Emotional Labour in the Global Context: The Roles of Intercultural and Intracultural Service
Encounters, Intergroup Anxiety, and Cultural Intelligence on Surface Acting

by

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Author’s Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.
Abstract

Research on emotional labour has shown that surface acting is the main correlate of employee ill-being such as emotional exhaustion, but culture moderates this relationship, highlighting the importance of considering the cultural context in understanding the surface acting-negative outcome link. However, these findings have emerged from intracultural service encounters, whereby the service provider and customer are from the same cultural backgrounds. Yet, with the growth of immigration and international travel, service providers are increasingly interacting with customers from different cultural backgrounds in intercultural service encounters. These encounters provide unique contexts in which service employees are expected to regulate their emotions, because there is more room for miscommunication and discomfort between service providers and customers from different cultural backgrounds. This dissertation investigates the intrapersonal processes of surface acting in the intercultural service context. Based on self-regulation theory, Study 1 investigated how the intercultural versus intracultural context in which emotional labour is performed influences the experience of surface acting at within-person level of analysis. Results showed that the service context moderated the relationship between daily (within-person) surface acting and emotional exhaustion, such that the relationship was stronger in the intercultural than the intracultural service encounters. Study 2 aimed to replicate findings from Study 1 at the between-person level of analysis in addition to examining the antecedents of surface acting in the intercultural service context at the between-person level of analysis. No significant interaction effect between the service context (intercultural and intracultural) and surface acting on emotional exhaustion was found at the between-person level, and alternative explanations for the null finding are discussed. Drawing from the Anxiety/Uncertainty Management (AUM) theory, results showed that service providers who experienced intergroup anxiety reported more use of surface acting in intercultural service
encounters. Moreover, certain facets of cultural intelligence (CQ) were found to have indirect and direct effects on surface acting in intercultural service encounters. Metacognitive CQ was found to have an indirect effect on surface acting through intergroup anxiety; service providers with high metacognitive CQ reported less anxiety with foreign customers and, in turn, reported less surface acting. On the contrary, behavioural CQ was related to increased surface acting. Thus, behavioural CQ appears to be a double-edge sword in intercultural service encounters. By investigating how both the intercultural context and service providers’ intercultural competencies affect their surface acting at work, the two studies highlight the unique considerations of emotional labour in the globalized context.
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To my family and friends
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CHAPTER 1
INTRODUCTION

We are living in an age of revolution, an “affective revolution,” in organizational psychology research (Ashkanasy & Humphrey, 2011; Barsade & Gibson, 2007). As reviewed by Barsade and Gibson (2007), emotions have been shown to affect various domains of work including leadership (Bono, Foldes, Vinson, & Muros, 2007; Rubin, Munz, & Bommer, 2005), decision making (Isen, 2001; Staw & Barsade, 1993), creativity (James, Brodersen, & Jacob, 2004), team performance (Barsade, Ward, Turner, & Sonnenfeld, 2000), job performance (Sharma & Levy, 2003; Staw, Sutton, & Pelled, 1994; Wright, Cropanzano, & Meyer, 2004; Zelenski, Murphy, & Jenkins, 2008), prosocial behaviour (George, 1991), negotiation and conflict resolution (Baron, 1990; Forgas, 1998; Lyubomirsky, King, & Diener, 2005), and turnover (George & Jones, 1996). Although emotions have a wide influence on many work aspects, they are not always useful or welcomed and, at times, need to be regulated (Gross, 2013). In fact, some organizations, especially those in the service sector, implement display rules (Ekman, 1973), which are expectations of emotions employees should display to customers (Rafaeli & Sutton, 1989). Emotion regulation to arrive at the emotional display required by the organization for the job is called “emotional labour” (Grandey, 2000), a term coined by Arlie Hochschild in 1983 from her seminal work with flight attendants.

On the one hand, emotional labour is related to positive outcomes for the service industry. For example, organizations instruct frontline agents to “smile” and “act friendly” towards their customers, because doing so has been found to promote customers’ positive evaluation of the service quality and customers’ willingness to return to the store (Barger & Grandey, 2006; Pugh, 2001; Tsai, 2001). On the other hand, emotional labour can also be related
to negative outcomes for organizations and their employees. At the intrapersonal level, emotional labour has been shown to relate to employee burnout, stress, job dissatisfaction, turnover intentions, and actual turnover in organizations (Chau, Dahling, Levy, & Diefendorff, 2009; Côté & Morgan, 2002; Goodwin, Groth, & Frenkel, 2011; Grandey, Dickter, & Sin, 2004; Kruml & Geddes, 2000; Pugliesi, 1999). In fact, the turnover rate in the hospitality industry in the United States over the past 10 years has been 45%, which is double the 21% turnover rate across all industries in the same period (U.S. Bureau of Labor Statistics, 2014). From the organizational perspective, according to the service-profit chain framework (Heskett, Jones, Loveman, Sasser, & Schlesinger, 1994), employee well-being is related to customer satisfaction, which translates to positive financial performance for firms. Thus, service employees’ experiencing burnout and dissatisfaction at work from emotional labour could negatively influence customer satisfaction and firm performance.

Hochschild (1983) proposed two main strategies of emotional labour, namely surface acting and deep acting. Surface acting is the strategy whereby service providers only alter their facial expressions to match the required emotion without actually feeling it (Grandey, 2000), whereas deep acting is the strategy whereby service providers manage their inner feelings to align to their job’s display rules (Grandey, 2000). Although service providers might use both or either strategies to regulate their emotions at work, research has unequivocally shown that surface acting is the main predictor and correlate of the detrimental effects of employees’ well-being (for a review, see Hülsheger & Schewe, 2011). Based on the findings that surface acting is detrimental to employees’ well-being, I focus this thesis on the emotional labour strategy of surface acting and its negative outcomes (see also, Bhave & Glomb, 2013; Grandey, Fisk, &
Interestingly, the negative relationship between surface acting and well-being has been shown to be influenced by cultural factors. In their meta-analysis, Hülsheger and Schewe (2011) found that the association between surface acting and emotional exhaustion was stronger in the Anglo culture cluster (e.g., Canada, United States) compared to the Latin European cluster (e.g., France, Spain), and the surface acting-job dissatisfaction relation was stronger in the Germanic (e.g., Germany, Netherlands) compared to the Latin European cluster. As an example, Grandey and colleagues (2005) found that the link between surface acting and job dissatisfaction was weaker for French than American employees, perhaps due to the French cultural work norms of personal control over emotional expressions. Hülsheger and Schewe (2011) did not include results from the Confucian Asia cultural cluster (e.g., China, Japan) in their meta-analysis because there were not enough studies (i.e., at least two) to do so, but a study comparing Chinese and American service workers by Allen, Diefendorff, and Ma (2013) showed that the relationship between surface acting and burnout was weaker for Chinese than American service workers, plausibly due to cultural values of high emotional control in China (Leu et al., 2010 as cited in Allen et al., 2013). Not only do these studies highlight the role that cultural values play on surface acting because cultures have influences on many emotional aspects including emotional expressions (Mesquita & Delvaux, 2013; Mesquita & Frijda, 1992), they also show that surface acting was less costly in certain cultural contexts, supporting Mesquita and Delvaux’s (2013) assertion that emotion regulation “is always contextualized by the cultural models of self and relating” (p. 254).
Although the above studies underscore the importance of considering the cultural context in understanding the surface acting-negative outcome relationship, the findings have emerged from intracultural service encounters, whereby the service provider and customer are from the same cultural backgrounds (i.e., U.S. American-U.S. American, French-French, or Chinese-Chinese provider-customer encounters). However, a new cultural context is emerging due to growth of immigration and international travel. The United Nations has estimated that in 2010, there were 214 million international migrants worldwide (United Nations, Department of Economic and Social Affairs, Population Division, 2009). Moreover, the World Tourism Organization reports that in 2012, there were 1 billion international tourist arrivals worldwide (World Tourism Organization UNWTO, 2013), and this number is forecasted to reach 1.6 billion by the year 2020 (World Tourism Organization UNWTO, n.d.). A direct result of these global trends is an increase in intercultural service encounters, where the service providers and customers are from different cultural backgrounds (Stauss & Mang, 1999). These “cross-cultural interfaces” (Gelfand, Erez, & Aycan, 2007) provide unique contexts in which service employees are expected to regulate their emotions, as emotional experiences can be affected by the social context (Gross, 1998) and “the context within which emotions occur can largely direct how people cope with them and subsequent behavioural outcomes” (Gooty, Gavin, & Ashkanasy, 2009, p. 836). For instance, not only do cultures vary in their emotional display rules (Matsumoto, 1990), they also differ in communication directness (Holtgraves, 1997) and cultural scripts (Triandis, Marín, Lisansky, & Betancourt, 1984). These differences create a context in which there is more room for miscommunication and discomfort for the service providers and customers, which can influence emotion regulation. Therefore, intercultural service encounters
provide contextual challenges and opportunities for emotional labour researchers and practitioners to consider.

The overall goal of this dissertation is to investigate the intrapersonal processes of surface acting for service providers in today’s global service industry, which brings people from different national cultures together. I begin by introducing the concept of emotional labour and reviewing the research on surface acting. Next, I present Study 1 by reviewing the literature on intercultural service encounters, and I investigate whether performing surface acting in the intercultural service context is more taxing for service providers than in the intracultural service context at the daily or within-person level of analysis. In Study 2, I aim to replicate findings from Study 1 at the between-person of analysis in addition to examining individual differences that influence surface acting particularly in the intercultural service context. I end with a general discussion on the implications of my research, overall limitations, future directions, and practical implications. This paper contributes to the emotional labour literature by (a) directly comparing the impact of the intercultural versus intracultural service contexts on the experience of surface acting in service providers and (b) introducing new antecedents of surface acting in an intercultural service context.
CHAPTER 2
LITERATURE REVIEW

Emotional Labour and Emotion Regulation at Work

Emotional labour is defined as emotion regulation that is “performed in response to job-based emotional requirements in order to produce emotion toward—and to evoke emotion from—another person to achieve organizational goals” (Grandey, Diefendorff, & Rupp, 2013, p. 18). Although other emotional labour strategies have been proposed (e.g., Ashforth & Humphrey, 1993; Biron & van Veldhoven, 2012; Diefendorff, Croyle, & Gosserand, 2005; Grandey, 2003; Hochschild, 1983; Mesmer-Magnus, DeChurch, & Wax, 2012), the focal strategy for this paper is surface acting, defined earlier as the strategy whereby service providers modify their emotional expressions to match the organizational display rules without actually feeling the emotion (Grandey, 2000). For example, in Hochschild’s study of flight attendants, she cited one attendant reporting, “Even though I’m a very honest person, I have learned not to allow my face to mirror my alarm or fright” (Hochschild, 1983, p. 107).

Grandey (2000) drew upon Gross’s (1998, 2002) process model of emotion regulation to understand the underlying mechanisms of emotional labour. Emotion regulation “refers to the processes by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998, p. 275). Because it is the individual’s interpretation of a situation, not the situation itself, which can potentially evoke an emotion, emotion regulation can occur at various points in the emotional generative process (Gross, 1998, 2002). Gross proposed two broad types of emotion regulation, namely antecedent-focused and response-focused emotion regulation. Antecedent-focused emotion regulation such as reappraisal is when regulation occurs before the emotion is fully generated. For example,
before getting upset over a conflict with a colleague, one can instead reappraise the conflict as a chance to learn more about each other, thereby avoiding feelings of distress. Response-focused emotion regulation such as emotion suppression occurs after the emotion is already generated and corresponds to surface acting (Grandey, 2000). For example, one may feel really excited about a first date but suppress this enthusiasm by appearing calm and collected.

Emotional labour is also conceptualized as a goal-directed behaviour enacted in response to discrepancies between emotional displays and emotional display rules. Diefendorff and Gosserand (2003) applied Carver and Scheier’s (1998) control theory to explain the emotional labour process. The display rule is the goal or standard with which one’s perceived emotional displays are compared. Once a discrepancy (or dissonance) is detected, the individual can utilize emotional labour strategies to align their emotional expressions to match those of the organizational display rules. The centrality of the “goal” in emotion regulation is emphasized by Gross, Sheppes, and Urry (2011) who stated that “…a process is emotion regulatory if and only if it is instantiated in pursuit of a goal to influence an ongoing or future emotion” (p. 769).

Part of the definition of emotional labour introduced above pertains to “job-based emotional requirements” (Grandey et al., 2013, p. 18). All jobs entail some degree of emotional labour as employees are explicitly or implicitly expected to follow emotional display rules, which are “standards for the appropriate expression of emotions on the job” (Diefendorff & Richard, 2003, p. 284), in interacting with customers, colleagues, supervisors, or even subordinates. However, some jobs have higher emotional labour demand than other jobs due to the frequency of occasions when employees need to manage emotions and the intensity of the emotions to be regulated. Examples of high emotional demand jobs are jobs in the service sector (e.g., customer service agent, health care provider) and enforcement services (e.g., police officer,
debt collector; Grandey et al., 2013). For example, Disney princesses at Walt Disney World have to maintain the brightest smiles on their faces no matter how hot the Floridian weather, and nurses who have recently been joking with their colleagues in the break room must appear serious when they approach a patient with a broken wrist who is clearly in pain. As previously discussed, in the service sector, display rules are implemented to serve organizational goals for customers’ positive evaluations of the service quality and willingness to return (Pugh, 2001; Tsai, 2000).

At the intrapersonal level, the emotional requirements and organizational display rules that employees must follow can create emotional dissonance. With three components at play, namely organizational display rules, felt emotions, and displayed emotions, two types of emotional dissonance are distinguished in the literature (Zerbe, 2000). The first is emotion-rule dissonance whereby the discrepancy is between felt emotions and emotions required by the display rules (Holman, Martínez-Iñigo, & Totterdell, 2008; Morris & Feldman, 1996; Zapf & Holz, 2006). Holman et al. (2008) proposed emotion-rule dissonance as the antecedent of the second type of dissonance, emotion-display dissonance, whereby the discrepancy is between the felt and expressed emotions (Côté, 2005; Grandey et al., 2013; Kruml & Geddes, 2000). The astute reader will note that emotion-display dissonance appears to be related to surface acting. Hülsheger and Schewe (2011) pointed out that these constructs are indeed related but distinct because the former refers to an emotional state whereas the latter refers to an “effortful process of managing one’s emotions” (Hülsheger & Schewe, 2011, p. 363). Furthermore, Grandey and colleagues (2013) noted that “though emotion-rule dissonance is often the focus of theoretical description, studies tend to actually measure emotion-display dissonance” (p. 15), because (a) organizational display rules are not always explicit or explicitly measured and are instead
implied, and (b) displayed emotions are assumed to be at the service of organizational display rules. Some researchers argue that surface acting precedes emotion-display dissonance (or fake emotion displays; Holman et al., 2008; Côté, 2005), leading to negative intrapersonal consequences for service employee, which I elaborate below.

**Surface Acting’s Intrapsychic Consequences and Regulatory Resources**

Research on emotional labour has consistently shown that surface acting results in negative outcomes such as emotional exhaustion (Brotheridge & Lee, 2002; Chau et al., 2009; Diefendorff, Erickson, Grandey, & Dahling, 2011; Grandey, 2003; Grandey, Foo, Groth, & Goodwin, 2011; Judge, Woelfl, & Hurst, 2009; Martínez-Iñigo, Totterdell, Alcover, & Holman, 2007; McCance, 2010; Pugh, et al., 2011; Totterdell & Holman, 2003), stress (Grandey, 2003), negative affect (Johnson & Spector, 2007; Judge et al., 2009), job dissatisfaction (Côté & Morgan, 2002; Grandey, 2003; Judge et al., 2009; Lam & Chen, 2012; Pugh et al., 2011), work withdrawal (Scott & Barnes, 2011), absenteeism (Nguyen, Groth, Johnson, 2013), turnover intentions (Côté & Morgan, 2002; Chau et al., 2009), and actual turnover (Goodwin et al., 2011).

Furthermore, research in emotion regulation has shown that emotional suppression, which is related to surface acting, is linked to impaired memory, greater experience of negative emotions, lessened social support, increased avoidant behaviours, and more depressive symptoms than reappraisal (Gross, 2002; Gross & John, 2003; John & Gross, 2004).

One explanation for why surface acting and suppression lead to negative outcomes is because they deplete self-regulatory resources (e.g., Brotheridge & Lee, 2002; Goldberg & Grandey, 2007; Richards & Gross, 1999; Grandey, 2003). Before I discuss how ego depletion relates to surface acting’s negative consequences, I first briefly review the research on self-regulation. Self-regulatory resources are conceptualized as a limited pool of resources, where any
form of self-regulation can lead to its depletion and affect regulation in other domains (Baumeister, 2002; Muraven & Baumeister, 2000; Muraven, Tice, & Baumeister, 1998). Furthermore, because executive control, “a collection of interrated abilities that enables people to modify their thoughts and actions” (Baddeley, 1986; Norman & Shallic, 1986 as cited in Schmeichel, 2007, p. 241), also operates under a limited and depletable resource model (Feldman-Barrett, Tugade, & Engle, 2004; Schmeichel, 2007) and enables self-regulation (Feldman-Barrett et al., 2004), “previous demonstrations of depleted self-regulatory resources may more precisely be considered instances of reduced resources for executive control” (Schmeichel, 2007, p. 251). No matter how “resource” is measured, its limited nature has been used to explain why regulation in one domain affects regulation in a different domain or subsequent regulation of the same domain.

For instance, Baumeister, Bratslavsky, Muraven, and Tice (1998) showed that when participants suppressed their emotions (both positive and negative), they exhibited poorer performance in solving anagrams than those who expressed their emotions freely. In a study by Muraven and colleagues (1998), participants who were asked to regulate their emotions (both suppressing and exaggerating emotions) while watching a sad film performed worse in a physical task (squeezing a handgrip) than those not asked to regulate their emotions. Another example comes from an experiment by Schmeichel (2007) where he asked some participants to exaggerate their emotional expression to see if doing so negatively influenced subsequent efforts using working memory. Compared to participants who were asked to simply express their emotions, those who exaggerated their emotional expressions performed worse at a memory recall task, a part of executive control function. The researchers concluded that participants who
regulated their emotions depleted their resources, which resulted in less energy to perform the subsequent task.

Because surface acting involves consistently monitoring and managing one’s emotions to fit organizational display rules (while not feeling the same way inside), surface acting can exhaust mental and emotional resources. Depletion of resources can result in emotional exhaustion, which is the central component of burnout and is the feeling of being emotionally drained and lacking energy due to work demands and dealing with people (Maslach, Schaufeli, & Leiter, 2001). In explaining the relationship between resource depletion and emotional exhaustion, Trougakos and Hideg (2009) cited Lazarus and Folkman’s (1984) transactional model of stress. According to this model, it is the appraisal of the potential stressor and not the characteristic of the stressor itself that affects well-being. Moreover, individuals’ resource levels will affect their appraisal of the stressor and their subsequent coping strategies. Based on this, “if resources are exhausted or lacking, individuals would perceive stressors as a threat” and “experiencing stressors as a threat would lead to employment of maladaptive coping strategies, which has detrimental effects on health and well-being” (Trougakos & Hideg, 2009) such as emotional exhaustion. Hobfoll’s (1989) conservation of resources (COR) theory has also been used to explain the link between resource loss and emotional exhaustion. The basic premise of this theory is that “people seek to obtain, retain, and protect resources and that stress occurs when resources are threatened with loss or lost or when individuals fail to gain resources after substantive resource investment” (Hobfoll, 2002, p. 312). Thus, emotional exhaustion occurs following resource loss (Weiss & Cropanzano, 1996). In their meta-analysis, Hülsheger and Schewe (2011) found that overall, surface acting was moderately but consistently related to
emotional exhaustion ($\rho = .44$, 95% CI [.41, .47]). Thus, emotional exhaustion is the negative intrapersonal outcome variable of surface acting that I focus on in this thesis.

**Moderators of the Surface Acting and Negative Intrapersonal Outcomes Links**

There is overwhelming evidence that surface acting is related to various negative outcomes for service providers. Thus, identifying variables that can alleviate the surface acting-negative outcome relationship and identifying variables that predict the use of surface acting in the first place can potentially help organizations select, train, or create work environments for service providers that discourage this emotional labour strategy.

