

# REGULAR PAPER

## Service excellence in the light of cultural diversity: the impact of metacognitive cultural intelligence

475

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Received 29 February 2016

Revised 18 June 2016

19 August 2016

4 October 2016

Accepted 1 November 2016

### Abstract

**Purpose** – The purpose of this paper is to understand when, how, and why service employees adapt the service encounter to meet the values and expectations of culturally disparate customers.

**Design/methodology/approach** – The authors tested the hypothesized framework utilizing a scenario-based experimental study. In total, a sample of 296 prospective restaurant service employees were asked to evaluate their willingness to adapt their behavior when faced with cultural differences as well as out group status. Furthermore, respondents were asked to assess their level of metacognitive cultural intelligence.

**Findings** – The authors found that both perceived cultural differences and out group status positively affect the service employee's willingness to adapt their behavior. Further, cultural intelligence (CQ) positively moderates one of those two direct relationships.

**Originality/value** – The authors extend the literature on the service-adjustment process, as well as the managerial implications of service adjustment. The study is among the first to introduce the role of the service employees' CQ in adaptation to an intercultural service encounter.

**Keywords** Cultural diversity, Cultural intelligence, Service encounter, Out group status

**Paper type** Research paper

### Introduction

Managing cross-cultural encounters is critical for many service providers (Johnson and Grier, 2013, p. 306).

Several factors have converged in recent years leading to a dramatic increase in intercultural interactions. Forces of globalization, growing access to the global business community, and increasing workforce mobility necessitate interactions with people who are culturally different on a scale that was previously unimaginable (Wang *et al.*, 2011). This fact, in tandem with analogous developments in numerous countries across the globe (e.g. the current influx of immigrants into the EU), exemplifies the diversification of the



Journal of Service Theory and  
Practice

Vol. 27 No. 2, 2017

pp. 475-495

© Emerald Publishing Limited

2055-6225

DOI 10.1108/JSTP-02-2016-0044

The authors would like to thank Jamey Hurst for the inspiration to this manuscript, Tom Baker and Andrew Kaikati for their valuable feedback, and Editor Marianna Sigala and the anonymous reviewers for their constructive comments that allowed us to significantly improve and further develop this manuscript.

customer base as well as the workforce on an international scale (Chen *et al.*, 2012). The increase in cultural diversity presents critical challenges in social and work life (Youssef and Luthans, 2012) and may result in an escalation of the number of intercultural misunderstandings and failures (Ang and Van Dyne, 2008; Mannor, 2008).

The impact of cultural diversity may be particularly strong in the services sector because differing cultural norms and values often lead to consumer misunderstandings (Cushner and Brislin, 1996; Bhawuk and Brislin, 2000), which would necessitate adjustment of the service experience. Customers from dissimilar cultures may have different service experiences, even in a similar service context, and thus reasonably derive different levels of satisfaction with the service encounter (Kong and Jogaratnam, 2007). Furthermore, recent literature suggests the possibility of service failure based on dissimilarities between the service employee and customer (Zhang *et al.*, 2008), as different cultural backgrounds of the service provider and the customer amplify the complexity of the interaction (Wang and Mattila, 2010). Thus, the success of service encounters may partially rely on the ability of the service provider to adjust to the cultural expectations of the customer (Zeithaml *et al.*, 1993).

However, while there seems to be an increase in cross-cultural service encounters, relatively few studies have investigated the challenges inherent in them (Johnson and Grier, 2013; Zhang *et al.*, 2008; Wang and Mattila, 2010). Anecdotal evidence has shown that cultural compatibility between the customer and service provider has the potential to facilitate interactions, mitigate the negative consequences of cultural distance, and generate positive consumer outcomes such as reciprocity, trust, engagement, and gratitude (Hopkins *et al.*, 2005; Johnson and Grier, 2013). Furthermore, cultural differences in the form of perceived out group status also plays a role in cross-cultural consumer-to-consumer interactions since cultural differences are perceived to be more salient to out group individuals (Johnson and Grier, 2013). As an extension of Johnson and Grier (2013), we propose that this out group status also plays an important role in the service employee-to-customer interaction.

Work by Sizoo *et al.* (2005) suggests that “cross-cultural sensitivity” may serve as a tool to decrease the likelihood of cross-cultural misunderstandings. We propose that cultural intelligence (CQ) rather than cross-cultural sensitivity provides an alternative perspective to understand cross-cultural and out group service interactions.

