception refer to the individual’s experiences of Danish society in general. Consequently, in our study we did not include measures of the local context of reception at the workplace. Such a local level context might be more impactful for foreign workers than the societal context might be, and future research could further examine possible differences between these two levels of context. Sixth, although we examined associations among various relevant factors that may shape foreign workers’ adaptation in Denmark, qualitative studies are needed to further understand the nature of these processes. For example, interviews could provide further insight into the hostile context of reception that foreign workers appear to perceive in Denmark.

**Conclusion**

Foreign workers have increased in numbers and constitute an essential part of the workforce in contemporary globalized societies. In the present study, we examined a path model associating cultural intelligence and perceived context of reception with work adaptation, as well as with adjustment outcomes, through cultural orientation among foreign workers in Denmark. Consequently, we examined some of the most relevant aspects of acculturation and context of reception as indicated by a recent survey among expatriates in Denmark (InterNations, 20019a).
We found cultural intelligence to be associated with adaptable work performance. Furthermore, cultural intelligence was indirectly associated with sociocultural adaptation difficulties through Danish cultural endorsement. Likewise, we found perceived context of reception to be indirectly associated with sociocultural adaptation difficulties through Danish cultural endorsement. These results suggest that a culturally intelligent way of adapting would include an endorsement of the destination cultural stream coupled with some degree of endorsement of one’s heritage culture. Additionally, our results indicate that contextual factors are important for cross-cultural adaptation, suggesting that, even within the globalized Danish context of reception, Danish cultural involvement is expected. Although our results do not capture the macro perspective reflecting the actual context of reception, our study does provide important information regarding how foreign workers adjust to working life in Denmark. That is, our results represent an incremental step toward understanding the association between cultural intelligence and cultural orientations through a complex process reflecting the social ecology of foreign workers’ intercultural adaptation.
CULTURAL INTELLIGENCE AND ACCULTURATION

References


CULTURAL INTELLIGENCE AND ACCULTURATION


CULTURAL INTELLIGENCE AND ACCULTURATION

<table>
<thead>
<tr>
<th></th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
<th>10.</th>
<th>11.</th>
<th>M (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cultural intelligence (CQ total)</td>
<td>.71**</td>
<td>.71**</td>
<td>.72**</td>
<td>.80**</td>
<td>.02</td>
<td>.01</td>
<td>.19**</td>
<td>-.04</td>
<td>-.07</td>
<td>.28**</td>
<td>5.10 (0.78)</td>
</tr>
<tr>
<td>2. CQ metacognition</td>
<td>.32**</td>
<td>.42**</td>
<td>.49**</td>
<td>.04</td>
<td>.01</td>
<td>.04</td>
<td>-.03</td>
<td>-.02</td>
<td>.23**</td>
<td>5.63 (1.04)</td>
<td></td>
</tr>
<tr>
<td>3. CQ cognition</td>
<td>.38**</td>
<td>.32**</td>
<td>.02</td>
<td>-.08</td>
<td>.15*</td>
<td>.01</td>
<td>-.04</td>
<td>.14*</td>
<td>4.31 (1.02)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. CQ motivation</td>
<td>.45**</td>
<td>-.09</td>
<td>-.03</td>
<td>.22**</td>
<td>-.14*</td>
<td>-.22*</td>
<td>.27*</td>
<td>5.77 (0.87)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. CQ behavior</td>
<td>.07</td>
<td>.12</td>
<td>.15*</td>
<td>.01</td>
<td>.03</td>
<td>.22**</td>
<td>4.94 (1.30)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Perceived context of reception</td>
<td>.10</td>
<td>-.16**</td>
<td>.24**</td>
<td>.36**</td>
<td>-.08</td>
<td>4.13 (1.51)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Heritage cultural orientation</td>
<td>-.18**</td>
<td>.01</td>
<td>.17**</td>
<td>.11</td>
<td>4.56 (1.52)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Danish cultural orientation</td>
<td>-.13*</td>
<td>-.21**</td>
<td>.14*</td>
<td>4.96 (1.35)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Perceived stress</td>
<td>.41**</td>
<td>-.28**</td>
<td>2.80 (0.67)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Sociocultural adaptation difficulties</td>
<td>-.11</td>
<td>2.20 (0.70)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Adaptive performance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.10 (1.02)</td>
</tr>
</tbody>
</table>

Note. *p < .05, **p < .01.
### Table 2. Path estimates and confidence intervals for the path model

<table>
<thead>
<tr>
<th></th>
<th>Danish cultural orientation</th>
<th>Heritage cultural orientation</th>
<th>Perceived stress</th>
<th>Sociocultural adaptation</th>
<th>Adaptable performance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td>.13</td>
<td>- .01, .27</td>
<td>.09</td>
<td>-.05, .23</td>
<td>.17**</td>
</tr>
<tr>
<td><strong>Stay in DK</strong></td>
<td>.15*</td>
<td>.03, .27</td>
<td>.13*</td>
<td>-.02, .24</td>
<td>-.16**</td>
</tr>
<tr>
<td><strong>Cultural intelligence</strong></td>
<td>.29**</td>
<td>.11, .46</td>
<td>.05</td>
<td>-.11, .22</td>
<td></td>
</tr>
<tr>
<td><strong>Perceived context of reception</strong></td>
<td>- .21*</td>
<td>-.37, -.05</td>
<td>.10</td>
<td>-.04, .25</td>
<td></td>
</tr>
<tr>
<td><strong>Danish cultural orientation</strong></td>
<td>-.21*</td>
<td>-.37, -.05</td>
<td>-.34**</td>
<td>-.51, -.17</td>
<td></td>
</tr>
<tr>
<td><strong>Heritage cultural orientation</strong></td>
<td>.09</td>
<td>-.06, .24</td>
<td>.26**</td>
<td>.11, .41</td>
<td></td>
</tr>
<tr>
<td><strong>Variance explained</strong></td>
<td>.12**</td>
<td></td>
<td>.19**</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. * marks $p < .05$ and ** marks $p < .01$; Gender: male coded as 1 and female as 2.
CULTURAL INTELLIGENCE AND ACCULTURATION

Figure 1. The hypothesized path model
Figure 2. Results from the hypothesized path model
CULTURAL INTELLIGENCE AND ACCULTURATION

Note. *p < .05; **p < .01