Fortunately, past research has begun to identify moderators which attenuate the relationships between surface acting and negative outcomes. To date, this research has primarily focused on demographic characteristics and individual differences. For instance, gender has been shown to moderate the relationships between surface acting and emotional exhaustion, negative affect, job dissatisfaction, and work withdrawal such that the relationships were less positive for men than women (Johnson & Spector, 2007; Scott & Barnes, 2011). Likewise, the links between surface acting and emotional exhaustion and negative affect are weaker among extraverts compared to introverts (Judge et al., 2009).

Besides demographic characteristics and personality traits, researchers have looked at how threats to the self-concept can affect the surface acting-negative outcome link. Being inauthentic to one’s values is a threat to one’s self-concept, and those who highly value authentic emotional display experience more threat to their self-concept when they engage in surface acting, because felt and displayed emotions are incongruent (Pugh et al., 2011). Research shows that surface acting is more strongly related to job dissatisfaction and emotional exhaustion for
these individuals compared to those who placed less importance on authentic emotional display (Pugh et al., 2011).

Self-efficacy, another aspect of the self-concept, can also influence the surface acting-outcome relationship. Emotional labour self-efficacy, the confidence in one’s abilities to perform emotional labour, was shown to moderate the link between emotional dissonance (a consequence of surface acting) and work engagement such that the relations were negative for those with low self-efficacy (Heuven, Bakker, Schaufeli, & Huisman, 2006). Heuven and colleagues (2006) also hypothesized but did not find that emotional labour self-efficacy moderated the relation between emotional dissonance and emotional exhaustion. On the contrary, Pugh and colleagues (2011) found that surface acting self-efficacy, which is an individual’s evaluation of his or her capabilities to perform surface acting (instead of general emotional labour), moderated the effects of surface acting on emotional exhaustion; for individuals with high (vs. low) levels of surface acting self-efficacy, the surface acting-emotional exhaustion link was attenuated. Additionally, surface acting self-efficacy has been found to moderate the links between surface acting and job dissatisfaction, work withdrawal, and absenteeism, such that the effects were weaker for individuals with high (vs. low) levels of surface acting self-efficacy (Nguyen et al., 2013; Pugh et al., 2011).

Similarly, perceptions of job autonomy or the degree to which one perceives one has control over one’s job attenuated the positive relationship between surface acting and emotional exhaustion because those who perceive autonomy over their jobs would see work demands as a challenge and not a strain (Johnson & Spector, 2007). For those with high job autonomy, the negative relationships between surface acting and affective well-being and job satisfaction were also weaker (Johnson & Spector, 2007).
It is not surprising that emotional intelligence (EI), the ability to recognize and regulate emotions in the self and others, has been proposed to moderate the emotional labour-outcome relations. However, Johnson and Spector (2007) hypothesized but did not find EI to moderate the links between surface acting and job dissatisfaction, affective well-being, and emotional exhaustion. On the contrary, Bechtoldt, Rohrmann, De Pater, and Beersma (2011), using an ability-based measure of EI, found that the emotion recognition dimension of EI was a significant moderator of the relationship between surface acting and work engagement, such that the relationship is less negative for those with high (vs. low) emotion recognition.

Only more recently have researchers begun to look beyond individual differences and instead investigate contextual factors as moderators of the surface acting-outcome link. The work unit’s climate of authenticity, a unit-level construct which is the service providers’ aggregate perception of their freedom to express true emotions to each other in their work unit (while performing emotional labour with customers), has been found to buffer the effects of individual-level surface acting on emotional exhaustion such that a high climate for authenticity attenuated the positive relationship (Grandey et al., 2011). On the other hand, occupational emotional labour requirements (i.e., organizational expectations of how much emotion management is required for the job) has been found to exacerbate the relationship between surface acting and job satisfaction such that the link was more negative for those in jobs with higher (vs. lower) emotional labour requirements (Bhave & Glomb, 2013).

I propose an additional contextual factor that could affect the surface acting-outcome relationship. As described earlier, cultural factors have been found to affect the surface acting-outcome relationships. Because intercultural service encounters could be more taxing (due to various cultural differences) for service providers than interacting with customers from the same
cultural background, the service context (whether it is intercultural or intracultural) could influence the relationship between surface acting and employee’s well-being. This prediction will be further elaborated in Study 1.

**Antecedents of Surface Acting**

By identifying variables that lead to surface acting, organizations can endeavour to prevent or decrease the use of this emotional labour strategy in service providers. Although prior conceptual models of emotional labour (Grandey, 2000) and subsequent empirical research (e.g., Totterdell & Holman, 2003) have focused on dispositional and situational factors that are related to surface acting, almost none of the research has been conducted on factors specifically related to cultural competencies in intercultural service encounters. For example, past studies have found individual and situational antecedents of surface acting such as extraversion (Buckner & Mahoney, 2012; Diefendorff et al., 2005), EI (Austin, Dore, & O’Donovan, 2008) and jobs with high emotional role demands (Brotheridge & Lee, 2002). The first two predicted less surface acting whereas the last factor was related to increased use of surface acting. These are the same factors found as moderators of the surface acting-outcome relationship mentioned in the previous section, but these factors do not incorporate potential cultural differences between the service provider and customer.

Other personality traits have also been demonstrated to relate to surface acting, with conscientiousness (Austin et al., 2008; Diefendorff et al., 2005) and agreeableness (Diefendorff et al., 2005) predicting less surface acting, whereas neuroticism predicted increased surface acting (Diefendorff et al., 2005; Kiffin-Petersen, Jordan, Soutar, 2011; Kim, 2008). Not surprisingly, affectivity is also related to the use of surface acting. Positive affect has been shown to be negatively related to surface acting (Beal, Trougakos, Weiss, & Green, 2006; Brotheridge
& Lee, 2003), and negative affect positively related to surface acting (Brotheridge & Lee, 2003; Liu et al., 2008). Additional disposition factors that were linked to surface acting were core self-evaluations and self-monitoring. Core-self evaluations, or the individuals’ fundamental evaluation of oneself (Judge et al., 1997), were found to be negatively related to surface acting (Beal et al., 2006). Self-monitoring, the degree to which individuals control their behaviours and self-presentation (Snyder, 1974), was shown to be positively related to surface acting (Bono & Vey, 2005; Buckner & Mahoney, 2012; Diefendorff et al., 2005). Because these studies demonstrate that individual differences are related to surface acting, they suggest that individual differences related to cultural competencies could also influence the use of surface acting in intercultural service encounters.

The work environment also affects service providers’ use of surface acting. Organizational emotional display rules have been shown to be positively related to surface acting (Allen, Pugh, Grandey, & Groth, 2010; Austin et al. 2008; Brotheridge & Lee, 2002; Diefendorff et al., 2005; Kim, 2008). Moreover, the quality of encounters with customers can influence emotional labour strategies. For instance, unpleasant encounters with customers have been shown to predict surface acting (Grandey et al., 2011; Kruml & Geddes, 2000; Totterdell & Holman, 2003). As argued in detail later, intercultural service encounters might also entail unpleasant experiences for service providers due to culturally different customers, which could also encourage service providers to use surface acting under these circumstances.

To date, only one study has specifically investigated the antecedents of surface acting in the intercultural service context (e.g., McCance, 2010). As the world becomes more globalized and the interactions between service providers and customers from different cultural backgrounds increase in frequency, not only do service providers have to regulate their emotions
at work, they have to regulate their emotions while interacting with culturally different customers. In this context, capabilities to manage one’s thoughts, emotions, and behaviours towards people from different cultural backgrounds could prove adaptive. Thus, I posit additional antecedents of surface acting specifically in these intercultural service encounters, which is expanded on in Study 2.

The goal of the two studies is to examine surface acting in the context where service providers and customers come from different cultural backgrounds. Study 1 investigates how the service context—intercultural versus intracultural— influences the relationship between surface acting and service providers’ well-being at the within-person levels of analysis. Study 2 aims to replicate Study 1 at the between-person level of analysis in addition to examining individual differences in cross-cultural competencies such as levels of uncertainty, feelings of intergroup anxiety, and capacity of the four cultural intelligence facets that influence service providers’ surface acting in the intercultural service context.
CHAPTER 3: TWO STUDIES EXAMINING SURFACE ACTING IN THE INTERCULTURAL SERVICE CONTEXT

Study 1

The purpose of Study 1 was to examine the moderating role of the service context (whether it is intercultural or intracultural) on the association between surface acting and emotional exhaustion. I begin by reviewing the research on intercultural service encounters and intercultural interactions and propose that the intercultural service context is more taxing to service providers than the intracultural service context using a self-regulatory lens.

Intercultural Service Encounters

Intercultural service encounters are contact situations between service providers and customers that come from different cultural backgrounds (Stauss & Mang, 1999). Although multiple definitions of “culture” have been proposed, the underlying features that constitute culture are its sharedness, adaptiveness, and transmittability across time and generations. I define culture as a set of shared attitudes, values, goals, and practices that characterize a national or ethnic group (e.g. Berry, Poortinga, Segall, & Dasen, 2002). Whereas in intracultural service encounters people have shared, cultural understandings to guide action and interpretation, there is more room for misunderstandings and discomfort in intercultural service encounters due to cultural differences. For example, culture influences the degree of indirectness in communication; Holtgraves (1997) has shown that people from Korea were more indirect in their communication compared to those from the United States. In negotiation, Adair, Okumura, and Brett (2001) demonstrated that Japanese negotiators exchanged information indirectly with their Japanese counterparts whereas U.S. negotiators exchanged information directly with their U.S. counterparts. In intercultural negotiations conducted in English, these researchers found that
there were lower joint gains compared to intracultural negotiations, which were partly due to differences in culturally normative negotiation behaviours that the authors suggested led to “ineffective and frustrated communication” (Adair et al., 2001, p. 381). Indeed, other negotiation researchers have shown that, in intercultural encounters, both economic and subjective outcomes suffer when the quality of communication exchanged (comprised of clarity, responsiveness, and comfort) is poor, even when both partners speak English (Liu et al., 2010). Thus, beyond language competency, the different communication norms could result in misunderstandings between service providers and customers from different cultural backgrounds.

Through socialization processes, people from different cultures also learn specific and different cultural scripts (Triandis et al., 1984), even for service encounters, which can influence the ease of interactions. Behavioural scripts are schemas of event sequences in typical situations (Abelson, 1981). For example, when one attends a restaurant in North America, one expects to enter the restaurant, be greeted by a server, take a seat at a table, choose food from the menu, and put in orders to the server. According to Role Theory (Solomon, Surprenant, Czepiel, & Gutman, 1985), many service encounters are relatively standard and involve elementary social interactions with similar clearly defined roles and scripts. Indeed, scripts are usually routine and automatic, using very little cognitive power (Abelson, 1981; Gioia & Poole, 1984; Lord & Kernan, 1987). However, in brand new or infrequent situations, “intensive conscious processing [is necessary] to decide appropriate behaviour and action” (Gioia & Poole, 1984, p. 453). Using terms from control theory, when activities unexpectedly deviate from the norm and goal discrepancies occur, “attention [will] shift to lower levels [in the goal hierarchy] and more conscious monitoring of behaviours...will occur” (Lord & Kernan, 1987, p. 271). Employees can experience more cognitive load in intercultural service encounters because service scripts are influenced by
culture. For example, in Japan, shop employees are expected to bow in greeting and valediction to customers entering and exiting a store, whereas in Thailand, shop employees usually “wai” or display the Thai greeting and appreciation gesture to customers only after they have purchased something. In negotiating bargains in retail settings, Chinese Singaporeans reported being more price competitive than U.S. Americans (Lee, 1998). Thus, in intercultural service encounters, service providers and customers from different cultural backgrounds bring with them different scripts and expectations, rendering a routine interaction an uncoordinated encounter generating high cognitive load (Stauss & Mang, 1999) and anxiety (Blascovich, Mendes, Hunter, Lickel, & Kawai-Bell, 2001; Stephan, Stephan, & Gudykunst, 1999; Gudykunst, 1993), especially if the customer is from a cultural background that the employee is not accustomed to serving.

Furthermore, cultures prescribe specific norms for displaying (Matsumoto, 1990) and experiencing emotions (Eid & Diener, 2001), which could impact the intercultural service encounter. For example, based on the concept of individualism-collectivism applied to the ingroup/outgroup distinction (Triandis, Bontempo, Villareal, Asai, & Lucca, 1988), Matsumoto (1990) proposed and found that members of individualistic cultures such as U.S. Americans and members of collectivistic cultures such as Japanese rated the appropriateness of different emotions displayed to ingroups and outgroups differently. The author found that U.S. participants rated the display of disgust and sadness to ingroup members (i.e., other U.S. participants) and happiness to outgroup members (i.e., non-U.S. participants) as more appropriate, and Japanese rated the display of anger to outgroup members (i.e., non-Japanese) as more appropriate (Matsumoto, 1990). Matsumoto also drew upon Hofstede’s (1980) concept of Power Distance, the degree to which cultures endorse status differences, to explain display rule differences across cultures. He predicted and found that the Japanese rated the display of anger to
lower-status individuals as more appropriate as compared to U.S. Americans because the Japanese culture is a high(er) Power Distance culture. This study is one of many that highlight the impact of cultural values on emotion.

Considering the service context, when service providers and customers from different cultural backgrounds interact, their cultural norms for appropriate emotional displays might hinder the service encounter. For example, unlike in the United States, Israeli checkout clerks who smile are viewed as inexperienced by customers (Rafaeli & Sutton, 1989). Moreover, emotion expressions serve important roles in social interaction by providing information to observers (Keltner & Haidt, 1999) and can influence the observers’ behaviours (van Kleef, 2009). For instance, a Thai customer who is unhappy about a service might smile to be polite but a U.S. American service provider might interpret the smile as satisfaction with the service and continue to behave in the same (unsatisfactory) manner. Thus, service providers and customers who are not expressing cross-culturally appropriate emotions could encourage additional miscommunication, discomfort, and inappropriate responses in the intercultural interaction.

People are also worse at recognizing emotions of members from different cultural groups (Elfenbein & Ambady, 2002). In a lab study, Gray, Mendes, and Denny-Brown (2008) videotaped White and Black participants engaging in intercultural or intracultural interactions. They then asked White and Black observers to report the participants’ levels of anxiety. The researchers found that same-race observers (but not different-race observers) detected increased anxiety in participants who engaged in intercultural compared to intracultural interactions. Moreover, same-race observers’ (but not different-race observers’) ratings of participants’ anxiety levels were positively related to the participants’ cortisol levels in the interaction, which is an objective indicator of the participants’ stress response. These findings suggest that whether
the service context is intercultural or intracultural could affect the providers’ emotion recognition abilities and the effectiveness of their subsequent emotional labour strategies.

Together, cultural communication style differences, unfamiliar culturally normative scripts, and difficulties recognizing and responding to emotions from different cultures render the intercultural service context particularly challenging for service providers to engage in self-regulation and effective emotional labour strategies. Furthermore, these and other cultural differences create more stress in intercultural than intracultural encounters, and research on intergroup relations provides evidence that intercultural interactions are in fact more psychologically taxing than intracultural interactions.

**Intercultural service encounters and self-regulation.** Intergroup relations research has shown that intergroup interactions are characterized by more behavioural monitoring and self-regulation (Devine, 1989; Dovidio & Gaertner, 1998) than intragroup interactions. Richeson and colleagues (Richeson & Shelton, 2003; Richeson & Trawalter, 2005) found that both White and Black participants performed worse in Stroop colour-naming tasks following intercultural interactions compared to intracultural interactions, indicating that intercultural interactions require more effortful self-regulation than intracultural ones. In an fMRI study, Richeson and colleagues (2003) found activity in the same brain region when racially biased White participants viewed Black faces and when these participants engaged in Stroop tasks following interracial interactions, providing stronger claims that interracial interactions (at least for racially biased individuals) deplete regulatory resources and affect executive functions.

As mentioned earlier, because self-regulatory resources and executive functions have limited capacity (Baumeister et al., 1998; Muraven et al., 1998; Feldman-Barrett et al., 2004; Schmeichel, 2007), performing tasks that deplete resources can negatively affect performance in
other self-regulatory domains. Recall also that emotion regulation can affect subsequent regulatory tasks (Muraven et al., 1998; Schmeichel, 2007). Conversely, other tasks that deplete self-regulatory resources and tax the executive function can also affect emotion regulation. Muraven and colleagues (1998) showed that participants who were asked to suppress thoughts of a white bear while writing down other thoughts subsequently had trouble controlling their emotional expressions while watching a funny video clip. In another study, Schmeichel (2007) demonstrated that participants had trouble inhibiting their emotional expressions while watching a gruesome video following a memory updating task. Thus, not only does emotion regulation affect the ability to regulate the self in other domains, exercising self-control in other domains also affects our ability to regulate our emotions.

Based on these findings, I argue that engaging in intercultural service encounters can enhance the negative effects of surface acting that are present in intracultural service encounters. Because surface acting depletes self-regulatory resources (Brotheridge & Lee, 2002; Goldberg & Grandey, 2007; Grandey 2003; Richards & Gross, 1999) and intercultural interactions also deplete resources (Richeson & Shelton, 2003; Richeson & Trawalter, 2005), performing surface acting in the intercultural service context should drain even more resources from the common self-regulatory pool. Thus, performing surface acting in intercultural service encounters should lead to a stronger relationship between surface acting and emotional exhaustion as compared to intracultural encounters.

Most studies on self-regulation, especially those related to emotions and intercultural interactions, are conducted in single lab sessions, which point to the temporary nature of resource depletion (e.g., Baumeister, 2002; Baumeister et al., 1998; Goldberg & Grandey, 2007; Muraven et al., 1998; Richeson & Shelton, 2003; Richeson & Trawalter, 2005; Schmeichel, 2007). Thus,
capturing this phenomenon dynamically but over a shorter period of time should reveal a more accurate picture of the depleting effects of intercultural encounters. Moreover, researchers have argued for more dynamic measures of emotional labour and its outcomes. Not only is there evidence for the cyclical nature of affective states throughout the week (e.g., Larsen & Kasimatis, 1990), daily emotions can also differ based on the events of the work day itself. According to the Affective Events Theory (Weiss & Cropanzano, 1996), events at work are the causes of emotions, which in turn affect behaviours and attitudes at work. Because events at work are not the same every day, emotions each day should also vary. For example, Ilies, Johnson, Judge, and Keeney (2011) found that employees’ experiences of interpersonal conflict (with co-workers or supervisors) varied throughout a two-week time period, and these conflicts influenced the fluctuations of employees’ negative affect throughout the same time span. As emotions could vary from day to day, emotional labour (which is the regulation of these emotions) could thus fluctuate from day to day for the same person and exhibit within-person variance (e.g., Beal and colleagues, 2006). Thus, instead of a one-time survey measuring the overall levels of emotional labour across time, a more refined way to study the phenomenon at the within-person level is through daily observations by using the experience sampling methodology (ESM; Larson & Csikszentmihalyi, 1983). Few studies have investigated surface acting and its outcomes at the daily level. In a sample of bus drivers, Scott and Barnes (2011) found that daily surface acting was related to daily negative affect, which in turn predicted daily work withdrawal. Totterdell and Holman (2003) and Judge and colleagues (2009) found that daily surface acting was also related to daily increases in emotional exhaustion in customer service employees. Building on these previous findings, I test my hypothesis at the daily or within-person level of analysis.
Hypothesis 1: The service context will moderate the positive relationship between daily surface acting and daily emotional exhaustion, such that the relationship will be stronger in the intercultural than intracultural service context.

Method

Participants and procedure. The sample comprised of registered nurses\(^1\) from a large private hospital in Thailand, where approximately 40% of the patients were non-Thai. I administered anonymous paper-and-pencil surveys to 845 nurses who were distributed across 38 work units (e.g., emergency department, skin centre) plus one special unit (i.e., inter-departmental unit). Although nurses at this hospital interacted with both foreign and Thai patients throughout the day, I randomly assigned them into different patient “conditions” by asking them to recall their interactions with either (a) Western patients (e.g., Canada, United States), (b) Middle Eastern patients (e.g., United Arab Emirates, Qatar), (c) East Asian patients (e.g., Japan, China), or (d) Thai patients. Therefore, each nurse completed only one version of the four possible paper-and-pencil survey versions (see survey prompts for the three foreign patient conditions in Appendices A-C\(^2\)).