CQ reflects an individual’s ability to successfully adapt to new cultural contexts (Earley and Ang, 2003). Similar to emotional intelligence (EQ), CQ is complementary to cognitive intelligence (IQ), in that both are significant predictors of professional and personal success in an increasingly complex and interdependent world (Ang and Inkpen, 2008). CQ is composed of four dimensions: metacognitive, cognitive, motivational, and behavioral elements. We will focus on the metacognitive component of CQ as the predominant predictor of employee service encounter adaption because it is a reliable predictor of performance in a variety of cultural settings (Chen *et al.*, 2011; Magnusson *et al.*, 2013) and perhaps the most important CQ dimension as it links cognition and behavior (Chua *et al.*, 2012). Metacognitive CQ is defined as the mental process capability to acquire, assess, control, and understand cultural knowledge (Earley and Ang, 2003).

To summarize, we take an integrative view of the relationship between perceived cultural differences and out group status and the intent of the service employee to adjust the service encounter. We will integrate the theory of planned behavior (TPB) in order to develop a theoretical model that establishes metacognitive CQ as a moderator in the service-adjustment process. Service employees that exhibit high levels of metacognitive CQ will have better customer outcomes in an environment where a priori perceived cultural differences and out group status exist. On the basis of our theoretical arguments that we will subsequently discuss, we derive the hypotheses shown in Figure 1.

We aim to contribute toward a better understanding of the influence of perceived cultural differences and cultural competencies in a service encounter. One aspect of this research is to

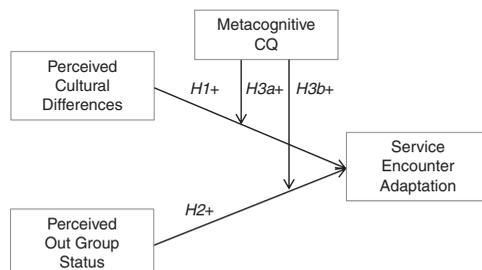
increase the understanding of the influence of cultural differences in service transactions. We build upon and extend the findings of Rao Hill and Tombs (2011) regarding service encounter adjustment in cross-cultural settings by conducting an experiment-based study which takes into account not only accent but also other physical and behavioral aspects of cultural difference such as appearance, facial expressions, speed of speech, and other verbal and non-verbal cues. Furthermore, we extend the literature on the service-adjustment process, as well as the managerial implications of service adjustment. On a micro level, culturally competent employees will have grateful and satisfied customers who are willing to engage in future service encounters. On a macro level, firms with culturally competent employees may be able to establish a competitive advantage over those with limited abilities to adjust to cultural differences. Firms that can manage cultural diversity (i.e. culturally intelligent firms) are consequently suggested to outperform firms with less CQ (Ang and Inkpen, 2008).

We test our model using an experimental design using a sample of prospective restaurant service employees and customers. The restaurant context provides a desirable setting to test our hypotheses because restaurants often deal with a culturally diverse workforce and customer base. In the next section, we will review a number of relevant constructs presented in this research. We first proceed by reviewing the importance of the service encounter. Next, we review the literature of the underlying cultural constructs used in this research (i.e. perceived cultural differences and perceived out group status) with regards to employee intent to adjust the service delivery process. The sections presenting perceived cultural differences and perceived out group status proceed in a similar manner: a more formal definition of the construct is presented, which is followed by our conceptualization of this construct, as well as how it specifically relates to this research. Next, we continue by discussing the theoretical underpinnings of CQ, in particular metacognitive CQ, which is then followed by the development of our hypotheses. We end the paper with a presentation of the results and a discussion.

## Literature review and hypotheses development

### *The service encounter*

The service encounter reflects the dyadic interaction between the customer and the service provider (Bitner *et al.*, 1990, 1994; Surprenant and Solomon, 1987). According to Tax *et al.* (2013), a service encounter is a situation in which the customer coproduces value through interplay with a service organization. The service encounter is critical to a firm as it is the customer facing component of a service provision. Each encounter is a chance for the firm to inform and impress the consumer of its offering (Bitner *et al.*, 2000). Successful encounters can lead to customer satisfaction (Bitner *et al.*, 1990, 2000), repeat purchases, customer loyalty, and positive word of mouth (Chandon *et al.*, 1997), while unsuccessful encounters can cause the firm to incur significant costs in the form of needing to repeat the service, compensating dissatisfied customers, losing customers, and negative word of mouth (Bitner *et al.*, 2000).



**Figure 1.**  
Theoretical model of  
culturally different  
service encounter

Adaptation of the service encounter is often necessary to meet the unique needs of the customer. Adaptation may occur through the adjustment of interpersonal behavior or the service offering itself (Bettencourt and Gwinner, 1996). Hartline and Ferrell (1996, p. 55) define employees' adaptability as "the ability of contact employees to adjust their behavior to the interpersonal demands of a service encounter." Adaptability is strongly linked with employee performance and may range from adhering with a script to personalizing the encounter to the needs of each customer (Hartline and Ferrell, 1996). Service employees may adapt their interpersonal behavior through altering communication elements such as tone of voice, delivery speed, facial expressions, personality style, encounter control, vocabulary, or gestures.