Six hundred and one completed surveys were returned in sealed envelopes (71.1% response rate). After excluding surveys that (a) were returned without a signed consent form, (b) had entire scales for this study left blank, and (c) reported interactions with both foreign and Thai patients, the sample was reduced to 516. These nurses were then randomly contacted to

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\(^1\) Those who participated were entered into a draw to win a tablet computer, although this identifying information was in no way linked to the individual’s anonymous survey.

\(^2\) There was no separate prompt for Thai patients because the question for each scale in the survey referred to Thai patients directly. For example, participants were asked, “How often do you engage in the following behaviours with Thai patients?”
participate in the daily diary study. Forty-one nurses agreed to participate and were part of this study, whereas the 475 remaining nurses were included in Study 2.

One month later, I gave the 41 nurses 10 additional daily surveys to complete at the end of their shifts over three weeks, recalling their daily interactions with the same patient group (i.e., Western, Middle Eastern, East Asian, or Thai) with the prompts as shown in Appendices D to F. However, on some days, the nurses reported interacting with both foreign and domestic patients, and these days were dropped from the analyses. Moreover, some nurses reported interacting with patients from more than one foreign cultural group on some of the days, and these nurses were subsequently grouped into a new “Foreigners” condition. In exchange for their participation, in this daily dairy study, the nurses each received a token of appreciation. I obtained a final of 388 matched daily surveys out of a total of 410 possible responses (94.6% response rate).

In the (now) four foreign patient conditions (i.e., Western, Middle Eastern, East Asian, and Foreigners), I found no differences in age ($F(2, 27) = .41, p = .667$) and work tenure ($F(2, 28) = 1.89, p = .170$)\(^3\), so I collapsed them into one intercultural service context ($N = 31$) to compare with the intracultural service context ($N = 10$). There were also no significant differences in these demographic variables in the intercultural and intracultural service conditions (age, $F(1, 37) = 2.95, p = .094$; work tenure, $F(1, 39) = 3.33, p = .076$).

Forty of the nurses were female (98%) with one unreported sex (2%). The average age of the nurses was 29.4 years ($SD = 6.11$), and they had been working at the hospital for a mean of 4.52 years ($SD = 5.06$). Most of the nurses were full-time employees (38 full-time, 93%, and 3

\(^3\) The between groups df is 2, because there were no participants left in the East Asian condition (i.e., they were all included in the Foreigners condition). Sex and work status (full- or part-time) between the two groups could not be compared for this study, because respondents who reported these demographics were all females and worked full-time.
not reported, 7%). All nurses were born in Thailand and could speak at least one foreign language (28 could speak one foreign language, 68%, 11 could speak two, 27%, and two could speak three, 5%).

**Measures.** All study materials were in Thai (unless an English survey was requested). I followed Brislin's (1970) method for translation-back-translation from English to Thai. Any discrepancies were resolved by me and another bilingual Thai-English speaker. Respondents in the intercultural service context were instructed to “Think about the interactions [they] have with [English-speaking Caucasian/Arabic or Middle Eastern/East Asian] patients and respond to the statements below by circling the number in the scales” whereas respondents in the intracultural service context were instructed to think about their interactions with Thai patients. Participants were prompted to respond to the items based on their experiences “during today’s shift.”

**Daily surface acting.** I measured surface acting with Diefendorff and colleagues’ (2005) 7-item Surface Acting (see Appendix G; α = .96). However, the items were modified to fit the intercultural and intracultural service contexts (e.g., “I fake my mood when interacting with [this group of foreign/Thai] patients.”). The response scale ranged from 1 (Never) to 5 (Always).

**Daily emotional exhaustion.** Emotional exhaustion was measured with the 8-item Emotional Exhaustion subscale of the Maslach Burnout Inventory (Maslach & Jackson, 1981; e.g. “I feel emotionally drained from my work”; see Appendix H; α = .96). The response anchors for the Emotional Exhaustion scale were adapted to fit the daily context, ranging from 0 (Never) to 6 (All Day).

**Daily negative affect.** Because negative affect (NA) has been found to relate to surface acting and emotional exhaustion (e.g., Brotheridge & Grandey, 2002; Chu et al., 2012; Judge et al., 2009), NA was used as a control variable. NA was measured with 10 negative emotion terms
from the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988; see Appendix J; \( \alpha = .83 \)). Participants used a 5-point scale (1 = *very slightly or not at all* to 5 = *extremely*) to indicate how they felt during that day’s shift (e.g., distressed, upset).

**Analyses.** Before testing the hypothesis, I verified whether there were systematic within-(daily) and between-individual variance in the level-1 variables by calculating ICC(1)s. The ICC(1)s were .71 for daily surface acting, .79 for daily emotional exhaustion, and .50 for daily negative affect, which reveal that there was variance at both the within- and between-individual levels. Because of the nested nature of the data, I implemented multilevel modeling (MLM) using SAS PROC MIXED (Singer, 1998). MLM is more appropriate than single-level regression techniques because MLM does not result in a downward bias of standard errors due to clustering (Raudenbush & Bryk, 2002). All variables in the study were nested within individuals (level-1 variables, \( n = 388 \) occasions) except for the moderator, service context, and the other control variable, age, which were between-person variables (level-2 variables, \( N = 41 \) nurses). I computed the level-1 variables by person-mean centring the variables (i.e., group-mean centring; Hofmann & Gavin, 1998); in other words, subtracting the between-person (i.e., aggregated over 10 days) scores from each day’s raw scores. Doing so allows the removal of the between-person variance from the level-1 variables and aids in the interpretation of the cross-level interaction (Hofmann & Gavin, 1998). In addition to negative affect, I controlled for age\(^4\) because past research has shown that age is negatively related to surface acting (e.g., John & Gross, 2004) and emotional exhaustion (e.g., Maslach et al., 2001).

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\(^4\) An alternative control variable is work tenure, as there is reason to believe that the longer someone has experience with surface acting at work, the more efficient they become at surface acting and thus might not experience as much emotional exhaustion (e.g., Kanfer & Ackerman, 1989). However, work tenure is highly correlated with age (\( r = .81, p < .001 \)), and substituting work tenure as a control instead of age or including both variables as controls did not affect the pattern of findings.
For the MLM, I entered the control variables (age, within-person negative affect, between-person negative affect) into the first step. Subsequently, the main effects (service context, within-person surface acting, between-person surface acting) were entered in the second step. In the final step, I entered the two-way interaction between within-person surface acting and between-person service context.

Results

Means, standard deviations, reliabilities, and correlations based on raw scores are found in Table 1. Scales showed acceptable reliability (.83 - .96). Because the data are nested, the significance levels were not calculated for the raw score correlations (Raudenbush & Bryk, 2002).
Table 1
*Study 1 Raw Scores Means, Standard Deviations, Reliabilities, and Correlations*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>α</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily surface acting</td>
<td>1.73</td>
<td>.85</td>
<td>.96</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily emotional exhaustion</td>
<td>2.05</td>
<td>1.61</td>
<td>.96</td>
<td>.55</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Daily negative affect</td>
<td>1.37</td>
<td>.44</td>
<td>.83</td>
<td>.35</td>
<td>.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Service context</td>
<td>.76</td>
<td>.43</td>
<td>-</td>
<td>-.04</td>
<td>.13</td>
<td>-.05</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>29.44</td>
<td>6.04</td>
<td>-</td>
<td>-.08</td>
<td>.21</td>
<td>-.01</td>
<td>.27</td>
</tr>
</tbody>
</table>

*Note. N = 39-41. Service context: 0 = intracultural, 1 = intercultural. Significance tests were not calculated due to clustering of data (Raudenbush & Bryk, 2002).*
Table 2 shows the correlations at the between-person level. These correlations were calculated based on each nurse’s average (i.e., aggregated over 10 days) score on each variable. Negative affect was positively related to surface acting ($r = .44, p < .01$) and emotional exhaustion ($r = .33, p < .05$). Surface acting was positively related to emotional exhaustion ($r = .59, p < .001$), all supporting past research.
### Table 2
*Study 1 Correlations at the Between-person Level*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>1. Daily surface acting</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Daily emotional exhaustion</td>
<td>.59***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Daily negative affect</td>
<td>.44**</td>
<td>.33*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Service context</td>
<td>-.07</td>
<td>.18</td>
<td>-.06</td>
<td></td>
</tr>
<tr>
<td>5. Age</td>
<td>-.08</td>
<td>.27</td>
<td>-.02</td>
<td>.27</td>
</tr>
</tbody>
</table>

*Note.* Between-person correlations were calculated using each person’s average (i.e., aggregated) score on each variable, except for age and service context. *N* = 38-41. Service context: 0 = intracultural, 1 = intercultural.

* *p < .05. ** *p < .01. *** *p < .001
Table 3 shows the correlations at the within-person level. Between-person scores were subtracted from the raw scores to create the within-person mean-centred variables. Service context and age were omitted, because these variables did not vary at the within-person level. Most correlations are similar to those at the between-person level (see Table 2). In general, the between- and within-person correlations corroborate with past research (Judge et al., 2009; Scott & Barnes, 2011).
Table 3
*Study 1 Correlations at the Within-person Level*

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Daily surface acting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Daily emotional exhaustion</td>
<td>.35***</td>
<td></td>
</tr>
<tr>
<td>3. Daily negative affect</td>
<td>.18***</td>
<td>.48***</td>
</tr>
</tbody>
</table>

*Note. Within-person correlations were calculated with the within-person centred variables. n = 375-388. Service context and age were omitted, because these variables did not vary at the within-person level.*

* p < .05. ** p < .01. *** p < .001
To test my hypothesis, I conducted MLM, and results are presented in Table 4. As seen in Table 4, there was a main effect of daily surface acting (Step 2, $\gamma = .52$, $SE = .08$, $p < .001$) but not of service context (Step 2, $\gamma = .37$, $SE = .46$, $p = .429$). Hypothesis 1 predicted that the service context will moderate the relationship between daily surface acting and daily emotional exhaustion, such that the relationship will be stronger in the intercultural than intracultural service context. Results show that, controlling for age, daily and between-person negative affect, and between-person surface acting, the service context moderated the relationship between daily surface acting and daily emotion exhaustion (Step 3 interaction term: $\gamma = .40$, $SE = .17$, $p = .003$). Thus, hypothesis 1 was supported.

5 These patterns of findings were the same even when control variables were omitted.
Table 4

Study 1 Multilevel Modeling Results of Daily Surface Acting and Service Context Interaction on Daily Emotional Exhaustion

<table>
<thead>
<tr>
<th>Predictor</th>
<th>γ</th>
<th>SE</th>
<th>Predictor</th>
<th>γ</th>
<th>SE</th>
<th>Predictor</th>
<th>γ</th>
<th>SE</th>
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<td>Step 1</td>
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<td>Step 2</td>
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<td>Step 3</td>
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<tr>
<td>Age</td>
<td>.06</td>
<td>.03</td>
<td>Age</td>
<td>.07</td>
<td>.03</td>
<td>Age</td>
<td>.07</td>
<td>.03</td>
</tr>
<tr>
<td>NA_{WI}</td>
<td>1.18***</td>
<td>.12</td>
<td>NA_{WI}</td>
<td>.99***</td>
<td>.12</td>
<td>NA_{WI}</td>
<td>.94***</td>
<td>.12</td>
</tr>
<tr>
<td>NA_{BTW}</td>
<td>1.61*</td>
<td>.66</td>
<td>NA_{BTW}</td>
<td>.61</td>
<td>.67</td>
<td>NA_{BTW}</td>
<td>.61</td>
<td>.67</td>
</tr>
<tr>
<td>Service context</td>
<td>.37</td>
<td>.46</td>
<td>Service context</td>
<td>.37</td>
<td>.46</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>SA_{WI}</td>
<td>.52***</td>
<td>.08</td>
<td>SA_{WI}</td>
<td>.26*</td>
<td>.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA_{BTW}</td>
<td>1.01**</td>
<td>.31</td>
<td>SA_{BTW}</td>
<td>1.01**</td>
<td>.31</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SA_{WI} x Service context</td>
<td>.40**</td>
<td>.17</td>
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</tbody>
</table>

Notes. NA_{WI} = Within-person or daily negative affect. NA_{BTW} = Between-person negative affect. SA_{WI} = Within-person or daily surface acting. SA_{BTW} = Between-person surface acting. Service context: 0 = intracultural, 1 = intercultural.

* p < .05. ** p < .01. *** p < .001.
Figure 1 depicts the relationship between daily surface acting and daily emotional exhaustion in the intercultural and intracultural service contexts. Simple slopes were plotted at high (+1 SD) and low (-1 SD) levels of daily surface acting (Aiken & West, 1991). Supporting hypothesis 1, the relationship between daily surface acting and daily emotional exhaustion was stronger in the intercultural rather than the intracultural service context. Simple slopes analyses showed that an increase in surface acting is related to a greater increase in emotional exhaustion (e.g., a steeper slope) in the intercultural ($\gamma = .67, SE = .10, p < .001$) than in the intracultural service context ($\gamma = .26, SE = .13, p = .046$).
**Figure 1.** Study 1 cross-level interaction of daily surface acting and service context on daily emotional exhaustion. Scale for emotional exhaustion ranged from 0-6 but presented with a restricted range for greater visual clarity.
Discussion

Based on self-regulation theory, I proposed that the intercultural versus intracultural service context will moderate the relations between surface acting and emotional exhaustion at the daily level, and results supported this hypothesis. Results showed that the link between daily surface acting and daily emotional exhaustion was stronger for nurses who engaged in intercultural service rather than in intracultural service encounters. It appears that interacting with foreign patients depletes more self-regulatory resources for nurses than interacting with domestic patients, and thus the intercultural context exacerbates the effects of surface acting on emotional exhaustion on a daily basis.

By introducing the intercultural and intracultural service context as a moderator, I add to a literature that is slowly moving away from focusing on dispositional moderators to focus instead on contextual moderators of the emotional labour-outcome link. Although past research has recognized that emotion regulation occurs in the organizational context in response to organizational goals, this literature has largely ignored cultural factors and the interpersonal dynamics surrounding the emotional labour. Once these contextual factors are considered, we enrich our understanding of the emotional labour processes.

One limitation of Study 1 is the lack of direct measures of resource depletion or weakened executive control (e.g., handgrip or memory tasks before and after service encounters). A potential future field study could be designed so that nurses would engage in a task that involves self-regulation (such as the tasks mentioned above) as a baseline before they start their day, and at the end of the day, the nurses could engage in the same task and report how often they engaged in surface acting and interacted with foreign patients throughout the day. In this design, I would expect to see that nurses who interacted more with foreign patients would
exhibit, for example, a weaker handgrip at the end of the day compared to the baseline in addition to a stronger relationship between surface acting and emotional exhaustion compared to those who interacted less with foreign patients. Alternatively, future studies could bring individuals from the same and different cultural backgrounds into the lab, assess baseline self-control strength, ask participants to interact with persons from the same and different cultural backgrounds while suppressing their emotions (i.e., surface act), and subsequently assess participants’ resource depletion to test the proposed mechanisms.

Another limitation of this study is the low sample size ($N = 10$) in the intracultural service condition. Due to the low sample size, the results could potentially be driven by an influential outlier. However, I conducted post hoc analyses by deleting one person from this group and re-ran the entire test to see whether the pattern of the results changed. Repeating this procedure for all 10 participants in the intracultural condition showed that the obtained pattern of results remained consistent even with each participant excluded, which provides some evidence that this study’s result is not due to an influential outlier. Nevertheless, because the power to detect cross-level interactions in MLM is determined by the sample sizes of both level-1 and level-2 in addition to the size of the interaction effect and the variance of the within-person slopes across the number of respondents (Mathieu, Aguinis, Culpepper, & Chen, 2012), future studies should replicate these findings with a larger between-person (level-2) sample size to ensure that the effect found here is robust.

The unequal subgroup sample sizes of this study could also affect the power of the statistical test. Although not discussed for multilevel models, unequal subgroup sample sizes in (single level) moderated multiple regression with categorical moderators can decrease a study’s power (Aguinis, 2004). For example, although the total level-2 sample size was 41 in this study,
the subgroups were unequal \((N_{\text{intercultural}} = 31, N_{\text{intracultural}} = 10\)), and in moderated multiple regression with categorical moderators, the *effective* total sample size \((N')\) is actually the harmonic mean\(^6\) of the subgroups, which reduces to 15 for this study and lowers the power of the test. Moreover, the ratio of the subgroup sizes in (single level) moderated multiple regression also affects power, and this “effect of unequal subgroup proportions on statistical power is significant *above and beyond* the effect of total sample size” (Aguinis, 2004, p. 76). Together, the unequal sample sizes and less-than-optimal ratio between subgroup sample sizes could potentially lower the power of the test\(^7\). Despite the plausibility of low power, I still detected an interaction effect, which leads to stronger confidence in the results.

Because each day’s survey was collected from a single source, common method variance is a potential problem. Common method variance is the “variance that is attributable to the measurement method rather than to the constructs the measures represent” (Podsakoff, Mackenzie, Lee, & Podsakoff, 2003, p. 879). Although there are diverse definitions of what constitutes a “method”, the underlying and uniting characteristic of the “method” factor is that it introduces systematic measurement error and can obscure the true, underlying relationships between the constructs of interest (Podsakoff, MacKenzie, & Podsakoff, 2012). However, Siemsen, Roth, and Oliveira (2010) have shown in their mathematical derivations that common method variance actually acts to reduce the interaction effect due to its influence on lowering the measures’ reliability. The authors concluded that “finding significant interaction effects despite the influence of [common method variance] in the data set should be taken as strong evidence

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\(^6\) Effective total sample size \(N' = \frac{2(n_1 n_2)}{n_1 + n_2}\) (Hsu, 1993 as cited in Aguinis, 2004).

\(^7\) Because I could not find references that discuss unequal sample sizes and their effects on MLM with categorical moderators, these are conjectures from single level moderated multiple regression.
that an interaction effect exists” (Siemsen et al., 2010, p. 470), which supports the robustness of the significant interaction of this study.

This study was conducted at the within-person level to capture the dynamic nature of surface acting. However, multi-level researchers (e.g., Chen, Bliese, & Mathieu, 2005; Kozlowski & Klein, 2000) assert that relationships between variables at one level of analysis might not be similar at another level of analysis, i.e., there might not be homology across levels of analysis. Furthermore, questions addressed at different levels are conceptually distinct and answer distinct questions (e.g., Dalal, Lam, Weiss, Welch, and Hulin, 2009). To illustrate, in their paper on organizational citizenship behaviours (OCBs) and counterproductive work behaviours (CWB), Dala and colleagues (2009) argued that “At the between-person level, the issue is the relationship between people’s characteristic levels of OCB and CWB: whether people who characteristically engage in OCB must also characteristically refrain from CWB. At the within-person level, in contrast, the issue is the relationship between a person’s momentary levels of OCB and CWB: whether a person who engages in OCB on a particular occasion must also refrain from CWB on that occasion” (p. 1052). Although in this study, I investigated the relationship between surface acting and emotional exhaustion at the within-person level of analysis, traditionally, emotional labour has been examined at the between-person level, that is, the constructs of interest are measured with a one-time survey for each participant (e.g., Brotheridge & Grandey, 2002; Grandey, 2003; Johnson & Spector, 2007). Such survey research was able to uncover “the general extent to which employees engage in emotional labour and to [measure] the more general and long-term consequences of emotional labour” (Totterdell & Holman, 2003, p. 56), but it could not capture momentary occurrences of affective events that could trigger the need for emotion regulation and its proximal consequences, unlike this study.
As Kozlowski and Klein (2000) suggested, to better understand any workplace phenomena, investigating the same construct at different levels of analysis will yield a more complete picture. Thus, in Study 2, I seek to replicate findings from Study 1 at the between-person level of analysis.

Moreover, due to the overwhelming evidence that surface acting is detrimental to employees’ well-being reviewed earlier, it is useful to identify the variables that are associated with service providers’ general use of surface acting, especially in the intercultural service context, to help limit the likelihood of such negative outcomes. Thus, Study 2 also investigates the antecedents of surface acting in intercultural service encounters at the between-person level.

**Study 2**

The first purpose of Study 2 was to replicate findings from Study 1 at the between-person level of analysis.

*Hypothesis 1:* The service context will moderate the positive relationship between surface acting and emotional exhaustion, such that the relationship will be stronger in the intercultural than intracultural service context.

The second purpose of Study 2 was to explore the antecedents of surface acting for nurses who interacted with foreign customers (i.e., those who engaged in intercultural service encounters) at the between-person level of analysis. As previously argued, there are increased opportunities for miscommunications and discomfort in intercultural service encounters due to cultural differences such as communication directness and indirectness (Holtgraves, 1997), service scripts (Stauss & Mang, 1999; Solomon et al., 1985; Triandis et al., 1984), display rules (Matsumoto, 1990; Rafaeli & Sutton, 1989), and emotion recognition (Elfenbein & Ambady, 2002; Gray et al., 2008). Moreover, intercultural interactions are rife with anxiety (e.g.,
Blascovich et al., 2001; Stephan et al., 1999). Consequently, perhaps service providers who are better able to manage their experiences of uncertainty and anxiety (Gudykunst, 1993, 1998) and possess higher levels of cultural intelligence (Earley & Ang, 2003; Ang & Van Dyne, 2008) would be less prone to using surface acting in intercultural service encounters.

**Antecedents of Surface Acting in Intercultural Service Encounters**

Previous research has investigated and found individual-difference and job-related antecedents of surface acting in intracultural service encounters as reviewed above. However, these past studies have not considered individual-level capacities that have been shown to influence effective interactions with culturally different others. I expand the research on antecedents of emotional labour by considering antecedents specifically in the intercultural service context.

**Intergroup anxiety, uncertainty, and surface acting.** Research has documented that, in general, intercultural contacts are characterized by stress, threat, and anxiety (e.g., Blascovich et al., 2001; Ickes, 1984; Mendes, Blascovich, Lickel, & Hunter, 2002; Stephan et al., 1999). In the service realm, service providers have “indicated that feelings of uncertainty, intimidation, frustration, and stress are common” in intercultural service encounters (Wang & Mattila, 2010, p. 334). According to Gudykunst’s (1993, 1998) Anxiety/Uncertainty Management (AUM) Theory, which is based on Berger and Calabrese’s (1975) theory on interpersonal communication, people feel a certain amount of anxiety and uncertainty in all relationships, but more so with those who are unfamiliar (i.e., strangers) and from different cultural backgrounds. Although the theory explains effective communication with both strangers and cultural outgroups, this thesis focuses on the AUM theory applied to interactions with cultural outgroups. Effective interpersonal communication depends on the degree to which individuals can manage or reduce their levels of
uncertainty and anxiety in the interaction. Uncertainty in this case is the uncertainty in predicting and explaining others’ attitudes, feelings, and behaviours due to differences in cultural norms, scripts, and display rules, as reviewed above. It is even argued that the need for certainty, or “a fundamental need to feel accurate in [the] understanding of how the world operates” (Heine, Proulx, & Vohs, 2006, p. 95; see also Grieve & Hogg, 1999; Kruglanski & Webster, 1996) is a basic and universal human need. The experience of uncertainty also goes hand-in-hand with negative feelings such as anxiety that tend to accompany situations of threat. Anxiety is “the affective (emotional) equivalent of uncertainty” (Gudykunst & Nishida, 2001, p. 59). In the intercultural context, anxiety stems from contact with outgroup members and can be more appropriately termed intergroup anxiety (Stephan & Stephan, 1985). Intergroup anxiety is described as the feeling of uneasiness and apprehension in intergroup encounters, for example when employees from one culture group provide service to customers from another culture group.

Support for AUM theory comes from behavioural and physiological data in intercultural encounters. Gudykunst and Shapiro (1996) found that people rated higher levels of anxiety and uncertainty for intercultural rather than intracultural encounters. Mendes and colleagues (2002) found patterns of cardiovascular responses in intercultural and intracultural interactions that support the argument for intergroup anxiety as a threat response to stress. As mentioned earlier, according to Lazarus and Folkman’s (1984) model of stress, the appraisal of the stressor, and not the qualities of the stressor itself, affects well-being. Threat appraisal occurs when individuals perceive the demands of stressors are higher than their personal coping resources. Challenge appraisal is when perceived demands of stressors are lower than one’s coping resources. As demonstrated in other experiments (e.g., Tomaka, Blascovich, Kelsey, & Leitten, 1993), threat
and challenge appraisals display distinct cardiovascular response patterns. Using cardiovascular response measures, Mendes and colleagues (2002) found that participants in intercultural interactions exhibited threat responses whereas those in intracultural interactions exhibited challenge responses. Threat responses and anxiety are aversive psychological states, and because these responses “[divert] attentional resources from the task at hand to resolving internal conflicts (i.e., reducing the anxiety)” (Hyers & Swim, 1998 as cited in Avery, Richeson, Hebl, & Ambady, 2009, p. 1384), effective interpersonal and cross-cultural interaction, therefore, depends on how individuals manage their uncertainty and anxiety so their energy and resources can be focused on successful interactions versus managing anxiety.

In intercultural service encounters, I propose that employees who experience more uncertainty and intergroup anxiety will engage more in surface acting. As explained above, intercultural service providers may experience high uncertainty when they are unable to anticipate or identify foreign customers’ service scripts or feelings. In such situations, the service provider might fake his or her emotional expression, engaging in surface acting, because he or she is unable to respond appropriately and authentically. Thus, uncertainty should predict surface acting in service providers in intercultural service encounters. Furthermore, in line with Gross’s (1998, 2002) process model of emotion regulation, if a service provider already feels high levels of anxiety in his or her interactions with foreign customers, then it is more likely that he or she will engage in response-focused emotion regulation or surface acting. Supporting this claim, Grandey and colleagues (2004) found that, employees tended to engage in surface acting when they felt more threatened by customers’ aggression. Experiencing uncertainty and anxiety in an

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8 Acknowledging that service providers can also experience uncertainty and anxiety in their encounters with customers from the same cultural background, this study focuses on uncertainty and intergroup anxiety as antecedents of surface acting in the intercultural service encounters only, as the effects of uncertainty and anxiety should be more prominent in the intercultural compared to the intracultural service context.
intercultural service encounter constitutes a threatening situation, thus service employees should engage in surface acting when experiencing high uncertainty and intergroup anxiety.

*Hypothesis 2:* In the intercultural service context, uncertainty will be positively related to surface acting.

*Hypothesis 3:* In the intercultural service context, intergroup anxiety will be positively related to surface acting.

**Cultural intelligence, intergroup anxiety, uncertainty, and surface acting.** Because in the intercultural service context, uncertainty and anxiety could lead to surface acting and its negative consequences, service providers should fare better when they have individual resources that will help reduce uncertainty and anxiety. I propose cultural intelligence as one such resource to help service providers to manage their levels of uncertainty and anxiety in the intercultural service context. Earley and Ang (2003) defined cultural intelligence or CQ as the capability to function effectively in situations characterized by cultural diversity. Based on Sternberg and Detterman’s (1986) idea of multiple intelligences, CQ is theorized to comprise four factors: metacognitive CQ, cognitive CQ, motivational CQ, and behavioural CQ (Earley & Ang, 2003). Metacognitive CQ refers to the higher order cognitive functioning that is used to acquire and understand cultural knowledge (Ang & Van Dyne, 2008). Individuals high on this component consciously monitor and reflect upon their own cultural assumptions and their interactions with culturally different others. They are able to suspend their judgment, be mindful, and adjust their own cultural knowledge in an unfamiliar cultural situation (Ang & Van Dyne, 2008). Cognitive CQ refers to the knowledge of cultural universals, or etics, as well as national, or emic, cultural norms, practices, and conventions (Ang & Van Dyne, 2008). Those who score high on cognitive CQ have knowledge of other cultures’ economic, legal, and social systems. Motivational CQ is
“a source of drive” (Ang & Van Dyne, 2008, p. 6) which leads individuals to direct their attention and energy towards effectively functioning in situations with culturally different others. Individuals with high motivational CQ possess self-efficacy or confidence in their abilities to do well in culturally diverse contexts and are intrinsically motivated to do so (Ang & Van Dyne, 2008). Finally, behavioural CQ reflects the capability of individuals to exhibit appropriate verbal and nonverbal behaviours, such as words, tones, gestures, and facial expressions (Gudykunst, Ting-Toomey, & Chua, 1988) depending on the cultural context. Individuals with high behavioural CQ should possess a wide range of culturally appropriate behaviours, understand the display rules of different cultures, and be proficient at interpreting the meanings of culturally different others’ behaviours (Ang & Van Dyne, 2008). CQ is a useful individual resource to consider in a multicultural context because it is conceptualized as a capability and can be developed through experience and learning (Earley & Ang, 2003).

Research has shown CQ to positively predict cultural judgment and decision-making effectiveness (Ang et al., 2007), cultural and work adjustment (Ang et al., 2007; Templer, Tay, & Chandrasekar, 2006), integrative information behaviours and cooperation in intercultural negotiations (Imai & Gelfand, 2010), and job performance (Ang et al., 2007; Chen, Kirkman, Kim, Farh, & Tangirala, 2010). In a sample of short-term international business travelers, CQ was negatively related to emotional exhaustion (Tay, Westman, & Chia, 2008). In the service realm, Sizoo, Plank, Iskat, and Serrie (2005) found that employees with higher intercultural sensitivity, which is related to CQ, scored higher on service attentiveness and interpersonal skills in intercultural encounters.

Moreover, research has found that CQ has unique effects in intercultural settings that are not present in intracultural settings. For example, in their study on trust in multicultural teams,
Rockstuhl and Ng (2008) found that higher CQ led to increased trust but only in culturally heterogeneous (and not homogeneous) dyads in the team. Moreover, although cognitive ability, EI, openness, and extraversion have been found to influence the outcomes of both intracultural and intercultural negotiations, Imai and Gelfand (2010) found that CQ has exclusive effects in intercultural negotiations. These findings emphasize the importance of CQ in multicultural contexts and interactions.

Based on the theoretical conceptualization of CQ above, it follows that CQ should influence service providers’ experience of uncertainty and intergroup anxiety with foreign customers. In fact, in their nomological network of CQ, Ang and Van Dyne (2008) situated CQ as an antecedent of the AUM model (but did not test the relationships). Moreover, each CQ facet may offer unique resources to counter intercultural anxiety and uncertainty. I propose specific predictions for the CQ facets related to uncertainty, intergroup anxiety, and surface acting in a multicultural setting.

Those who score high on metacognitive CQ are able to suspend their judgment and be mindful in culturally diverse settings, thus they should be better able to manage (i.e., reduce) uncertainty than those who score low on metacognitive CQ (Gudykunst & Nishida, 2001). These individuals should also experience less anxiety due to their stress appraisal. Lazarus and Folkman (1984) introduced the concept of stressor appraisals and suggested that under primary appraisals, individuals judge the demands of the stressor as irrelevant, benign, or stressful. Individuals high on metacognitive CQ might be able to reduce their anxieties by not appraising an intercultural interaction as something stressful.

**Hypothesis 4:** In the intercultural service context, metacognitive CQ will be negatively related to (a) uncertainty and (b) intergroup anxiety.
Individuals with high cognitive CQ possess knowledge of other cultural groups and should experience lower uncertainty in intercultural encounters, because they “proactively use their knowledge of other cultures to anticipate different expectations in various situations” (Lustig & Koester, 2006 as cited in Sharma, Tam, & Kim, 2009, p. 233) and thus should be better at predicting and explaining culturally dissimilar others’ attitudes, feelings, and behaviours than individuals with lower cognitive CQ. Cognitive CQ should be negatively related to intergroup anxiety based on the second stage of Lazarus and Folkman’s (1984) appraisal of stressors. Under secondary appraisals, individuals assess whether they have the necessary resources to cope with the stressor. Thus, even if individuals appraise the intercultural encounter as a potential source of stress, they might still possess CQ-related resources such as the knowledge to deal with the intercultural situation (also see Trawalter, Richeson, & Shelton, 2009).

Hypothesis 5: In the intercultural service context, cognitive CQ will be negatively related to (a) uncertainty and (b) intergroup anxiety.

From the communication literature, Berger (1979 as cited in Hammer, Wiseman, Rasmussen, & Bruschke, 1998) pointed out that people might not try to reduce uncertainty unless the interaction partner “can satisfy an individual’s needs or can administer reward or punishment” (p. 310). Intercultural interaction is fulfilling and rewarding for people with high motivational CQ because they enjoy interacting with people from different cultures and are confident in their own multicultural skills. Thus, those high in motivational CQ should be more likely to engage in uncertainty reduction. Motivational CQ is also posited to be negatively related to intergroup anxiety as someone who is confident in their abilities to communicate effectively with culturally different others should not feel anxious in intercultural situations.
**Hypothesis 6:** In the intercultural service context, motivational CQ will be negatively related to (a) uncertainty and (b) intergroup anxiety.

Conversely, I do not predict significant relations between behavioural CQ and uncertainty or intergroup anxiety. The ability to adapt one’s behavioural repertoire in an intercultural setting is distinct from the cognitive ability to predict and explain others’ attitudes and behaviours or to feeling secure and calm during an intercultural interaction. Abilities for intercultural behavioural adaptation and adjustment may be related to how employees express surface acting, which will be explored below, but should not predict attitudes or feelings prior to a cross-cultural interaction.

Gudykunst (1995) proposed that anxiety and uncertainty are proximal causes of ineffective intercultural interaction, and that distal causes of ineffective interaction are mediated through these two variables. Thus, I predict that metacognitive, cognitive, and motivational CQ have indirect effects on surface acting via uncertainty and intergroup anxiety.

**Hypothesis 7:** In the intercultural service context, (a) uncertainty and (b) intergroup anxiety will mediate the relationship between metacognitive CQ and surface acting.

**Hypothesis 8:** In the intercultural service context, (a) uncertainty and (b) intergroup anxiety will mediate the relationship between cognitive CQ and surface acting.

**Hypothesis 9:** In the intercultural service context, (a) uncertainty and (b) intergroup anxiety will mediate the relationship between motivational CQ and surface acting.

Finally, for direct effects of CQ on surface acting, past research has shown that overall CQ was not significantly related to daily surface acting (McCance, 2010). However, in my work, I investigate each facet of CQ separately. Unlike the other three facets of CQ, behavioural CQ relates to the ability to enact appropriate nonverbal behaviours. As surface acting is also a
behaviour enacted to display appropriate nonverbal behaviours (in this case, appropriate emotional expressions), I predict that behavioural CQ should be positively related to surface acting.

*Hypothesis 10:* In the intercultural service context, behavioural CQ will be positively related to surface acting.

Summary of hypotheses 2-10 are shown in Figure 2.
Figure 2. Study 2’s hypothesized relationships among each facet of CQ with uncertainty, intergroup anxiety, and surface acting. The mediation hypotheses (H7-9) cannot be represented in this model.
Method

Participants and procedure. The 475 participants in this study were from the same population of nurses in Study 1. However, these nurses only completed a one-time paper-and-pencil survey (and did not participate in the daily diary study). As described earlier, the nurses interacted with both foreign and Thai patients, but they were randomly assigned to recall either their interaction with a foreign patient group or Thai patients while completing the survey (see prompts for the foreign patient conditions in Appendices A-C). Although asked to only recall their interactions with one foreign patient group, some nurses reported interactions with multiple foreigner groups, and for the analyses, I grouped these nurses into a fifth “Foreigners” condition.

In the four foreign patient conditions (i.e., Western, Middle Eastern, East Asian, and Foreigners), I again found no differences in age ($F(3, 328) = .55, p = .648$), sex ($F(3, 336) = .94, p = .423$), work status (full- or part-time; $F(3, 246) = 1.88, p = .134$), and work tenure ($F(3, 336) = 1.00, p = .392$), thus I collapsed them into one intercultural service context condition, resulting in 348 nurses in this condition. The other 127 nurses interacted with Thai patients and were in the intracultural service context condition. There were also no differences in the same variables mentioned above when comparing nurses in the intercultural and intracultural service context conditions (age, $F(1, 455) = .01, p = .908$; sex, $F(1, 465) = .34, p = .561$; work status (full- or part-time), $F(1, 366) = 1.43, p = .233$; work tenure, $F(1, 460) = 1.05, p = .306$).

Of the 475 nurses, 461 were female (97%), 6 were male (1%), and 8 did not report their sex (2%). The average age of the nurses was 30.92 years ($SD = 6.14$), and they had been working at the hospital for a mean of 6.14 years ($SD = 5.66$). Most nurses were full-time employees (365 full-time (77%), 3 part-time (1%), and 107 not reported (22%) and were born in Thailand (467

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9 There was no separate prompt for Thai patients because the question for each scale in the survey referred to Thai patients directly. For example, participants were asked, “How often do you engage in the following behaviours with Thai patients?”
Thai-born (98%), 8 not reported (2%). Most nurses could speak at least one foreign language (290 could speak one foreign language (61%), 95 could speak two (20%), 36 could speak three or more (8%), 3 reported no foreign language (1%), and 51 not reported (10%)).

**Measures.** Similar procedures were followed for the scale translation-back-translation in Study 1. Respondents were instructed to “Think about the interactions [they] have with [English-speaking Caucasian/Arabic or Middle Eastern/East Asian/Thai] patients and respond to the statements below by circling the number in the scales.” The response scales ranged from 1 (*strongly disagree*) to 5 (*strongly agree*) unless otherwise noted.

For hypothesis 1, surface acting ($\alpha = .95$) and emotional exhaustion ($\alpha = .94$) were measured with scales described in Study 1 without the prompt “During today’s shift” (see Appendices G and I). Moreover, I used the original response anchors for the Emotional Exhaustion scale, ranging from 0 (*Never*) to 6 (*everyday*).

**Negative affect.** Because the data for this study were collected through a one-time self-report survey, common method variance could be a problem. Podsakoff et al. (2003) proposed that one source of common method variance is the common rater effect due to mood state, which is “the propensity of respondents to view themselves and the world around them in generally negative terms (negative affectivity) or...positive terms (positive affectivity)” (p. 882). Moreover, because negative affect (NA) has been found to influence the relations between stressor and strain variables in workplace self-reports (e.g., Burke, Brief, & George, 1993; Chen & Spector, 1991), I measured and controlled for this variable at the between-person level. NA was measured with the PANAS as in Study 1 (e.g., distressed, upset; $\alpha = .90$) but with a prompt asking how participants felt in general (see Appendix J).

---

10 Only the frequency, and not the strength, of emotional exhaustion was used in this study.
In addition to scales for surface acting, emotional exhaustion, and negative affect as described above, the following scales were included to test hypotheses 2-10:

**Uncertainty.** In practice, uncertainty is measured by its inverse, attributional confidence, which is the confidence one has in predicting others’ attitudes, feelings, and behaviours (e.g., Gudykunst & Nishida, 2001; Hammer et al., 1998). I modified Gudykunst and Nishida’s (2001) 12-item version of the Attributional Confidence scale to fit the hospital context (e.g., “I am confident in my general ability to predict how this group of foreign patients will behave”; see Appendix K; α = .88).

**Intergroup anxiety.** Intergroup anxiety was measured with 11 items adapted from Stephan and Stephan (1985, as cited in Gudykunst & Nishida, 2001) and modified to fit the hospital context (i.e., “I felt ____ during my interactions with this group of foreign patients.) Example adjectives were calm (reverse-coded) and anxious (see Appendix L; α = .81).

**Cultural intelligence.** CQ was measured by the 20-item Cultural Intelligence Scale (CQS; Ang et al., 2007; see Appendix M), which consisted of four subscales for metacognitive CQ (e.g., “I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds”; α = .84), cognitive CQ (e.g., “I know the cultural values and religious beliefs of other cultures”; α = .89), motivational CQ (e.g., “I enjoy interacting with people from different cultures”; α = .84), and behavioural CQ (e.g., “I vary the rate of my speaking when a cross-cultural situation requires it”; α = .83).