Past research recognizes that service encounters are, first and foremost, interpersonal, social interactions. As in most interpersonal interactions, individuals prefer to interact with other individuals who share the same behavior expectations as themselves (Mathies *et al.*, 2016). Behavioral expectations become extremely important in both the delivery and the evaluation of a service encounter. Before an employee is able to adapt an encounter to a customer's needs, it is important that the employee recognize and understand these needs (Homburg *et al.*, 2009).

Recognition of the customer's needs and the subsequent adaptation of the service encounter may be particularly important if there are cultural differences between the customer and the service employee (Stauss and Mang, 1999). Research has shown that service customers prefer to interact with employees who speak the same language, or seem to be culturally and ethnically similar to themselves (Holmqvist, 2011; Sharma *et al.*, 2012). Customers may even react negatively to a different accent (Rao Hill and Tombs, 2011). Interestingly, service employees also prefer to interact with customers belonging to the same cultural background (Sharma *et al.*, 2012). Thus, cultural factors may exert influence on service evaluations, as customers with different cultural backgrounds may expect and perceive service encounters differently (Stauss and Mang, 1999).

There is also a higher risk of an unfavorable service evaluation due to cultural differences between the customer and service provider (Sharma *et al.*, 2012). Thus, an understanding of how to adapt the service encounter to match the values and expectations of a culturally different customer may be crucial for a service employee, and subsequently, the success of a service company. Service employees in an intercultural situation must identify verbal and non-verbal cues used in different cultures, adapt body language and behavior, as well as communication style (Stauss and Mang, 1999). Furthermore, service employees should possess the ability to leverage culturally driven expectations, and understand the costs of disregarding cultural differences (Mattila, 1999).

#### *An application of the TPB*

A service employee uses specific behaviors in order to adjust to the customer during the service encounters. Yet these actions are not performed extemporaneously, but rather are the result of attitudes, cognitions, and beliefs that induce deliberate action (Ajzen, 1991). The TPB was designed to predict behaviors and behavioral intention in specific contexts (Ajzen, 1991).

Specifically, the TPB proposes that intentions and the subsequent behaviors are a function of three cognitive factors: attitudes, subjective norms, and perceived behavioral control (Ajzen, 1991). Attitudes reflect the individual's evaluation of anticipated consequences and the valence of the behavior. Subjective norms refer to the anticipated pressure from the social environment to execute the behavior. Perceived behavioral control incorporates the perceived degree of challenge and confidence in performing the behavior (Ajzen, 1991). The TPB may thus explain why cross-cultural attitudes and beliefs (perceived cultural differences) and perceptions and social pressures (perceived out group status) stimulate the behavioral intent to adjust the service encounter to culturally different

customers as well as how metacognitive CQ (behavioral control) may strengthen the adjustment process (Ajzen, 1991).

The TPB has been applied to a wide array of marketing topics and has helped to explain the behavior of service employees specifically (e.g. Fischer *et al.*, 2014). We suggest that the TPB is also suited to investigate service employees' willingness to adjust the service encounter. First, the TPB can be considered a deliberative processing model as the theory implies that individuals perform behaviors volitional based on available information, rather than unconsciously or habitually (Conner and Armitage, 1998). Consequently, as research shows that service employees decide to adjust or not to adjust the service encounter in cross-cultural situations (e.g. Bettencourt and Gwinner, 1996; Sizoo *et al.*, 2005) and service employees face costs and benefits trade-offs when adjusting (e.g. high efforts, risk of failing, or increased compensation), we suggest that the decision to adjust is made deliberately. Second, the adjustment of the service encounter is not only under the control of the service employee but is also, to some extent, influenced by the social context, which the TPB refers to as "subjective norms." For example, if the service employee is culturally different from the majority (out group status), the cultural majority will likely influence and increase perceived pressure on the service employee to adjust. Further, as the intent to adjust the behavior may stimulate positive reactions in others, the service employee is even more inclined to adapt due to the potential of higher compensation (e.g. tips), customer satisfaction, and gratitude. Finally, research has suggested that within the TPB framework attitudes, subjective norms, and behavioral control may interact with each other (Bansal and Taylor, 2002), as, for example, "people take control into account in conjunction with their desire to engage in a behavior" (Eagly and Chaiken, 1993, p. 189). By including metacognitive CQ (behavioral control) as a potential moderator of the direct attitude and subjective norm relationship, we also account for the importance of the interactions within the TPB framework. Thus, due to the described applicability to the context of the current study, the TPB provides the foundation for our model and the hypotheses development.