**Racial attitudes.** Research has shown that individuals who hold high racial biases appraise intercultural interactions as more threatening compared to those with low racial biases (Trawalter et al., 2009). Thus, to rule out the possibility that the effects found were due to racial attitudes of the nurses who dealt with foreign patients, I measured and controlled for racial
attitudes with a modified version of Brigham’s (1993) 5-item Social Distance subscale of the Whites’ Attitudes Towards Blacks scale (e.g., “If I had a chance to introduce someone from this group of foreigners to my friends and neighbors, I would be pleased to do so”; see Appendix N) This subscale “[deals] with feelings of social distance or discomfort in interacting with blacks,” by white participants (Brigham, 1993, p. 1946). Although the scale was originally used for the White majority participants in the United States, Thai nurses are a majority group member in Thailand, justifying the use of this scale in this context.

However, the alpha reliability for all five items in this scale was relatively low (α = .61). A plausible reason for the low scale reliability is the lack of unidimensionality of the items (Cortina, 1993). Because alpha should only be used for unidimensional factors (Cotton, Campbell, & Malone, 1957), I conducted an exploratory factor analysis using principle axis factoring extraction method with Promax rotation of the scale. Results showed that the items mainly fell into two factors; the first two items in one factor, the second two reverse-coded items in another factor, and the fifth item did not load strongly on either factor (i.e., loading of less than .40). Because the first two items covertly address participants’ racial attitudes and their alpha reliability was .70\textsuperscript{11}, I instead used these first two items of the Social Distance subscale to control for potential racial biases\textsuperscript{12}.

\textsuperscript{11} Although the Cronbach alpha of .70 for the two items is relatively low as compared to the recommended .80 (Nunnally, 1978), I proceeded with using the two items from the Social Distance subscale because (a) high precision is not as important here because Social Distance is only used as a control for participants’ potential implicit racial biases and (b) Cronbach alpha is a function of the number of items in the scale (Cortina, 1993) and should be interpreted in light of the number of items (i.e., the alpha is not surprisingly low for two items).

\textsuperscript{12} Using two items of the Social Distance subscale did not affect the significance levels of the zero-order correlations between study variables. Data analyzed with the two-item Social Distance subscale showed the same pattern of results as the five-item Social Distance subscale. However, the motivational CQ-intergroup anxiety link went from non-significant ($\beta = -.07, SE = .04, p = .101$) in the five-item analysis to significant ($\beta = -.10, SE = .05, p = .035$) in the two-item analysis.
Analyses. For hypothesis 1, all 475 nurses were included in the analyses (348 nurses in the intercultural condition and 127 nurses in the intracultural condition). Excluding participants’ age, which was used as one of the controls, there were 0.76% missing data and the EM technique in SPSS was used to estimate the missing values (Gold & Bentler, 2000). Prior to testing hypothesis 1, I calculated the ICC(1)s as the nurses were nested across 38 units plus one special unit. The ICC(1)s were .05 for surface acting, .06 for emotional exhaustion, and .02 for negative affect. Although the nurses worked in different work units, the lack of (or very low) between-unit variance indicates that there were no systematic differences between nurses nested within units. In other words, the assumption of independence of observation for general linear models is not violated. Thus, MLM is unnecessary as the standard error will not be heavily downwardly biased (Raudenbush & Bryk, 2002). Surface acting was centred to reduce multicollinearity (Aiken & West, 1991). For the same reasons as Study 1, I again controlled for age. To test hypothesis 1, I conducted hierarchical regression analysis. The control variables (age, negative affect) were entered in the first step. Then, I entered the main effects (service context and surface acting) in the second step, followed by the two-way interaction between surface acting and service context in the third step.

For hypotheses 2-10 because they only concerned the intercultural service context, only the 348 nurses in this condition were included. The ICC(1)s were .02 for overall CQ, .00 for intergroup anxiety, .00 for attributional confidence, .05 for surface acting, .01 for negative affect, and .00 for social distance. The lack of between-unit variance indicates that MLM is

13 Nevertheless, I did conduct all tests with MLM as well as regression analysis, and results did not change when analyzed using MLM.
unnecessary\textsuperscript{14}. Therefore, I analyzed the data using Amos 18.0 (Arbuckle, 2009). In the structural equation model (SEM), I tested each facet of CQ as a predictor of attributional confidence, intergroup anxiety, and surface acting, and, in turn, attributional confidence and intergroup anxiety as predictors of surface acting. I allowed intergroup anxiety and attributional confidence to be correlated based on past research (e.g., Hammer et al., 1998; Stephan et al., 1999). I also controlled for age, negative affect, and social distance. Figure 3 depicts a simplified version of the SEM model tested. The entire model was tested separately with each CQ facet as a predictor\textsuperscript{15}. Mediation was tested with RMediation, an R package that computes confidence intervals for the indirect effect with the distribution of product of coefficients method (Tofighi & MacKinnon, 2011).

\textsuperscript{14} When the data were analyzed with the MLM procedure, results generally showed the same patterns. The only relationship that went from significant to non-significant using MLM was the link between motivational CQ and intergroup anxiety ($\gamma = -0.02$, $SE = 0.05$, $p = 0.700$).

\textsuperscript{15} The SEM model was also analyzed with each CQ facet as the predictor controlling for the other three CQ facets, and the pattern of findings was the same.
Figure 3. Study 2 simplified SEM model of the relationships between each facet of cultural intelligence (CQ), intergroup anxiety, attributional confidence (inverse of uncertainty), and surface acting. The model was analyzed separately for each CQ facet. For clarity, control variables (age, negative affect, and social distance) are not shown. Intergroup anxiety and attributional confidence were allowed to be correlated (e.g., Hammer et al., 1998; Stephan et al., 1999).
Results

For hypothesis 1, means, standard deviations, reliabilities, and correlations for each scale can be found in Table 5. All scales showed acceptable reliability (.90 -.95). Similar to past research (e.g., Bechtoldt et al., 2011; Brotheridge & Lee, 2003; Liu et al., 2008) and Study 1’s results, negative affect was positively related to surface acting ($r = .24$, $p < .001$) and emotional exhaustion ($r = .29$, $p < .001$). Surface acting was positively related to emotional exhaustion ($r = .23$, $p < .001$), corroborating with findings reported in past research (e.g., Brotheridge & Lee, 2002; Grandey, 2003; Chau et al., 2009).
Table 5
*Study 2 Means, Standard Deviations, Reliabilities, and Correlations for Hypothesis 1*

<table>
<thead>
<tr>
<th>Variable</th>
<th>$M$</th>
<th>$SD$</th>
<th>$\alpha$</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<tbody>
<tr>
<td>1. Surface acting</td>
<td>2.12</td>
<td>.95</td>
<td>.95</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Emotional exhaustion</td>
<td>3.35</td>
<td>1.31</td>
<td>.94</td>
<td>.23**</td>
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<tr>
<td>3. Negative affect</td>
<td>2.08</td>
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<td>.24***</td>
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<td>4. Service context</td>
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<td>.44</td>
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<td>-.04</td>
<td>.04</td>
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<tr>
<td>5. Age</td>
<td>30.92</td>
<td>6.21</td>
<td>-</td>
<td>.01</td>
<td>-.21***</td>
<td>-.11*</td>
<td>-.01</td>
</tr>
</tbody>
</table>

*Note. N = 457-475. Values are calculated based on imputed missing values (except for age). Service context: 0 = intracultural, 1 = intercultural.*

* $p < .05$. ** $p < .01$. *** $p < .001$
For hypotheses 2-10, means, standard deviations, reliabilities, and correlations for each scale can be found in Table 6. The reliability levels were acceptable (.70 - .95).

The four facets of CQ are theorized to be related but distinct, and the correlations found between the four facets \((rs = .20 - .55, ps < .001)\) support this conceptualization and fall within the range found in past research (e.g., Ang et al., 2007). Social distance was found to be significantly related to all study variables except behavioural CQ \((r = .08, p = .127)\), which is preliminary evidence that behavioural CQ operates differently from other facets of CQ.

The correlations in Table 6 also provide preliminary support for some of the hypotheses. Intergroup anxiety is positively related to surface acting \((r = .35, p < .001)\). Metacognitive CQ, cognitive CQ, and motivational CQ are negatively related to intergroup anxiety \((rs = -.11 - -.26, ps < .05)\) and positively related to attributional confidence \((rs = .30 - .40, ps < .001)\). None of the CQ facets are significantly related to surface acting except behavioural CQ \((r = .15, p = .005)\).
Table 6
*Study 2 Means, Standard Deviations, Reliabilities, and Correlations for Hypotheses 2-10*

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>α</th>
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<th>2</th>
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<th>6</th>
<th>7</th>
<th>8</th>
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<td>1. Metacognitive CQ</td>
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<td>.42</td>
<td>.84</td>
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<td></td>
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<td>2. Cognitive CQ</td>
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<td>3. Motivational CQ</td>
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<td>4. Behavioural CQ</td>
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<td>.83</td>
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<tr>
<td>5. Intergroup anxiety</td>
<td>2.43</td>
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<td>.81</td>
<td>-.26***</td>
<td>-.11*</td>
<td>-.21***</td>
<td>-.03</td>
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<tr>
<td>6. Attributional confidence</td>
<td>3.31</td>
<td>.48</td>
<td>.88</td>
<td>.33***</td>
<td>.30***</td>
<td>.40***</td>
<td>.35***</td>
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<td>7. Surface acting</td>
<td>2.10</td>
<td>.95</td>
<td>.95</td>
<td>-.10</td>
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<td>-.07</td>
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<td>.35***</td>
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<td>8. Negative affect</td>
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<td>-.17**</td>
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<td>.34***</td>
<td>-.13*</td>
<td>.26***</td>
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<td>9. Social distance</td>
<td>3.66</td>
<td>.64</td>
<td>.70</td>
<td>.21***</td>
<td>.16**</td>
<td>.32***</td>
<td>.08</td>
<td>-.29***</td>
<td>.29***</td>
<td>-.22***</td>
<td>-.20***</td>
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<tr>
<td>10. Age</td>
<td>30.90</td>
<td>6.24</td>
<td>-</td>
<td>.12*</td>
<td>-.10</td>
<td>.00</td>
<td>.03</td>
<td>-.11*</td>
<td>.07</td>
<td>.01</td>
<td>-.04</td>
<td>-.09</td>
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</tbody>
</table>

*Note. N = 332-348. Values are calculated based on imputed missing values (except for age). CQ = Cultural Intelligence. Attributional confidence is the inverse of Uncertainty.

* p < .05. ** p < .01. *** p < .001.
Hypothesis 1 predicts that the service context will moderate the relationship between surface acting and emotional exhaustion, such that the positive relationship will be stronger in the intercultural than intracultural service context. Results from hierarchical regression in Table 7 show that the service context did not moderate the relationship between surface acting and emotion exhaustion (Step 3 interaction term: $B = -.02$, $SE = .13$, $p = .855$). Thus, hypothesis 1 at the between-level of analysis was not supported.

\footnote{The patterns of findings were the same even when control variables were omitted.}
Table 7
Study 2 Surface Acting and Service Context Interaction on Emotional Exhaustion

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\Delta R^2$</th>
<th>Predictor</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\Delta R^2$</th>
<th>Predictor</th>
<th>$B$</th>
<th>$SE$</th>
<th>$\Delta R^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
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<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.04***</td>
<td>.01</td>
<td></td>
<td>Age</td>
<td>-.04***</td>
<td>.01</td>
<td></td>
<td>Age</td>
<td>-.04***</td>
<td>.01</td>
<td></td>
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<tr>
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<td>.48***</td>
<td>.09</td>
<td></td>
<td>NA</td>
<td>.48***</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>Service context</td>
<td>.06</td>
<td>.13</td>
<td></td>
<td>Service context</td>
<td>.06</td>
<td>.13</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>SA</td>
<td>.24***</td>
<td>.06</td>
<td></td>
<td>SA</td>
<td>.26*</td>
<td>.11</td>
<td></td>
<td>SA</td>
<td>.26*</td>
<td>.11</td>
<td></td>
</tr>
<tr>
<td>SA x Service context</td>
<td>-0.02</td>
<td>.13</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>.12***</td>
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<td>.03***</td>
<td></td>
<td></td>
<td></td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Notes. NA = negative affect. SA = surface acting. Service context: 0 = intracultural, 1 = intercultural.

* $p < .05$. ** $p < .01$. *** $p < .001$. 
Figure 4 shows the relationship between surface acting and emotional exhaustion for the intercultural and intracultural service contexts at the between-person level. Although the interaction was not significant, I calculated the simple slopes at high (+1 SD) and low (-1 SD) levels of surface acting (Aiken & West, 1991) to examine whether surface acting was significantly related to emotional exhaustion for both contexts, as suggested by the significant main effect of surface acting in Table 8 (Step 2, \( B = .24, SE = .06, p < .001 \)). Results showed that surface acting is related to an increase in emotional exhaustion for both the intercultural (\( B = .24, SE = .07, p < .001 \)) and intracultural (\( B = .24, SE = .12, p = .049 \)) service contexts. The slope lines are very similar, illustrating the lack of main effect for service context found in Table 7 (Step 2, \( B = .06, SE = .13, p = .632 \)).
Figure 4. Study 2 relationship between surface acting on emotional exhaustion by intercultural and intracultural service contexts. Scale for emotional exhaustion ranged from 0-6 but presented with a restricted range for greater visual clarity.
Overall results for hypotheses 2 to 6 and 10 are shown in Figure 5\textsuperscript{17}. Hypothesis 2 predicted that, in the intercultural service context, uncertainty will be positively related to surface acting. Controlling for age, negative affect, social distance, intergroup anxiety, and each of the four CQ facets (one at a time), attributional confidence was not significantly related to surface acting ($\beta$s = .01 - .07, $ps$ = .231 - .895). Thus, hypothesis 2 was not supported. Hypothesis 3 predicted that, in the intercultural service context, intergroup anxiety will be positively related to surface acting. Controlling for similar variables as before and attributional confidence, results showed that intergroup anxiety was significantly related to surface acting ($\beta$s = .28 - .29, $ps$ < .001) supporting hypothesis 3.

Metacognitive CQ was predicted to be negatively related to uncertainty and intergroup anxiety. Hypothesis 4a and b were supported, as metacognitive CQ was positively related to attributional confidence ($\beta$ = .27, $p$ < .001) and negatively related to intergroup anxiety ($\beta$ = -.15, $p$ = .002). Similar predictions were made for cognitive and motivational CQ and their relations with uncertainty and intergroup anxiety. Both facets were related to attributional confidence (cognitive CQ: $\beta$ = .27, $p$ < .001; motivational CQ: $\beta$ = .33, $p$ < .001), but only motivational CQ ($\beta$ = -.11, $p$ = .040) and not cognitive CQ ($\beta$ = -.08, $p$ = .108) was related to intergroup anxiety. Thus, hypothesis 5a, 6a, and 6b, but not 5b, were supported.

Hypotheses 7-9 predicted mediation between metacognitive, cognitive, and motivational CQ and surface acting through uncertainty and intergroup anxiety. Because hypotheses 2 and 5b were not supported, most of the mediation predictions could not be tested (hypotheses 7a, 8a, 8b, 9a). However, I could test hypothesis 7b where intergroup anxiety was hypothesized to mediate the relationship between metacognitive CQ and surface acting because both the metacognitive

\begin{footnote}{17} The SEM model was also tested with the main CQ facet as the predictor while controlling for the other CQ facets. Pattern of results were the same.\end{footnote}
CQ to intergroup anxiety (hypothesis 4b) and intergroup anxiety to surface acting (hypothesis 3) paths were significant. Results showed that the indirect effect was -.10 with a 95% confidence interval of -.18 to -.03. Thus hypothesis 7b was supported. For hypothesis 9b, I hypothesized that intergroup anxiety will mediate the link between motivational CQ and surface acting because both the motivational CQ to intergroup anxiety (hypothesis 6b) and intergroup anxiety to surface acting (hypothesis 3) paths were significant. Hypothesis 9b was not supported because results showed that the indirect effect was -.05 with a 95% confidence interval of -.11 to -.00.

Results showed that hypothesis 10 was supported because, as expected, behavioural CQ was positively related to surface acting ($\beta = .16$, $p = .002$). Although not hypothesized, behavioural CQ was positively related to attributional confidence ($\beta = .33$, $p < .001$) and was not significantly related to intergroup anxiety ($\beta = -.03$, $p = .573$). In summary, hypotheses 3, 4a, 4b, 5a, 6a, 6b, 7b, and 10 were supported (see Table 8).
Figure 5. Study 2 results for hypotheses 2 to 6 and 10 with standardized paths. Paths reflect the coefficients controlling for age, negative affect, and social distance. The control variables and correlation between intergroup anxiety and attributional confidence are omitted for figure clarity. Facets of CQ were tested one at a time, and the coefficients are in order, from top to bottom, for metacognitive CQ, cognitive CQ, motivational CQ, and behavioural CQ. The mediation hypotheses (H7-9) cannot be represented in this model.

* $p < .05$. ** $p < .01$. *** $p < .001$. 
### Table 8
**Study 2 Summary of Hypotheses 2-10 Tests**

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Results</th>
<th>Conclusion</th>
</tr>
</thead>
</table>
| **H2:** Uncertainty is positively related to surface acting<sup>a</sup>. | Metacognitive CQ: $B = .13, SE = .11, p = .231$
Cognitive CQ: $B = .11, SE = .11, p = .328$
Motivational CQ: $B = .11, SE = .11, p = .330$
Behavioural CQ: $B = .02, SE = .11, p = .895$ | Not supported |
| **H3:** Intergroup anxiety is positively related to surface acting. | Metacognitive CQ: $B = .53, SE = .10, p < .001$
Cognitive CQ: $B = .53, SE = .10, p < .001$
Motivational CQ: $B = .53, SE = .10, p < .001$
Behavioural CQ: $B = .51, SE = .10, p < .001$ | Supported |
| **H4:** Metacognitive CQ is negatively related to (a) uncertainty<sup>a</sup> and (b) intergroup anxiety. | (a) Metacognitive CQ $\rightarrow$ Attributional Confidence: $B = .30, SE = .06, p < .001$
(b) Metacognitive CQ $\rightarrow$ Intergroup Anxiety: $B = -.19, SE = .06, p = .002$ | Supported |
| **H5:** Cognitive CQ is negatively related to (a) uncertainty<sup>a</sup> and (b) intergroup anxiety. | (a) Cognitive CQ $\rightarrow$ Attributional Confidence: $B = .20, SE = .04, p < .001$
(b) Cognitive CQ $\rightarrow$ Intergroup Anxiety: $B = -.06, SE = .04, p = .100$ | Supported |
<table>
<thead>
<tr>
<th>H6:</th>
<th>Motivational CQ is negatively related to (a) uncertainty(^a) and (b) intergroup anxiety.</th>
<th>(a) Motivational CQ $\rightarrow$ Attributional Confidence</th>
<th>Supported</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B = .28, SE = .04, p &lt; .001$</td>
<td>(b) Motivational CQ $\rightarrow$ Intergroup Anxiety</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>$B = -.10, SE = .05, p = .040$</td>
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<td></td>
</tr>
<tr>
<td>H7:</td>
<td>(a) Uncertainty(^a) and (b) intergroup anxiety will mediate the relationship between metacognitive CQ and surface acting.</td>
<td>(a) Metacognitive CQ $\rightarrow$ Attributional confidence $\rightarrow$ Surface acting</td>
<td>Not Supported</td>
</tr>
<tr>
<td></td>
<td>$n/a$</td>
<td>(b) Metacognitive CQ $\rightarrow$ Intergroup Anxiety $\rightarrow$ Surface acting</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>$IE = -.10, 95% CI^{b} [-.18, -.03], p &lt; .05$</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H8:</td>
<td>(a) Uncertainty(^a) and (b) intergroup anxiety will mediate the relationship between cognitive CQ and surface acting.</td>
<td>(a) Cognitive CQ $\rightarrow$ Attributional confidence $\rightarrow$ Surface acting</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td>$n/a$</td>
<td>(b) Cognitive CQ $\rightarrow$ Intergroup Anxiety $\rightarrow$ Surface acting</td>
<td>Not supported</td>
</tr>
<tr>
<td>H9:</td>
<td>(a) Uncertainty(^a) and (b) intergroup anxiety will mediate the relationship between motivational CQ and surface acting.</td>
<td>(a) Motivational CQ $\rightarrow$ Attributional confidence $\rightarrow$ Surface acting</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td>$n/a$</td>
<td>(b) Motivational CQ $\rightarrow$ Intergroup Anxiety $\rightarrow$ Surface acting</td>
<td>Not supported</td>
</tr>
<tr>
<td></td>
<td>$IE = -.05, 95% CI^{b} [-.11, -.00], ns$</td>
<td></td>
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<tr>
<td>H10:</td>
<td>Behavioural CQ is positively related to surface acting.</td>
<td>Behavioural CQ $\rightarrow$ Surface Acting</td>
<td>Supported</td>
</tr>
<tr>
<td></td>
<td>$B = .26, SE = .09, p = .002$</td>
<td></td>
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</tbody>
</table>
Note. $B =$ unstandardized path coefficient. SE = standard error. IE = indirect effect. CI = confidence interval.

$^a$ Uncertainty is operationalized as attributional confidence, which is its inverse. Thus, all “uncertainty” predictions were tested with “attributional confidence” such that a positive prediction for uncertainty is a negative unstandardized coefficient $B$ for attributional confidence and vice versa.

$^b$ RMediation confidence interval.
**Additional analyses.** Although results of hypothesis 1 at the between-person level of analysis in Study 2 did not replicate findings from the cross-level analysis in Study 1, I analyzed additional data from Study 1 at the between-person level of analysis to investigate whether the results would replicate at this level of analysis. Recall that nurses in Study 1 also completed a one-time, trait-level survey one month prior to the diary study. Thus, two sources of between-person data for nurses in Study 1 are (a) from this one-time, trait-level survey and (b) the ten-day aggregated/mean scores (i.e., between-person scores) from the dairy study. If in fact there is a true population moderation effect of service context at all levels of analyses and the difference in findings from Studies 1 and 2 was only due to the time-frame difference in measurement, which could be confounded by recall biases, then we should see that the trait-level data from the nurses in Study 1 replicate the trait-level data of the nurses from Study 2 (i.e., no significant interaction) but the between-person data from the 10 days from the nurses in Study 1 would show a significant moderation. On the other hand, if there is a lack of homology of the moderating effects of service context at the different levels of analyses, then we should see that the trait-level data from nurses in Study 1 replicate the trait-level data of nurses from Study 2, and the between-person data from the 10 days from the nurses in Study 1 would also not show a significant moderation. In other words, all measurements at the between-person level of analyses will show similar results (i.e., no significant moderation) that are different from the findings from the within-person level of analysis (i.e., significant moderation), hinting at a potential underlying mechanistic difference between the different levels of analyses of the same constructs.

Using data from the trait-level survey one month prior to the diary study, results replicated findings from Study 2 such that service context did not moderate the relationship between surface acting and emotional exhaustion at the between-person level of analysis ($B$
= .75, \( SE = .43, p = .091 \)). However, using data from the ten-day aggregate scores from the dairy study, service context was found to be a significant moderator of the between-person surface acting-emotional exhaustion relationship (\( \gamma = 2.62, SE = .93, p = .008 \)), replicating findings from Study 1 that were found at the within-person level of analysis. Thus, the additional analyses supported the first claim that the different findings from Studies 1 and 2 could be due to the difference in recall accuracy (i.e., one-time, trait-level global survey with more potential for recall biases versus daily surveys with less plausibility for recall biases).

I also conducted additional analyses to test whether the surface acting-antecedent relationships tested in Study 2 held when emotional exhaustion was included as the outcome of surface acting (as in Study 1) for nurses who engaged in intercultural service encounters. As seen in Figure 6, patterns of results were the same when emotional exhaustion was added to the SEM model used to test hypotheses 2 to 6 and 10 from Figure 3\(^\text{18} \).

\(^\text{18}\) Mediation results for hypotheses 7 to 9 also held from the full model.
Figure 6. Study 2 full path model with standardized paths. Paths reflect the coefficients controlling for age, negative affect, and social distance. The control variables and correlation between intergroup anxiety and attributional confidence are omitted for figure clarity. Facets of CQ were tested one at a time, and the coefficients are in order, from top to bottom, for metacognitive CQ, cognitive CQ, motivational CQ, and behavioural CQ.

* $p < .05$. ** $p < .01$. *** $p < .001$. 
Discussion

Service context as a moderator? The first goal of Study 2 was to replicate findings from Study 1, which found that the service context (intercultural versus intracultural) moderated the daily surface acting-emotional exhaustion relationship. However, I did not find a similar significant moderating effect at the between-person level in Study 2. The null finding is difficult to interpret due to various alternative explanations. The lack of a significant finding does not necessarily mean that the effect does not exist in the population; it might be the case that, based on this sample, there was not enough evidence to support a significant moderating effect. For example, the lack of significant findings could be due to low power. Using categorical moderators in multiple regression is notorious for being low in power; in fact, in a 30-year review of the literature, Aguinis, Beaty, Boik, and Pierce (2005) found that the median effect size for this type of moderation is only .002, which means that the probability to detect the population effect (if it exists) in the sample is low. As mentioned in Study 1, the unequal subgroup sample sizes could also influence the study’s power. The subgroups were unequal ($N_{\text{intercultural}} = 348$, $N_{\text{intracultural}} = 127$), and the effective total sample size is 186 for this study, which lowers the power of the test. Although 186 is a lot lower than the original sample size of 475, it is still larger than the sample size of at least 120 that Stone-Romero and Anderson (1994 as cited in Aguinis, 2004) found to be the minimum to detect moderating effects based on their Monte Carlo simulations. Even though this study’s less-than-optimal subgroup sample size ratio (.36) reduces the power of moderated multiple regression, it is not a large departure from the optimal ratio of .50 (Stone-Romero, Alliger, & Aguinis, 1994 as cited in Aguinis, 2004). In this way, the small effective total sample size and unequal subgroup sample sizes in the study contributed to the lower power to detect a moderating effect, resulting in a null effect.
The method of measurement could also lead to the null findings. This survey study could suffer from common method variance due to the one-time, single-source collection method, and common method variance has been shown to attenuate interaction effects (Siemsen et al., 2010). Moreover, results from self-report surveys can be confounded by participants’ memories (Beal & Weiss, 2003; Bolger, Davis, & Rafaeli, 2003). For example, although I randomly assigned nurses to specific conditions by asking them to recall their interactions with a particular patient cultural group, the nurses might have reported aggregate responses of their experiences with other patient groups, because, in reality, the Thai nurses interacted with both foreign and Thai patients throughout the day. I pre-empted this issue by eliminating responses from nurses who reported dealing with both foreign and Thai patients, but this strategy does not eliminate the potential for memory biases in the actual responses. The confounded responses could result in a non-significant interaction because the nurses were, in effect, not distinctly and neatly separated into the intercultural and intracultural service conditions.

Furthermore, these retrospective ratings could be problematic as emotion-related constructs are dynamic in nature (e.g., Beal et al., 2006; Beal & Ghandour, 2011) and self-regulatory resource depletion is temporary in nature (e.g., Baumeister, 2002; Muraven et al., 1998), which were motivations to conduct Study 1 at the within-person level. For instance, as mentioned earlier, according to the Affective Events Theory, work events are causes of emotions (Weiss & Cropanzano, 1996). As work events vary throughout the day, affective responses would also vary, and emotion regulation should occur on an episode-to-episode basis (Beal et al., 2006). Furthermore, the longer the time interval between the assessment of self-control and behavioural outcome, the weaker the effect (De Ridder, Lensvelt-Mulders, Finkenauer, Stok, & Baumeister, 2012). Therefore, the lack of significant moderation could be due to the insensitivity
of the cross-sectional, one-time survey measure of the constructs. Future studies can use event-contingent methods, whereby nurses are asked to respond to the survey measures once the targeted “event” occurs (in this case, right after they interact with patients), to prevent memory decay problems (Bolger et al., 2003).

Conversely, if the null finding in Study 2 is in fact substantiated, taken together, the findings from Studies 1 and 2 would corroborate with research on the temporary nature of resource depletion (e.g., Baumeister, 2002; Muraven et al., 1998; Richeson & Shelton, 2003) and with research on self-regulatory strength. Baumeister and colleagues (Muraven & Baumeister, 2000; Baumeister, 2002) suggested that self-control is like a muscle, which can be fatigued in the short run but build up strength over the long run. Muraven, Baumeister, and Tice (1999) showed that participants who engaged in self-regulatory exercises (e.g., monitoring and improving posture or mood) over two weeks showed less ego-depletion in a subsequent assessment (compared to a baseline assessment) than a control group who did not practice any exercises. Moreover, Oaten and Cheng (2006) found that participants who engaged in a 2-month self-regulation exercise program demonstrated less depletion in a subsequent assessment. Similarly, my findings suggest that, although engaging in surface acting for intercultural service encounters does indeed deplete self-regulatory resources on a daily basis, as evidenced by the significant effect on emotional exhaustion in Study 1, over a longer period of time, nurses may strengthen their self-control muscle so that they no longer experience the additional depleting effects of intercultural interactions in Study 2.

Alternatively, assuming a true lack of moderating effects in the population, the absence of homology of the moderating effects in Studies 1 and 2 could instead reinforce the necessity for a multilevel consideration of emotional labour, as different mechanisms might underlie the
surface acting-strain relationship at different levels of analysis. The current studies corroborate with past research that surface acting results in emotional exhaustion at both the within- (Study 1) and between-person (Study 2) levels of analysis. Although I argued that self-regulatory resources depletion is the underlying mechanism of this relationship, other explanations abound. An alternative explanation for the surface acting-negative outcome relationship is the inauthenticity and tension caused by emotional dissonance. Similar to Festinger’s (1957) cognitive dissonance theory, Hochschild (1983) proposed that emotional dissonance (the state whereby expressed and felt emotions are incongruent), a consequence of surface acting (Holman et al., 2008), can lead to tension and stress. “Individuals are motivated to maintain and enhance their sense of self as being meaningful or authentic” (Erickson & Wharton, 1997, p. 192), and expressing one’s (true) emotion is a way to be authentic to one’s identity (Ashforth & Humphrey, 1993). Thus, when one experiences emotional dissonance, not only is there a discrepancy between one’s felt and expressed emotion, there is also a discrepancy between one’s self-concept and behaviour (Harmon-Jones & Mills, 1999 as cited in Pugh et al., 2011) resulting in a sense of inauthenticity (Ashforth & Humphrey, 1993; Brotheridge & Lee, 2002; Simpson & Stroh, 2005). Inauthenticity has been shown to relate to depressed mood (Erickson & Wharton, 1997). Moreover, inauthentic feelings “are similar to the value conflict and person-job incongruence” (Pugh et al., 2011, p. 379), which has been linked to burnout (Maslach & Leiter, 2008). No study to date has been able to conclusively determine which mechanism explains the relationship between surface acting and emotional exhaustion (Grandey et al., 2013), but I propose based on my results that the different mechanisms might be operating at different levels of analysis.
If the null moderating effect at the between-person level in Study 2 is in fact substantiated, I propose that the within-person surface acting-emotional exhaustion link might be due to ego-depletion whereas the between-person surface acting-emotional exhaustion relationship might, instead, be explained by the tension due to inauthenticity. In Study 1, I showed that the service context moderated the relationship between daily surface acting and emotional exhaustion, because performing surface acting and engaging with foreign customers both drain resources from a common regulatory resource pool. However, the lack of interaction effect in Study 2 at the between-person level of analysis suggests that surface acting might not be draining regulatory resources. Instead, the between-person level of analysis deals with the general and stable association between one’s characteristic use of surface acting and overall experience of emotional exhaustion. Consequently, the between-person surface acting-emotional exhaustion relationship might be better explained by emotional dissonance and inauthenticity due to the longer time span of identity and self-concept development and their influences on behaviour (e.g., Baumeister, 2011) compared to the temporary nature of self-regulatory resources. Furthermore, although ego-depletion has been assumed to underlie the surface acting-emotional exhaustion relationship, studies that directly measure ego-depletion (e.g., Stroop responses, tasks requiring attention) have only been conducted in one-time lab settings (e.g., Goldberg & Grandey, 2007), and no long-term or field studies have been conducted to support this mechanism. Future studies should be conducted to address this issue.

Recall that Study 2’s null finding is inconclusive based on the current results due to potential alternative explanations. Thus, the above theoretical proposal is unsubstantiated and provisional. Moreover, additional data analyses from Study 1 provided some evidence that the lack of homology between findings from Studies 1 and 2 could, in fact, be due to the lack of
sensitivity in a one-time, trait-level measurement of emotion- and regulatory resource-related constructs. Despite the additional support, this claim is still tentative. For one, the sample size from Study 1 is small, and the replicated null findings at the between-person level from Study 1 might be due to low power and not true lack of population moderation effects. Additionally, the samples from Studies 1 and 2 were from the same population. Thus, replications of this study with higher power and in different samples could provide more convincing conclusions.

Significant moderation of the service context and surface acting on emotional exhaustion at the between-person level would support the parsimony of theory across levels of analysis, whereas a lack of moderation could provide further support for self-regulatory strength or the need to distinguish mechanisms at different levels of analysis to gain a clearer understanding of emotional labour.

Antecedents of surface acting in the intercultural service context. Study 2 was also conducted to investigate the antecedents of surface acting in the intercultural service context at the between-person level of analysis. According to the AUM theory, people can experience uncertainty and anxiety in their interactions, especially with those from different cultural backgrounds (Gudykunst, 1993, 1998). Based on the theory, I proposed that service providers who experience uncertainty and anxiety in interacting with foreign customers may turn to surface acting as a behavioural response, because service providers who are unable to predict customers’ feelings would fake their emotional expressions in response, and those who experience anxiety would utilize respond-focused emotion regulation or surface acting. Results showed that, accounting for uncertainty, when nurses experienced intergroup anxiety, they resorted to surface acting. Those who experienced uncertainty, accounting for intergroup anxiety, did not engage in surface acting. Thus, it appears that surface acting is a behavioural outcome only in response to
the affective (e.g., anxiety) and not the cognitive (e.g., uncertainty) aspect of intergroup interactions. These relationships held even after controlling for racial attitudes.

This finding corroborates with Pettigrew and Tropp’s (2011) review of the mediating factors between intergroup contact and prejudice reduction. The intergroup contact theory (Allport, 1954) maintains that increased contact between different social groups can reduce intergroup prejudice. Some studies propose that increased intergroup interactions lead to increased knowledge of the other group, which can result in reduced prejudice. However, in their review, Pettigrew and Tropp (2011) found that across studies, although increased contact leads to increased knowledge, this increased knowledge had a very minimal effect on decreasing intergroup prejudice. Other studies propose reduced anxiety as a mediator of the intergroup contact-prejudice link. Pettigrew and Tropp’s (2011) meta-analysis of these studies found that, unlike mediation through increased knowledge, “mediation through anxiety reduction appears to account for almost a third of contact’s effects on prejudice” (p. 81). Therefore, it appears that, resulting attitudes (e.g., prejudice) and behavioural responses (e.g., surface acting) from intercultural encounters operate through the affective rather than cognitive pathway. Because intergroup anxiety, but not uncertainty, is related to surface acting, I focus the remainder of the discussion on the relations of CQ, intergroup anxiety, and surface acting.

This study expands past research on CQ in intercultural service encounters by exploring how each facet of CQ (instead of overall CQ) has direct and indirect effects, through reducing intergroup anxiety, on surface acting. In the only other study to look at emotional labour in the intercultural service context, McCance (2010) did not investigate each CQ facet’s influence on surface acting in this context, and she found that overall CQ was not significantly related to surface acting at the daily level. Perhaps exploring overall CQ obscured the underlying relations
that some facets of CQ were related to surface acting. For example, Imai and Gelfand (2010) hypothesized that overall CQ would affect intercultural negotiation sequences and outcomes. However, they found that the motivational CQ facet was the main driver of the overall CQ-outcome relationships (Imai & Gelfand, 2010). This study’s results showed that certain facets of CQ have direct and indirect effects on surface acting in intercultural service encounters as further elaborated below.

Metacognitive CQ has an indirect effect on surface acting through intergroup anxiety; nurses with high metacognitive CQ reported less anxiety with foreign patients, and decreased anxiety is related to decreased surface acting. Thus, although past research contended that people experience threat and anxiety in intergroup interactions, those with high metacognitive CQ might be resilient against this affective reaction. Perhaps nurses who are consciously aware of their cultural assumptions and suspend their judgments experience less anxiety in intercultural service encounters because they do not immediately appraise the interaction as a stressor. The result that metacognitive CQ is negatively related to intergroup anxiety is also supported by past literature. Metacognitive CQ is related to mindfulness in intercultural interactions (Ang & Van Dyne, 2008), and research on mindfulness has shown that trait mindfulness is linked to lower levels of anxiety and stress (Brown, Ryan, & Creswell, 2007). Thus, metacognitive CQ is a way for service providers to reduce their use of surface acting through reducing their levels of anxiety in cross-cultural interactions. Uncovering this relationship is important because the finding provides additional support for the benefits of CQ in intercultural interactions, especially metacognitive CQ as it has been purported as the core dimension of CQ (Thomas et al., 2008).

Moreover, the result that only intergroup anxiety, and not uncertainty, mediated the relationship between metacognitive CQ and surface acting is similar to past findings that the
relationship between metacognitive CQ and cross-cultural idea sharing was mediated by affect-based trust (being comfortable and having an emotional bond with someone) and not cognitive-based trust (being sure of someone’s competence and dependability; Chua, Morris, & Mor, 2012). It appears that the link between CQ and behaviour functions through affective rather than cognitive pathways, again emphasizing the importance of comfort and lack of negative feelings in effective intercultural interactions.

Motivational CQ was also significantly related to intergroup anxiety. Having a drive to interact with foreign others and possessing self-efficacy in living in different cultures can decrease one’s feelings of anxiety in cross-cultural interactions. However, this finding should be interpreted with caution because this relationship was not significant when analyzed with MLM and when controlling for all five items of the Social Distance subscale.

Contrary to predictions, cognitive CQ was not significantly related to intergroup anxiety. It seems that having more knowledge about different cultures’ social systems, values, art forms, and languages does not make one more or less likely to feel anxiety in intercultural situations. This finding parallels with Pettigrew and Tropp’s (2011) assertion that cultural training methods that involve learning cultural knowledge only act through cognitive processes and “is not intended to effect direct change on behaviour or affective processes,” because it “neither reduces the preferred social distance from the outgroup nor increases liking of the outgroup” (p. 89). Furthermore, past research has not shown cognitive CQ to be significantly related to non-cognitive outcomes (e.g., Ang et al., 2007).

Behavioural CQ appears to be a double-edged sword in intercultural service encounters. Although behavioural CQ is normally encouraged in cross-cultural interactions because those who score higher on this facet report greater work and psychological adjustment (Ang et al.,
results of this study showed that behavioural CQ was also related to increased surface acting in intercultural service encounters. To illustrate, perhaps nurses with higher behavioural CQ may be sensitive to their patients’ cultural backgrounds and vary the distance in which they sit next to the patients according to the patients’ cultural norms, but these nurses might also surface act and smile because of organizational display rules and not because they feel that way inside, creating emotional dissonance for themselves. This finding raises the question as to whether those who report changing their verbal and nonverbal behaviours to fit the cross-cultural context’s requirement are doing so authentically or just at the “surface” level.