Consistent with our research focus, we first review the relevant literature and then explore the relationships between perceived cultural differences and the behavioral intent to adjust and out group status and its influence on adaptation intentions through the lens of the TPB. Finally, we examine the moderating effect of metacognitive CQ on the adaptation of the service encounter process.

#### *The role of cultural differences and out group status*

*Perceived cultural differences.* A country's culture "determines how people *interact with one another*" (emphasis added), and can manifest itself in language, ethnicity, social networks, religions, or social norms (Ghemawat, 2001, p. 3). Ghemawat (2001) investigated cultural attributes at a national, aggregated level. We conceptualize cultural at the individual level in order to mitigate some of the difficulties incurred by viewing culture from a national perspective (Donthu and Yoo, 1998). Cultural difference is the degree of difference between two cultures regarding language, social structure, living standards, religion, and values (Sharma *et al.*, 2012). Perceived cultural differences as presented in this study are analogous to the cultural attributes described above. Cultural differences are not intended to serve as a novel construct to the CQ literature, but rather contribute to the understanding of intercultural interactions by unifying constructs used in other literatures (e.g. cultural congruence).

Much of the research focusing on cultural congruence appears in the management and international business literature, with a focus on leadership and leader-employee dyads and multinational firms. Cultural congruence is typically conveyed as the degree to which the cultures of two individuals are similar; thus we view cultural congruence (incongruence) as synonymous with cultural similarities (differences). Although the contexts used in many of

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these studies do not entirely resemble the service relationship in this paper, we believe that there are certain themes in this literature that are relevant to this study, which point to the more universal application of perceived cultural differences.

First, the international management literature indicates that perceived cultural differences influence individual perceptions of others in an intercultural setting (Testa, 2002). Specifically, when an individual experiences greater cultural differences with an individual from another culture, there is a tendency of that individual to view the other less favorably (Testa, 2002). It is further observed that perceived cultural differences have the potential to negatively impact employee responses in intercultural settings, thus negatively impacting firm performance (Testa, 2002). Sharma *et al.* (2012) use the term “interaction comfort” to refer to the degree to which either the customer or employee is in a calm state and does not experience anxiety or worry at the prospect of a service encounter. The authors propose that interaction comfort is lower in the case of perceived cultural differences. Moreover, “whether the encounter occurs in a low-contact, medium-contact, or high-contact service system, a successful outcome will be more likely if the service providers’ cultural background (e.g. language and communication style, demeanor, and/or physiognomy) is compatible with the service customers’ cultural background” (Hopkins *et al.*, 2005, p. 330).

Second, perceived cultural differences have been noted to affect the communication strategies between individuals of different cultures in a joint-venture setting (Zeybek *et al.*, 2003). Individuals who perceived themselves as having high levels of cultural differences with another were noted to pursue more formal communication means, as well as more frequent contact with others, perhaps in an attempt to negate perceived barriers to communication (Zeybek *et al.*, 2003). However, other literature indicates that interactions between culturally different individuals are likely to lead to greater tension and hold a greater threat of miscommunication, which can lead to avoidance of these interactions altogether (Plant, 2004). High perceived cultural differences during a service encounter also raises the possibility of either party resorting to stereotyping the other, miscommunicating, and making negative evaluations even more likely (Sharma *et al.*, 2012). Thus, while the study by Zeybek *et al.* (2003) indicate an active intent to overcome cultural differences in a multinational firm context, it is noted that cultural differences increase barriers to communication due to the mental effort involved in coding and decoding intercultural communication (Fox, 1997) as well as a lack of trust between the two parties (Sharma *et al.*, 2012).

Due to the tendency of cultural differences to cause individuals to rate others unfavorably, as well as the labor incurred in coding and decoding conversations in an intercultural context, cultural differences have the potential to adversely affect an employee’s intent to adapt to customers from different cultures. This behavior could be driven by a number of factors, including the fear of negative evaluation or rejection by the customer, as well as an adverse reaction to the higher emotional and mental cost of engaging in intercultural communication. It should also be noted that the reduced willingness to engage is not uni-directional. Overall, adaptation to cultural differences between employees and customers are most likely a two-way process, and would require a study of the employee-customer dyad.