This question is related to Molinsky’s (2013) research on how individuals in a new cultural context manage the “internal conflict throughout the process of learning to engage in new behaviours that are critical to successful performance in a new culture but that conflict with their own culturally ingrained values and beliefs” (p. 684). Molinsky found that people take one of two approaches to dealing with conflict: instrumental or integrative. In the instrumental approach, individuals “achieve task performance by forcing themselves to perform the offending behaviour despite the internal conflict it generates. They are thus able to perform the behaviour, but continue to feel inauthentic when doing so” (Molinsky, 2013, pp. 684-685). In the integrative approach, they “[f]ind a way to feel authentic performing [the] behaviour that, at least initially, poses an intense conflict with their ingrained cultural values and beliefs” (Molinsky, 2013, p. 685). For instance, in the nursing context, some female nurses might feel uncomfortable touching male patients due to cultural taboos. However, if these nurses are able to reconcile their behaviour and reason that, as a nurse, it is of utmost importance to heal and help patients no matter who they are, these nurses would feel more personally congruent and at ease in their
behaviours. Thus, although not addressed here and in the extant literature on CQ, future research might investigate the implications of engaging in behavioural CQ instrumentally or integratively as it relates to well-being outcomes.

One potential issue that affects the validity of this study is whether the nurses in the intercultural service condition are in fact reporting their experiences with (only) foreign patients. As discussed above, although I randomly assigned nurses into either the intercultural or intracultural service conditions, the Thai nurses’ responses might have been influenced by their interactions with Thai patients due to the retrospective nature of the survey method and the fact that they usually interact with both foreign and Thai patients throughout the day. Thus, the findings here might have been contaminated by nurses responding based on their interactions with both foreign and domestic patients. However, in a post hoc analysis, intergroup anxiety was found to be significantly higher in the intercultural ($M = 2.43, SD = .51$) compared to the intracultural ($M = 2.24, SD = .55$) service context, $t(473) = 3.34, p = .001$, which provides evidence that (a) the intercultural service context is in fact more anxiety provoking than the intracultural one and (b) nurses might have, in fact, accurately recalled interactions with the correct assigned patient cultural group.

Another limitation which was previously mentioned is that the data were collected cross-sectionally and from a single source, which could result in inflated estimates of the relationships between the constructs of interest due to common method variance (Podsakoff et al., 2003). However, I attempted to mitigate this problem by controlling for respondents’ negative affectivity. Future studies should consider multi-source ratings. For instance, the service providers’ CQ could be rated by a supervisor or colleague. Yet, based on their meta-analysis of multitrait-multimethod studies, Lance, Dawson, Birkelbach, and Hoffman (2010) concluded that
the method variance might not actually be a serious issue in inflating the relationships between constructs. The authors found that the method variance accounts for approximately 18% of the variance but is nevertheless almost entirely cancelled out by the attenuating effects of measurement error. As discussed earlier, one-time, trait-level surveys might not provide a complete picture of emotion-related constructs. Thus, future studies should also use within-person, event-contingent sampling, to fully understand how individual level cross-cultural competencies can affect service providers’ day-to-day experiences of anxiety and use of surface acting with foreign customers. However, the method variance might not account for other potential inflation of the relationship between constructs due to a third variable. For instance, behavioural CQ and surface acting might be positively related because self-monitoring is positively related to surface acting (e.g., Diefendorff et al., 2005) and self-monitoring has also been proposed as an antecedent of CQ (e.g., Ang et al., 2007). Thus, future studies should control for other potential third variables to provide replication and stronger evidence for certain relationships found here.

Finally, causal relationships cannot be inferred in this study. Future studies can conduct lagged-surveys, which would be a step towards implying directional causation. For example, Hülsheger, Lang, and Maier (2010) conducted a two-wave longitudinal lagged survey of emotional labour and strain two months apart and found that surface acting preceded emotional strain and not vice versa, which provides stronger causal evidence than a one-time cross-sectional survey. One support for the directional causal relationship between metacognitive CQ, intergroup anxiety, and surface acting is through the lack of mediating effects when these three variables were switched around in all combinations (e.g., intergroup anxiety mediation between surface acting and metacognitive CQ, surface acting mediating between CQ and intergroup
anxiety, etc.). Despite these limitations, Study 2 contributes to our knowledge of emotional labour processes in the global context.
CHAPTER 4

GENERAL DISCUSSION

Past literature on emotional labour, largely conducted in the North American context, has consistently shown that surface acting is related to personal ill-being such as emotional exhaustion. Researchers have extended this finding to other cultural contexts and found that culture moderated the negative link between surface acting and employee well-being through cultural norms for emotional expression (e.g., Allen et al., 2013; Grandey et al., 2005). However, these cross-cultural studies neglected to account for another culturally-relevant contextual factor, which is the multicultural nature of the service context. Intercultural interactions entail uncertainty, threat, and anxiety (Blascovich et al., 2001; Stephan et al., 1999) due to cultural differences such as degree of indirectness in communication (Holtgraves, 1997) and service scripts (Stauss & Mang, 1999; Solomon et al., 1985), which affect the fluency of interactions. By investigating how both the intercultural context and service providers’ intercultural competencies affect their surface acting at work, this research uncovers boundary conditions and antecedents of the link between surface acting and employee-well-being, leading to recommendations to improve the fluency of intercultural service context interactions. My research shows that the service context moderated the relationship between surface acting and emotional exhaustion, at least at the daily level, because intercultural service encounters consumed more self-regulatory resources than intracultural service encounters. Moreover, intergroup anxiety was found to be positively related to surface acting in the intercultural service context. Finally, I demonstrated that metacognitive CQ had indirect effects on surface acting via intergroup anxiety, and behavioural CQ had direct effects on surface acting in the intercultural service context. My studies extend past theory and research in several ways.
The Moderating Role of Intercultural Service Context

First, by showing that the negative effect of surface acting is stronger for Thai nurses who interact with foreign compared to Thai patients (at least at the daily level), my study reinforces the notion that situation variables, such as the intercultural context, can influence the relationship between surface acting and employee ill-being. Previous studies on moderators of the surface acting-emotional exhaustion relationship have mainly focused on individual differences such as gender (Johnson & Spector, Scott & Barnes, 2011), personality (Judge et al., 2009), and EI (Bechtoldt et al., 2011). More recent research on moderators of the relationship between emotional labour and well-being have looked beyond the individual into contextual aspects such as work unit’s climate (Grandey et al., 2011) and occupational emotional labour requirements (Bhave & Glomb, 2013), and my research contributes to this growing literature to include the intercultural service context. Instead of looking at a context that buffers the link between emotional labour and well-being (e.g., climate of authenticity), my study investigates a context that exacerbates the relationship between surface acting and emotional exhaustion. My study reinforces the notion that considering the context in which emotional labour is performed will provide a more comprehensive understanding of this phenomenon. Emotions and emotion regulation do not occur in a vacuum, and taking contextual factors into consideration advances our understanding of emotional labour.

Self-regulatory Resource Depletion as a Uniting Theory

Moreover, one of the main contributions of my studies was uniting the emotional labour literature with intergroup research by drawing on the theory of self-regulation (Baumeister et al., 1998). Although resource depletion has been used to explain the detrimental effects of surface acting (e.g., Brotheridge & Lee, 2002; Goldberg & Grandey, 2007) and interracial interactions
(e.g., Richeson & Shelton, 2003), these two lines of work have rarely been considered together through this theoretical lens. For example, as discussed earlier, Grandey and colleagues (2011) proposed that the work unit’s climate of authenticity can buffer the effects of surface acting on emotional exhaustion. The authors reasoned that employees who are allowed to freely express their felt emotions to their colleagues in their work unit can conserve their resources through reduced self-regulation and not experience as much emotional exhaustion when they engage in surface acting with customers. However, this work did not explicitly discuss whether the service providers were interacting with customers from the same or different cultural backgrounds. Intercultural encounters are anxiety provoking (e.g., Stephan et al., 1999), and the act of trying to reduce this anxiety can redirect resources away from the current interaction (Hyers & Swim, 1998 as cited in Avery et al., 2009). Moreover, because “humans are inexhaustible meaning makers” and have a need for certainty (Heine et al., 2006, p. 91), intercultural service encounters can be psychologically threatening because there is increased uncertainty due to different cultural behavioural norms and values. Together, these processes tax the service providers’ regulatory resources in intercultural interactions as shown by Richeson and colleagues (Richeson & Shelton, 2003; Richeson & Trawalter, 2005). Results from my study show that the surface acting-emotional exhaustion relationship is intensified in the intercultural service context on a daily basis, which is congruent with the reasoning that there is additional resource depletion due to concurrently surface acting and interacting with foreign customers (compared to domestic customers). Consequently, my study demonstrates the utility of applying the self-regulatory resource theory as a common currency that influences underlying intrapersonal processes across domains.
Expanding the Nomological Networks for Emotional Labour and Cultural Intelligence

Thirdly, my work expands the nomological network for emotional labour and CQ. Previously, Grandey (2000) proposed a conceptual framework of emotional labour including various individual factors such as affectivity and self-monitoring that could influence emotional labour, and many parts of this model have been empirically supported (e.g., Beal et al., 2006; Buckner & Mahoney, 2012; Brotheridge & Lee, 2003; Totterdell & Holman, 2003). However, Grandey’s (2000) model and these aforementioned studies did not take into account the intercultural nature of certain service encounters, which could be characterized by anxiety and threat (e.g., Blascovich et al., 2001; Mendes et al., 2002; Stephan et al., 1999). By introducing and finding support for various indicators of cross-cultural competence as predictors of surface acting in intercultural service encounters, namely CQ and intergroup anxiety, my study expands Grandey’s model and provides a more comprehensive picture of influences of emotional labour across multiple contexts. However, because my study did not directly compare whether CQ had an effect in intracultural compared to intercultural service encounters (and only focused on the intercultural service context), future studies would benefit from directly comparing the two contexts to identify whether CQ, in fact, has exclusive effects in intercultural service encounters.

Moreover, by examining the role of CQ as a proximal and distal predictor of surface acting and by finding that intergroup anxiety is the mediating link between metacognitive CQ and surface acting, I test and expand the nomological network of CQ and integrate the CQ literature with the AUM theory of intergroup communication and emotional labour as a behavioural outcome of CQ. More specifically, my work addresses the concern regarding the bandwidth-fidelity dilemma (Cronbach & Gleser, 1965) for CQ. This issue refers to the trade-off between measuring a large number of attributes more crudely, i.e., increasing the bandwidth, or
measuring one or fewer characteristics with more detail and precision, i.e., increasing the fidelity. The bandwidth-fidelity dilemma affects criterion-related validity when there is a mismatch between the predictor and criterion’s breadth (Ones & Viswesvaran, 1996). For example, job performance is complex and multidimensional, and using the overall CQ as a predictor of this criterion should provide better predictor-criterion “fit” (Ng, Van Dyne, & Ang, 2012). On the other hand, if overall CQ was used as a predictor for a more specific criterion, the effects of the predictor on the criterion might appear insignificant or non-existent. This mismatch might be the reason why McCance (2010) did not find a significant relationship between overall CQ and surface acting in intercultural service encounters but found a significant relationship between overall CQ and performance (operationalized as a combination of emotional and task performance) in the same service context. My results showed that almost all facets of CQ were related to both intergroup anxiety and uncertainty, but only metacognitive CQ had indirect effects and behavioural CQ had direct effects on surface acting. Thus, future researchers should discern the predictor-criterion fit in their investigations of CQ in emotional labour in intercultural service encounters.

**A Step towards Generalizability**

This work also provides evidence for the generalizability of the effects of emotional labour and research on intergroup anxiety to include another cultural group. Emotional labour studies (in general) have been conducted in North America (but for studies from other cultures, see a review by Hülsheger & Schewe, 2011). By showing similar relations between surface acting and emotional exhaustion in a Thai sample, a country in the Southeast Asian cultural cluster (House, Hanges, Javidan, Dorfman, & Gupta, 2004) where emotional labour has not previously been investigated, my work provides additional evidence for the universality of the
surface acting-emotional exhaustion relationship. Moreover, the emotional labour literature is lacking in research and replication at the cross-cultural interface. Since the inception of the term “emotional labour” by Hochschild in 1983, more than 10,000 published academic articles have referred to emotional labour (Grandey et al., 2013) but none referenced emotional labour in the intercultural service context until McCance’s (2010) investigation of North American hotel employees interacting with foreign customers. To the best of my knowledge, my study is only the second to investigate emotional labour in intercultural service encounters from the service provider’s perspective. My research, thus, advances the field of emotional labour in the global context.

In addition, my research contributes to intergroup research by illustrating the role of intergroup anxiety in a context not typically studied. Research on interracial relations mostly originated from the United States and has traditionally examined groups with a long history of prejudice and intergroup conflicts. In fact, a meta-analysis by Toosi, Babbit, Ambady, and Sommers (2012) showed that over 70% of interracial studies were conducted in the United States investigating the interactions between White majority partners with Black minority partners. Fewer studies have considered Asians, Latinos, Middle Easterners, and First Nations as minority interacting partners (Toosi et al., 2012). My studies with Thai nurses interacting with foreign patients from Western, East Asian, and Middle Eastern countries address Toosi and colleagues’ (2012) call for research with intercultural pairings beyond the Black-White pair. Moreover, these authors found that the majority versus minority status of the participants in the interactions can affect the outcome; majority group members reported more negative affect in interracial interactions than in same-race interactions, whereas minority group members reported similar negative affect levels when interacting with other- and same-race partners. My studies were
conducted in Thailand, and the majority group members are Thai\textsuperscript{19} whereas the minority group members are Western (e.g., U.S. American), East Asian, and Middle Eastern. Because I show similar effects of anxiety and ego-depletion in the Thai-foreign and Thai-Thai interactions using mechanisms drawn from studies with White-Black and White-White interactions, my findings support the notion that it might not be the race of the partners per se but the partners’ majority/minority status according to the cultural context of the study that affects the experience of the intergroup interaction.

Investigating emotional labour in the Thai culture is a strength of this study but also adds complexity in interpreting the results because cultures influence emotional expressions (Mesquita & Delvaux, 2013; Mesquita & Frijda, 1992). As mentioned earlier, Allen and colleagues (2013) speculated that the surface acting-burnout relationship was not as strong in the Chinese service workers as compared to the U.S. American service workers because the Chinese sees emotions as “dangerous, irrelevant, or illness causing” (p. 883). In collectivistic cultures where the self is connected to others and maintaining social harmony and fitting into others’ expectations is the norm (Markus & Kitayama, 1991), emotions are not encouraged and emotional suppression is endorsed (Heine, Lehman, Markus, & Kitayama, 1999; Matsumoto, 2006) due to the emphasis of relational nature of emotions (e.g., Uchida, Townsend, Markus, & Bergsieker, 2009). From a resource perspective, performing surface acting for collectivists should not consume (as much) resources, because individuals who are practiced and skillful at doing so can allocate less and less resources to a task to attain the same level of performance (Kanfer & Ackerman, 1989). From an identity perspective, theorists have argued that surface acting can lead to exhaustion due to the inauthenticity of the emotional display. In individualistic cultures such as the United States, the self is viewed as separate from others and there is a focus

\textsuperscript{19} In the United States, Thais would be considered a minority group.
on expressing one’s true self and uniqueness (Markus & Kitayama, 1991). When members of
different cultures surface act, the inauthenticity can cause strain because of the internal
tension (Erickson & Wharton, 1997; Pugh et al., 2011; Pugliesi, 1999). However, for members of
collectivistic cultures, having to conform to external demands might not be seen as inauthentic
but in fact “a sign of maturity” (Mesquita & Delvaux, 2013, p. 264) because of the social value
of emotion management (Allen et al., 2013). All in all, the surface acting-emotional exhaustion
link should be weaker for members of collectivistic compared to individualistic cultures.
Supporting this claim is Pugh and colleagues’ (2011) aforementioned finding that the
relationship between surface acting and emotional exhaustion was stronger for those who valued
more (versus less) authentic emotional expressions.

Thailand is also a highly collectivistic culture (Ronen & Shenkar, 1985). Although the
emotional lives of Thai people are not studied as extensively as that of other cultures, the Thais
seem to also use “the smile” as a mask of emotions like the Japanese (also a collectivistic
culture; Matsumoto, 1996). Several authors have noted that Thais smile often but what the smile
means varies with the situation (Moran, Harris, & Moran, 2007). For example, Thais will smile
upon hearing sad news (Lewis, 2004). Because Thais are used to managing their emotional
display that is different from what they might feel inside, they could be adept at surface acting.
Consequently, the link between surface acting and emotional exhaustion for Thais might be
attenuated compared to those from individualistic cultures. Thus, although using a Thai sample
supports the generalizability of the research findings across cultures, it also, in other ways, limits
the generalizability due to the specific nature of emotions in cultures whose norm is to mask
emotions. For example, findings here might not generalize to other collectivistic cultures like
Latin America, whose cultural norm of simpatía encourages social harmony and conflict
avoidance through emotional expressivity of positive emotions (Triandis et al., 1984). My work provides a step towards generalizability of emotional labour in intercultural encounters, but future studies should replicate the findings in other cultural clusters to obtain a more complete picture of emotion regulation in intercultural interactions.

**Benefits of Surface Acting?**

If surface acting leads to negative outcomes such as emotional exhaustion, why, then, do people use this emotional labour strategy? The prevalence of this strategy is evident as generally people report modifying their facial expression as a means of regulating their emotions more than half of the time (Gross, Richards, & John, 2006). One reason for the prevalence of response-focused emotion regulation strategies such as surface acting is that sometimes people have no other choice because the emotion is already at its full force. Emotions might be at full force (before people can employ antecedent-focused emotion regulation) because the emotional stimuli or events occur suddenly, are highly matched to prototypical challenges or opportunities, or have high relevance to the individual (e.g., Gross, 1998; Levenson, Soto, & Pole, 2007). Another reason people use surface acting as an emotional labour strategy is that whether surface acting leads to good or bad outcomes depends on the outcome being investigated. This thesis focused on surface acting leading to negative intrapersonal outcomes such as emotional exhaustion. However, the ability to regulate emotionally expressive behaviour (i.e., surface acting) has also been shown to lead to positive outcomes such as higher well-being and financial success (Côté, Gyurak, & Levenson, 2010). Thus, individuals who are able to manage their emotions appropriately, even using the surface acting strategy, in response to situation demands, benefit from other types of rewards. For example, in the service context realm, although surface acting might lead to emotional exhaustion for the individual, the employees’ amplification of positive
emotions should be viewed favourably by their customers or supervisors (e.g., Côté & Morgan, 2002), resulting in higher performance ratings and service quality. However, note that the results showing that the ability to regulate facial emotional displays relates to individuals’ self-reported well-being and financial success come from North American participants (albeit from various ethnic and age groups; Côté et al., 2010). Future research should investigate whether these findings replicate in cultures where manipulating facial expressions is the norm.

Overall Limitations and Future Directions

The three studies are not without limitations. My studies were conducted in the field, and doing so sacrifices experimental control and random assignment, hence internal validity. However, Toosi et al.’s (2012) meta-analysis comparing intergroup interactions found that, in field studies, compared to lab studies, participants reported larger differences in positive feelings in intracultural compared to intercultural interactions, and their reported negative attitudes towards other-race partners were marginally stronger. Therefore, benefits of conducting a field study of intercultural interaction are not only having an actual sample of service providers (i.e., nurses versus students) and observing real-world behaviours, but also avoiding demand characteristics potentially inherent in lab studies, such as participants trying to present themselves more positively with experimenters present (Reis & Gosling, 2010 as cited in Toosi et al., 2012), especially on a sensitive issue such as intergroup interactions.

Another limitation is the inclusion of only nurses in my studies. Erickson and Stacey (2013) suggested that emotional labour for nurses could be subtly different from other “people work” (such as service and sales) because nurses are guided by an ethics of care and the clients served are a more vulnerable population with relatively less power than the health care provider. Therefore, these studies with nurses might not generalize to other occupations. Although some of
the findings here corroborate with studies conducted with other occupational groups (e.g., hotel employees, McCance, 2010; bus drivers, Scott & Barnes, 2011), future studies should broaden the demographic variability of the sample in order to support the generalizability of the findings.

Thus far, I have discussed emotional labour as an intrapersonal process and focused only on how it affects the service provider who is performing emotional labour. However, the obvious missing player is the foreign customer involved in the service encounter. According to the Social Interaction Model of Emotion Regulation and Strain (Côté, 2005), there is a feedback loop between the emotion sender and emotion receiver. The sender displays an emotion, which is perceived by the receiver, and, in turn, the receiver could express an emotion or perform a behaviour in response to the sender’s emotion display. Similarly, the employee-customer feedback loop has been conceptualized as a “spiral” or “a pattern of consecutive increases (or decreases) in behavioural and affective…reactions” (Groth & Grandey, 2012, p. 3). Examples from field research support these claims. Barger and Grandey (2006) found that service providers’ smiles predicted customers smiling during the service interaction, and customers’ smiles were positively related to their post-service encounter self-report positive mood.

Moreover, Groth, Hennig-Thurau, and Walsh (2009) showed with dyadic survey data (given concurrently to service providers and customers after a service encounter) that a service employee’s emotional labour strategies affected customers’ ratings of the employee’s customer orientation.

Furthermore, according to this model, the sender’s strain can also be affected by the receivers’ responses to the sender’s original emotional display. For example, receivers can identify inauthentic emotions in senders (Grandey, Fisk, Mattila, Jansen, & Sideman, 2002) and respond unfavorably to the inauthentic emotional displays (e.g., Butler et al., 2003; Grandey,
The receiver’s adverse responses will in turn affect sender’s strain (Côté, 2005). For example, if a service provider is displaying a fake smile (through surface acting), the customer can sense this and project back negative emotions, which can further influence the service providers’ strain. Of importance is one of the proposed moderators of this relationship, which is the receivers’ emotion recognition accuracy (Côté, 2005). As discussed earlier, people are worse at identifying emotions from different cultural groups (Elfenbein & Ambady, 2002). Thus, in intercultural interactions, the relationship between senders’ emotional labour strategy and his or her strain could be weaker as the receiver’s emotion recognition accuracy decreases due to the cultural difference between service provider and customer (Côté, 2005). However, note that this proposition runs against my hypothesis at the intrapersonal level, because I predicted that intercultural interactions (compared to intracultural interactions) will result in a stronger relationship between surface acting and emotional exhaustion for the service provider (due to increased ego-depletion). Future research will need to tease apart these two opposing effects from the service provider alone versus from the customers to determine (a) whether the effects co-occur and (b) which pathway is a stronger predictor of the effects of emotional labour on strain in intercultural service encounters.

The customers’ level of CQ could also influence service providers’ anxiety and emotional labour strategy. Research in intercultural CQ has shown that, not only does one’s level of CQ influences an interaction’s outcome; the partner’s CQ level also matters. In a study with multicultural student teams, Rockstuhl and Ng (2008) found that focal persons with high metacognitive CQ and cognitive CQ were more likely to trust their foreign partners. However, the authors also found that focal persons were also more likely to trust their culturally different partner when the partners had high behavioural CQ. In a different study with multicultural
student negotiation dyads, Imai and Gelfand (2010) showed that, although dyads with higher (rather than lower) combined CQ participated in more advantageous sequences of cooperative and integrative information behaviours that led to higher joint gains, these behaviours were most strongly influenced by the partner with lower CQ. Extending these findings, customers with high behavioural CQ in intercultural service encounters might interact in a culturally sensitive manner, which discourages anxiety and surface acting in service providers. Future studies are needed to test this hypothesis.

**Practical Implications**

This research has practical implication for the service industry, including daily effects of intercultural service encounters and CQ training. Results show that, at the between-person level, there was no evidence to show that surface acting’s effect on emotional exhaustion differs in intercultural and intracultural service encounters. Stopping here, organizations might conclude that their service employees do not experience increased adverse impact from the intercultural service encounters compared to intracultural ones. However, on a daily basis, surface acting was more strongly related to emotional exhaustion in service providers who interacted with foreign patients (compared to domestic patients). By zooming in at the daily level, we see that intercultural service encounters are in fact more taxing for service providers, which suggests that organizations should tune into service providers’ daily stressor-strain experiences and help employees regain their regulatory resources on a daily basis. For example, as emotional exhaustion has been shown to relate to CWBs (e.g., Bolton, Harvey, Grawitch, & Barber, 2012; Fox, Spector, & Miles, 2001), and CWBs have been found to have within-person (daily) variability (Dalal et al., 2009), organizations investing in service providers’ health on a daily
basis could potentially reduce or prevent daily CWBs. Additionally, this effect could be even more profound for service providers who interact with foreign customers.

Furthermore, results show that service employees with high metacognitive CQ experienced less anxiety in intercultural service encounters and, in turn, performed less surface acting. Experiential CQ training has shown promising results with increasing metacognitive, motivational, and behavioural CQ (MacNab, 2012; but for limitations, see Fischer, 2011). Thus, organizations could also provide CQ training to intercultural service employees. However, there is a caveat in that increasing behavioural CQ could lead to employees engaging more in surface acting, which could instead lead to more emotional exhaustion. This contradiction suggests that CQ training and emotion regulation training should be done concurrently to potentially offset the opposing effects.

**Conclusion**

The current studies highlight the importance of the context in which emotional labour is practiced, specifically the intercultural service context. Results showed that the link between surface acting and emotional exhaustion is stronger in the intercultural than the intracultural service context at the daily level. According to the idea of ego-depletion (Baumeister et al., 1998) this could mean that interacting with customers from different cultural backgrounds consumes more self-regulatory resources than with those from the same cultural background. Furthermore, in this work, specific antecedents of emotional labour for the intercultural service context were considered. Service providers who experienced intergroup anxiety reported more use of surface acting. A way to decrease intergroup anxiety and surface acting is having high metacognitive CQ, because it is related to reduced intergroup anxiety, which in turn is related to less surface acting. Finally, behavioural CQ is positively related to surface acting, thus
behavioural CQ can be seen as a double-edged sword bringing benefits and disadvantages to cross-cultural interactions. Organizations are advised to consider training new employees in CQ and emotion regulation concurrently to circumvent these issues.
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Have you had interactions with English-speaking Caucasian patients? (e.g., American, Canadian, Australian, New Zealander, British)

YES  NO

Check all that apply:

( ) American
( ) Canadian
( ) Australian
( ) New Zealander
( ) British
( ) Other: ______________________

Think about the interactions you have with English-speaking Caucasian patients and respond to the statements below by circling the number in the scales.

Think of the foreign patient group that you interact with the most often.

From which cultural group are these foreign patients?

( ) Arabic or Middle Eastern (UAE, Qatar, Turkey, Egypt, Morocco, etc.)
( ) East Asian (Japan, China, South Korea, Singapore, etc.)
( ) South Asian (India, Malaysia, Indonesia, Philippines, Burma, etc.)
( ) Other: ______________________
( ) I don’t know ➔ My guess: ______________________

Think about the interactions you have with this group of foreign patients and respond to the statements below by circling the number in the scales.
APPENDIX B: Middle Eastern Patient Manipulation

Have you had interactions with Arabic or Middle Eastern patients?
(e.g., UAE, Qatar, Turkey, Egypt, Morocco, etc.)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Check all that apply:
- ( ) UAE
- ( ) Qatar
- ( ) Saudi Arabia
- ( ) Oman
- ( ) Turkey
- ( ) Other: ______________________

Think about the interactions you have with Arabic or Middle Eastern patients and respond to the statements below by circling the number in the scales.

Think of the foreign patient group that you interact with the most often.

From which cultural group are these foreign patients?
- ( ) English-speaking Caucasian (American, Canadian, Australian, New Zealander, British, etc.)
- ( ) East Asian (Japan, China, South Korea, Singapore, etc.)
- ( ) South Asian (India, Malaysia, Indonesia, Philippines, Burma, etc.)
- ( ) Other: ______________________
- ( ) I don’t know ➔ My guess: ______________________

Think about the interactions you have with this group of foreign patients and respond to the statements below by circling the number in the scales.
APPENDIX C: East Asian Patient Manipulation

Have you had interactions with East Asian patients? (e.g., Japan, China, South Korea, Singapore, etc.)

YES

Think of the foreign patient group that you interact with the most often.

From which cultural group are these foreign patients?
( ) English-speaking Caucasian (American, Canadian, Australian, New Zealander, British, etc.)
( ) Arabic or Middle Eastern (UAE, Qatar, Turkey, Egypt, Morocco, etc.)
( ) South Asian (India, Malaysia, Indonesia, Philippines, Burma, etc.)
( ) Other: ______________________

( ) I don't know ➔ My guess: ______________________

NO

Think about the interactions you have with East Asian patients and respond to the statements below by circling the number in the scales.

Check all that apply:
( ) Japan
( ) China
( ) South Korea
( ) Singapore
( ) Hong Kong
( ) Other: ______________________

Think about the interactions you have with this group of foreign patients and respond to the statements below by circling the number in the scales.
**APPENDIX D: Western Patient Manipulation, Daily Diary Study Version**

➢ **During today's shift, have you had interactions with English-speaking Caucasian patients?**  
(e.g., American, Canadian, Australian, New Zealander, British)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Check all that apply:</td>
<td>Think of the <strong>foreign patient group</strong> that you interact with the most often today.</td>
</tr>
<tr>
<td>( ) American</td>
<td>From which cultural group are these foreign patients?</td>
</tr>
<tr>
<td>( ) Canadian</td>
<td>( ) Arabic or Middle Eastern (UAE, Qatar, Turkey, Egypt, Morocco, etc.)</td>
</tr>
<tr>
<td>( ) Australian</td>
<td>( ) East Asian (Japan, China, South Korea, Singapore, etc.)</td>
</tr>
<tr>
<td>( ) New Zealander</td>
<td>( ) South Asian (India, Malaysia, Indonesia, Philippines, Burma, etc.)</td>
</tr>
<tr>
<td>( ) British</td>
<td>( ) Other: ______________________</td>
</tr>
<tr>
<td>( ) Other: ______________________</td>
<td>( ) I don’t know  ➔ My guess: ______________________</td>
</tr>
</tbody>
</table>

➢ **Think about the interactions you have with Western patients during today's shift only and respond to the statements below by circling the number in the scales.**

➢ **Think about the interactions you have with this group of foreign patients during today's shift only and respond to the statements below by circling the number in the scales.**
APPENDIX E: Middle Eastern Patient Manipulation, Daily Diary Study Version

- **During today’s shift, have you had interactions with Arabic or Middle Eastern patients?**
  (e.g., UAE, Qatar, Turkey, Egypt, Morocco, etc.)

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
</tr>
</thead>
</table>

**Check all that apply:**
- ( ) UAE
- ( ) Qatar
- ( ) Saudi Arabia
- ( ) Oman
- ( ) Turkey
- ( ) Other: ______________________

- **Think about the interactions you have with Arabic or Middle Eastern patients during today’s shift only and respond to the statements below by circling the number in the scales.**

- **Think of the foreign patient group that you interact with the most often today.**

**From which cultural group are these foreign patients?**
- ( ) English-speaking Caucasian (American, Canadian, Australian, New Zealander, British, etc.)
- ( ) East Asian (Japan, China, South Korea, Singapore, etc.)
- ( ) South Asian (India, Malaysia, Indonesia, Philippines, Burma, etc.)
- ( ) Other: ______________________
- ( ) I don’t know → My guess: ______________________

- **Think about the interactions you have with this group of foreign patients during today’s shift only and respond to the statements below by circling the number in the scales.**
During today's shift, have you had interactions with East Asian patients? (e.g., Japan, China, South Korea, Singapore, etc.)

YES

Check all that apply:

( ) Japan
( ) China
( ) South Korea
( ) Singapore
( ) Hong Kong
( ) Other: ______________________

➢ Think about the interactions you have with East Asian patients during today's shift only and respond to the statements below by circling the number in the scales.

Think of the foreign patient group that you interact with the most often today.

From which cultural group are these foreign patients?

( ) English-speaking Caucasian (American, Canadian, Australian, New Zealander, British, etc.)
( ) Arabic or Middle Eastern (UAE, Qatar, Turkey, Egypt, Morocco, etc.)
( ) South Asian (India, Malaysia, Indonesia, Philippines, Burma, etc.)
( ) Other: ______________________
( ) I don't know ➔ My guess: ______________________

➢ Think about the interactions you have with this group of foreign patients during today's shift only and respond to the statements below by circling the number in the scales.
APPENDIX G: Surface Acting Scale (Modified)

Prompt for daily surface acting: During today’s shift, how often did you engage in the following behaviours with this group of foreign patients?

Prompt for general surface acting: How often do you engage in the following behaviours with this group of foreign patients?

<table>
<thead>
<tr>
<th>Question</th>
<th>Never</th>
<th>Once or twice</th>
<th>A few times</th>
<th>Quite often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I put on an act in order to deal with this group of foreign/Thai patients in an appropriate way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I fake my mood when interacting with this group of foreign/Thai patients.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I put on a “show” or “performance” when interacting with this group of foreign/Thai patients.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I just pretend to have the emotions that I need to display for my job toward this group of foreign/Thai patients.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I put on a “mask” in order to display the emotions I needed to display with this group of foreign/Thai patients.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I show feelings to this group of foreign/Thai patients that are different from what I feel inside.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I fake the emotions that I show when dealing with this group of foreign/Thai patients</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX H: Maslach Burnout Inventory, Emotional Exhaustion Subscale for Daily Diary Study Version

<table>
<thead>
<tr>
<th>During today's shift, please indicate how often you've experienced the following emotions at work.</th>
<th>Never</th>
<th>Once or twice</th>
<th>A few times</th>
<th>Quite often</th>
<th>All day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I feel emotionally drained from my work.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. I feel used up at the end of the workday.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. I feel fatigued when I have to face another day on the job.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Working with people all day is really a strain for me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. I feel burned out from my work.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. I feel frustrated by my job.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Working with people directly puts too much stress on me.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. I feel like I'm at the end of my rope.</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
## APPENDIX I: Maslach Burnout Inventory, Emotional Exhaustion Subscale

Please indicate **how often** and **how strong** you’ve experienced the following emotions at work by circling the number in the scale below. Choose “Never” if you have never experienced the following emotions at work.

### I feel emotionally drained from my work.

<table>
<thead>
<tr>
<th>Never</th>
<th>How often:</th>
<th>Monthly</th>
<th>A few times a month</th>
<th>Every week</th>
<th>A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Very mild, barely noticeable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Moderate</td>
<td>5</td>
</tr>
</tbody>
</table>

### I feel used up at the end of the workday.

<table>
<thead>
<tr>
<th>Never</th>
<th>How often:</th>
<th>Monthly</th>
<th>A few times a month</th>
<th>Every week</th>
<th>A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Very mild, barely noticeable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Moderate</td>
<td>5</td>
</tr>
</tbody>
</table>

### I feel fatigued when I get up in the morning and have to face another day on the job.

<table>
<thead>
<tr>
<th>Never</th>
<th>How often:</th>
<th>Monthly</th>
<th>A few times a month</th>
<th>Every week</th>
<th>A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Very mild, barely noticeable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Moderate</td>
<td>5</td>
</tr>
</tbody>
</table>

### Working with people all day is really a strain for me.

<table>
<thead>
<tr>
<th>Never</th>
<th>How often:</th>
<th>Monthly</th>
<th>A few times a month</th>
<th>Every week</th>
<th>A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Very mild, barely noticeable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Moderate</td>
<td>5</td>
</tr>
</tbody>
</table>

### I feel burned out from my work.

<table>
<thead>
<tr>
<th>Never</th>
<th>How often:</th>
<th>Monthly</th>
<th>A few times a month</th>
<th>Every week</th>
<th>A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Very mild, barely noticeable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Moderate</td>
<td>5</td>
</tr>
</tbody>
</table>

### I feel frustrated by my job.

<table>
<thead>
<tr>
<th>Never</th>
<th>How often:</th>
<th>Monthly</th>
<th>A few times a month</th>
<th>Every week</th>
<th>A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Very mild, barely noticeable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Moderate</td>
<td>5</td>
</tr>
</tbody>
</table>

### Working with people directly puts too much stress on me.

<table>
<thead>
<tr>
<th>Never</th>
<th>How often:</th>
<th>Monthly</th>
<th>A few times a month</th>
<th>Every week</th>
<th>A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Very mild, barely noticeable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Moderate</td>
<td>5</td>
</tr>
</tbody>
</table>

### I feel like I’m at the end of my rope.

<table>
<thead>
<tr>
<th>Never</th>
<th>How often:</th>
<th>Monthly</th>
<th>A few times a month</th>
<th>Every week</th>
<th>A few times a week</th>
<th>Everyday</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Very mild, barely noticeable</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>Moderate</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX J: Positive and Negative Affect Schedule

Prompt for daily negative affect: During today’s shift, to what extent have you felt this way, that is, how did you feel during today’s shift on average?

Prompt for general negative affect: To what extent do you generally feel this way, that is, how you feel on average?

<table>
<thead>
<tr>
<th>Feeling</th>
<th>Very slightly or not at all</th>
<th>A little</th>
<th>Moderately</th>
<th>Quite a bit</th>
<th>Extremely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interested</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Distressed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Excited</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Upset</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Strong</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Guilty</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Scared</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Hostile</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Proud</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Irritable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Alert</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Ashamed</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Inspired</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Nervous</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Determined</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Attentive</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Jittery</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Active</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Afraid</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>How well can you predict the following behaviours of this group of foreign patients?</td>
<td>Strongly disagree</td>
<td>Disagree</td>
<td>Neutral</td>
<td>Agree</td>
<td>Strongly agree</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1. I am confident in my general ability to predict how this group of foreign patients will behave.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. I am confident that this group of foreign patients likes me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I am accurate at predicting this group of foreign patients’ attitudes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I am accurate at predicting the values this group of foreign patients hold.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I can predict this group of foreign patient’s feelings well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I can empathize with (share) the way this group of foreign patients feel about themselves.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I know this group of foreign patients well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I am certain of this group of foreign patients’ backgrounds.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I am certain that this group of foreign patients will behave in a socially appropriate way when it is important to do so.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I am certain that this group of foreign patients can understand my feelings when I do not verbally express them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I am certain that I understand what this group of foreign patients mean when we communicate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I am confident that this group of foreign patients will make allowances for me when I communicate.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX L: Intergroup Anxiety Scale

<table>
<thead>
<tr>
<th>I feel</th>
<th>during my interactions with this group of foreign patients.</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calm</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Frustrated</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>In control</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Insecure</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Composed</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Anxious</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Relaxed</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Irritated</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Worried</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Impatient</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Awkward</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX M: Cultural Intelligence Scale

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am conscious of the cultural knowledge I use when interacting with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>people with different cultural backgrounds.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I adjust my cultural knowledge as I interact with people from a</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>culture that is unfamiliar to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I am conscious of the cultural knowledge I apply to cross-cultural</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>interactions.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I check the accuracy of my cultural knowledge as I interact with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>people from different cultures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. I know the legal and economic systems of other cultures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. I know the rules (e.g., vocabulary, grammar) of other languages.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. I know the cultural values and religious beliefs of other cultures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. I know the marriage systems of other cultures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. I know the arts and crafts of other cultures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. I know the rules of expressing non-verbal behaviours in other cultures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. I enjoy interacting with people from different cultures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. I am confident that I can socialize with locals in a culture that is</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>unfamiliar to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. I am sure I can deal with the stresses of adjusting to a culture that</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>is new to me.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. I enjoy living in cultures that are unfamiliar to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I am confident that I can get used to the shopping conditions in a</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>different cultures.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. I change my verbal behaviour (e.g. accent, tone) when a cross-cultural</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>interaction requires it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. I use pause and silence differently to suit different cross-cultural</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>situations.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. I vary the rate of my speaking when a cross-cultural situation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>requires it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. I change my non-verbal behavior when a cross-cultural situation</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>requires it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. I alter my facial expressions when a cross-cultural interaction</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>requires it.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX N: Whites’ Attitudes Towards Blacks, Social Distance Subscale (Modified)

<table>
<thead>
<tr>
<th>Indicate the extent to which you agree or disagree with each of the following statements.</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If someone from this group of foreigners were put in charge of me, I would not mind taking advice and direction from them.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. If I had a chance to introduce someone from this group of foreigners to my friends and neighbors, I would be pleased to do so.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I would rather not have someone from this group of foreigners live in the same apartment building I live in.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. I would probably feel somewhat self-conscious dancing with someone from this group of foreigners in a public place.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I would not mind at all if someone from this group of foreigners with about the same income and education as me moved in next door.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>