Yet, we believe that the service encounter that is the focus of this study (i.e. restaurant server/customer dyad) will make salient the cultural differences and pressure the server to adapt for two reasons. First, in the restaurant context, service providers and customers are restricted in their ability to self-select, and thus must interact regardless of their diverse cultural backgrounds (Hopkins *et al.*, 2005). For example, the server is usually assigned a section of tables, which are accepted without challenge regarding the cultural similarity of the customers. Therefore, the server must engage the customer. Second, at least in the USA, the server’s primary compensation is tips. Indeed, the server rarely even makes the

minimum wage without tips. Thus, it is in the server's best interest to adjust as much as possible in order to provide a positive experience for the customer. The mechanism of both arguments can be theoretically explained by the TPB and especially by the attitude component of the theory. Service employees who perceive cultural differences will form an attitude about the consequence of performing adjustment behaviors. While the individuals consider the anticipated consequences of the behaviors, they make judgments as to whether each consequence is positive, negative, or neutral. The sum of all beliefs about the behavior in line with the evaluations will determine the behavioral intent (Fishbein and Ajzen, 1975; Miller, 2005). In case of the restaurant industry, positive consequences in form of tips, positive engagement, recommendations, and repeated patronage may outweigh the negative ones, such as increased effort, leading to adjustment behaviors.

In summary, contrary to some situations where individuals do not adjust their behavior in the face of cultural differences, we believe that the unique context of a restaurant service encounter suggests the opposite:

- H1.* Perceived cultural differences positively affect the service employee's intent to adjust the service encounter.

*Perceived out group status.* Perceived out group status is also likely to have an impact on an employee's likelihood to engage with culturally different individuals. Employees that perceive themselves to be in the cultural minority (out group) are more likely to adapt their behavior to the cultural expectations of their customers. Our conceptualization of this construct is built upon the notion of distinctiveness as defined in distinctiveness theory.

Distinctiveness theory posits that individuals form the basis of their own self-concept with respect to other individuals in their surroundings (Mcguire and Padawer-Singer, 1976). Specifically, Mcguire and Padawer-Singer (1976) reason that individuals possessing non-modal characteristics are more likely to view those aspects of their person as salient to their own self-image and are more mindful and aware of the personal characteristics that make them distinctive. The non-modal features by which individuals can form their self-concept extend to age, religion, other personal characteristics, and especially ethnicity. Individual awareness of ethnicity and cultural differences are noted to be much higher for individuals of an ethnic or cultural minority than for members of majority groups. This indicates a potentially magnified impact of ethnic distinctiveness for out group individuals (Mcguire *et al.*, 1978).

For out group individuals in intercultural settings, the greater the proportion of members of the cultural majority, the more anxiety felt by out group individuals (Inzlicht, Good, Levin and Van Laar, 2006). This anxiety could stem from a threatening environment in which the out group individuals anticipate evaluation along stereotypical lines (Inzlicht, Aronson, Good and Mckay, 2006; Inzlicht, Good, Levin and Van Laar, 2006). Thus, similar to cultural differences, perceived out group status has the potential to spur adaptation. Indeed, as noted by Inzlicht, Aronson, Good and Mckay (2006), individuals with a higher capacity to monitor their own behavior reacted to threatening environments through improved performance, which could manifest itself in the adaptation of the service encounter by out group employees.

The TPB supports the notion that perceived out group status may stimulate the intent to adapt as it triggers an individual to evaluate one's own distinctiveness relative to the group (Mcguire and Padawer-Singer, 1976). Specifically, out group status may represent the subjective norm component of the theory. Subjective norms reflect the influence that other people have on the intent to behave as a person assesses anticipated reactions from others to a behavior (Fishbein and Ajzen, 1975; Miller, 2005). Subjective norms are the sum of perceived opinions of all imperative people and the weights of how important each opinion is to the individual (Fishbein and Ajzen, 1975; Miller, 2005). If the service employee is culturally different from the majority, the cultural majority will likely influence and increase

perceived pressure on the service employee to adjust. Furthermore, as the intent to adjust the behavior may stimulate positive reactions in others, the service employee is even more inclined to adapt due to the potential of higher compensation (e.g. tips). In conclusion, we reason that a service employee's perceived distinctiveness can serve as an impetus for the adjustment of the service encounter:

*H2.* Perceived out group status positively affects the service employee's intent to adjust the service encounter.

### CQ

*What is CQ?* CQ was developed in order to understand the factors that influence an individual's ability to successfully adapt to new cultural contexts (Earley and Ang, 2003). CQ is a multifaceted individual difference that explains the mechanisms underpinning individual understanding and adaptation to cross-cultural differences that IQ and EQ cannot elucidate (Ang and Inkpen, 2008). EI and IQ are culturally bound, as the ability to encode emotions and social situations does not automatically transfer to unfamiliar cultures (Earley and Ang, 2003; Cantor and Kihlstrom, 1987). The CQ concept is grounded in Gardner's (1993) theory of multiple intelligences and Sternberg and Detterman's (1986) multiple-loci framework of intelligences, which encompasses four distinct, but complementary, ways of conceptualizing intelligence: metacognition, cognition, motivation, and behavior. Metacognitive CQ reflects the control over cognition including information processing and awareness; cognitive CQ refers to the actual cultural knowledge; motivational CQ indicates to the desire to act upon difference; and behavioral CQ signifies the ability to appropriately act upon behavioral cues (Earley and Ang, 2003).

CQ has also been proposed as a key facet of successful interactions in international markets (Alon and Higgins, 2005). It is positively related to outcomes such as cultural adaptation (Templer *et al.*, 2006), adjustment (Lee and Sukoco, 2010; Moon, 2010), leadership effectiveness (Rockstuhl *et al.*, 2011), cross-cultural negotiation (Imai and Gelfand, 2010), market and product innovation (Elenkov and Manev, 2009), export performance (Magnusson *et al.*, 2013) as well as individual performance (e.g. Chen *et al.*, 2011; Abdul Malek and Budhwar, 2012). These findings suggest that CQ can serve as a predictor for cross-cultural effectiveness.

Generally, international marketing research suggests that culture becomes salient during a service encounter as actors notice differences in how the person from the other culture interacts and communicates. Thus, if one actor (e.g. the service provider) possesses cross-cultural skills (i.e. CQ), the salience of cultural differences would be reduced in the eyes of the customer because the service provider adjusted his/her behavior (Hopkins *et al.*, 2011). While all of the CQ components may have important implications on the service encounter, we suggest that the possession of metacognitive CQ will facilitate the service employee's adjustment the most. Accordingly, we next discuss the tenants of metacognitive CQ.

*Metacognitive CQ.* Metacognitive CQ reflects the mental processes to acquire, assess, and understand cultural knowledge (Earley and Ang, 2003). In particular, metacognitive CQ characterizes the control over cognition and self-monitoring that results in deep information processing and the understanding of an individual's emotions, motives, and goals (Thomas, 2006; Ng *et al.*, 2012). It is established as a higher-order mental capability that connects cognition with behavior (Ng *et al.*, 2009; Chua *et al.*, 2012). Individuals high in metacognitive CQ are consciously aware of cultural differences and preferences, suspend judgment until enough data are available, and develop flexible coping mechanisms before and during interactions (Triandis, 2006; Ng and Earley, 2006). Van Dyne *et al.* (2012) propose three main components of metacognitive CQ in the international context: planning, awareness, and checking. Planning reflects the ability of strategizing before cross-cultural interactions.

Awareness refers to being cognizant of one's own cultural practices, suspending judgment until enough data are available, and making sense of self, others, and the situation. Finally, checking includes revising mental models, updating cultural biases, and correcting assumptions based on new information. Within a service delivery context, the concept is similar to Homburg *et al.* (2009) idea of customer need knowledge where an employee is able to employ cognitive and empathic skills to assess the need hierarchy of the customer.

Based on the notion that intercultural success is correlated with self-awareness, deep information processing, and flexibility to adjust mental models, prior research has suggested that metacognitive CQ is positively related to engaging in cooperative behaviors (Chua *et al.*, 2012; Mor *et al.*, 2013), job performance (Chen *et al.*, 2011), and interactional adjustment (Ang *et al.*, 2007; Ramalu *et al.*, 2010) when interacting with culturally different individuals. Accordingly, from the preceding arguments and supporting literature, we conclude that metacognitive CQ is particularly relevant in the cross-cultural service encounter and develop specific hypotheses regarding the impact of the service employee's metacognitive CQ. We suggest that metacognitive CQ directly relates to an effective and successful service encounter.

*Metacognitive CQ and the intent to adjust to the service encounter.* We established previously that an employee might perceive differences in two ways: based on cultural differences in the form of language, ethnicity, etc. between the service employee and the customer; and based on the perceived out group status between the service employee and the customer. In line with the TPB and previous literature which has demonstrated that within the TPB framework attitudes, subjective norms, and behavioral control may interact with each other (Bansal and Taylor, 2002), we suggest that metacognitive CQ strengthens the positive relationship between perceived cultural differences and the willingness to adjust the service encounter. Similarly, we suggest that high metacognitive CQ will strengthen the positive relationship between perceived out group status and the ability to adjust the service encounter.

The TPB helps us to explain the mechanism of the magnifying impact of metacognitive CQ on the intended adjustment behavior. Specifically, metacognitive CQ incorporates the critical component of perceived behavioral control. High metacognitive CQ increases the perceived behavioral control and, consequently, boosts effort toward the actual cross-cultural behavior (Ajzen, 1991). Behavioral control represents an individual's confidence regarding how easy or difficult the behavior in question will be to perform given the resources at disposal (Ajzen, 1991). Employees high in metacognitive CQ cannot only detect and act upon perceived cultural differences and out group status between themselves and the customer, but they can also better understand the valence of performing adjustment behaviors and can accurately predict the consequences. Adapting the service encounter is an outlet for service employees with high metacognitive CQ to take guided action on their intrinsic interest in other cultures, as they have self-confidence in their ability to adapt effectively to other cultures. In contrast, we expect service employees with low metacognitive CQ to behave in a more general manner when dealing with culturally different individuals. Service employees low in metacognitive CQ might even reduce their effort due to low self-efficacy and perceived behavioral control in cross-cultural encounters. This low self-efficacy in turn leads to a lower chance for a successful service encounter because of their anxiety, fear of this novel situation, or lack of flexibility.

Recent service and CQ literature support our arguments. Analyzing adaptation behaviors of frontline employees, Gwinner *et al.* (2005) found that employees that are able to modify their self-representation and acquire customer cues were higher in service offering adaptive behavior and interpersonal adaptive behavior. In particular, the employees' sensitivity to information and ability to self-monitor is suggested to increase accuracy of information and perceived customer preferences leading to behavioral adaptations.

Furthermore, Magnusson *et al.* (2013) found that export managers' metacognitive CQ positively moderates the relationship between marketing adaptation and performance.

Based on the provided arguments developed from TPB and prior literatures, we formalize the following hypotheses:

*H3a.* Employee metacognitive CQ moderates the relationship between perceived cultural differences and service encounter adjustment, such that the relationship is stronger for employees who have a high level of metacognitive CQ.

*H3b.* Employee metacognitive CQ moderates the relationship between perceived out group status and service encounter adjustment, such that the relationship is stronger for employees who have a high level of metacognitive CQ.

## Methods

### *Sample and procedure*

We examined the hypothesized framework utilizing a scenario-based experimental study with a sample of students from two universities in the USA. Scenario-based studies have been used in past service quality research to measure individual reactions within controlled hypothetical environments (Lee and Park, 2010; Shapiro and Nieman-Gonder, 2006). Further, since the median age of food servers in the USA is 26 years old, a student sample likely represents the attitudes and behaviors of the greater population of workers within this occupation (BLS, 2016). The model presented in Figure 1 was assessed in an experimental study that is subsequently described. Details and the script of the experiment are provided in Appendix 1. Data were collected through an online survey. In total, 533 out of 609 (87.5 percent) subjects initially responded to the survey. Of these, 46 were removed due to missing data. 132 were removed for completing the survey in a time less than what would be necessary to read the scenarios. Another 59 participants were removed from the final sample due to failing the attention filter. This resulted in a final working sample of 296 participants.

The study is a 2 × 2 (context: high or low perceived cultural differences; group: minority or majority status) experimental design. After being randomly assigned into one of these four groups, respondents were directed to a scenario in which they were asked to put themselves in the role of a waiter/waitress in a restaurant (see Appendix 1). Based on the respondents' experimental group, the respondents were either culturally different from the customers they served or had similar cultural values (context). Furthermore, respondents were either in the cultural majority in the restaurant (directly served customers that were similar) or in the cultural minority (directly served customers that were different).

After reading the scenario, respondents were asked to rate their intent to adjust the service process to the customers based on perceived cultural differences. The first item questioned the extent to which they (as a waiter/waitress) were willing change their verbal behavior (e.g. accent, tone) when a cross-cultural interaction required it. The second item questioned the extent to which the participant used pause and silence differently to suit different cross-cultural situations. The third item concerned adjustment of the rate of speaking when a cross-cultural situation required it, followed by the fourth item, which related to the change in non-verbal behavior when a cross-cultural intersection required it. The final question concerned the alteration of the facial expression upon the perception of cultural differences. All five measures were captured on a 1 (definitely disagree) to 7 (definitely agree) scale. Additionally, the respondents were asked to assess their mental ability to act upon cross-cultural differences on a five-item validated scale (metacognitive CQ). At the conclusion of the survey, we performed manipulation checks on perceived cultural differences and perceived out group status to ensure that our manipulations were effective. Lastly, some demographic information including age and ethnicity was requested.

### Measures

Adaptation of the service encounter was measured with the CQ behavioral subscale developed by Ang *et al.* (2007). Respondents were asked to rate their willingness to exert extra efforts to adjust the service encounter to overcome the cultural differences they perceived. The Likert-type scale ranged from 1 “I completely disagree” to 7 “I completely agree.” Questions concerned the change in verbal behavior, pausing and silence, rate of speaking, non-verbal behavior, and facial expression. This scale demonstrated good reliability for this study ( $\alpha = 0.82$ ). Discriminant validity was examined using the square root of the average variance extracted and was found to be more than acceptable at 0.77, well exceeding the bivariate correlations among study variables.

Metacognitive CQ was measured with the CQ metacognitive subscale by Ang *et al.* (2007). Respondents were asked to rate their consciousness of the cultural knowledge they apply to cross-cultural interactions, their adjustment to different cultural surroundings, and the reassessment of the accuracy of their knowledge they use before and during interactions. The Likert-type scale ranged from 1 “I completely disagree” to 7 “I completely agree.” This scale also had good reliability in this study ( $\alpha = 0.82$ ). The square root of the average variance extracted was again examined and found to be 0.78, exceeding the bivariate correlations among the other study variables, thus demonstrating good validity. A complete factor analysis of the CQ scale is available from Ang *et al.* (2007).

In order to confirm that our scenario manipulations were effective, we included manipulation checks for perceived cultural differences and perceived out group status. Perceived cultural differences were measured with a scale developed from Ghemawat's (2001) CAGE framework. Respondents were asked to rate their perceived similarities to the customers they were serving with regards to clothing, religion, ethnicity, language, behaviors, and social norms. The Likert-type scale ranged from 1 “I completely disagree” to 7 “I completely agree.” Perceived out group status was assessed by asking the respondents if they felt they were in the cultural or ethnic majority with respect to all other patrons in that restaurant. Results of the manipulation checks indicated strong perceived cultural differences and out group status between the study groups, with perceived cultural differences significantly higher in the high cultural differences conditions ( $p < 0.01$ ) and perceived out group status significantly higher in the high out group status conditions ( $p < 0.01$ ).

Demographic information such as age and ethnicity was included to serve as control variables in this study. Additionally, we controlled for employees' organizational citizenship behaviors (OCBs) using the three-item scale ( $\alpha = 0.84$ , AVE = 0.76) by Donovan *et al.* (2004) to ensure that the extra effort to adjust to cross-cultural situations actually stemmed from cultural competencies instead of OCBs. All scales are displayed in Appendix 2. As expected, ethnicity as a control variable had a large effect on adaptation. This result was not surprising and corroborated the findings of other studies (e.g. Volpone *et al.*, 2016) that found non-majority individuals felt the need to adapt their behavior to cultural nuances more than majority individuals, who felt less inclined to adapt their behavior. Multicollinearity for all non-manipulated study variables was tested by calculating the variance inflation factor for each independent variable when regressed on the other study variables. None of the variance inflation factors were higher than 1.08, thus providing no indication of multicollinearity among study variables.

### Results

Descriptive statistics and bivariate correlations are shown in Table I. As mentioned earlier, the survey was set up in a  $2 \times 2$  experimental design (context by group status). However, the moderator (metacognitive CQ) is a state variable that was measured (as opposed to manipulated) in the experimental subjects. Therefore, the results were tested using hierarchical linear (ordinary least-squares) regression with controls. Metacognitive CQ was

mean-centered prior to regression analyses. Controls were entered in Step 1 of the regression model followed the main effects in Step 2. Finally, interaction effects were entered in Step 3, as shown in Table II.

H1 predicted that perceived differences in culture would positively affect the intent of service employees to adjust the service encounter. As seen in Step 2 of Table II, when subjects in this study were in the condition of high cultural differences, they were significantly more willing to adjust the service encounter ( $B = 0.81, p < 0.01$ ). Thus, if service employees perceived the customers to be culturally different, they went out of their way to adjust to the customer distinctive needs during the time of the encounter (e.g. adapt voice, facial, and non-facial expression). Therefore, H1 was supported. Similarly, H2 predicted that perceived out group status would positively affect service encounter adjustment. Hence, if service employees felt that they were in the cultural minority during the service encounter, they were more likely to adjust to the customers' culture. This also was significant ( $B = 0.65, p < 0.01$ ) as shown in Step 2 of Table II, thus confirming H2.

H3a and H3b predicted the moderating role that metacognitive CQ would have on the relationship between perceived cultural differences and service encounter adjustment (H3a), and between perceived out group status and service encounter adjustment (H3b). Regression results presented in Step 3 of Table II indicate that while metacognitive CQ significantly moderated the relationship between perceived cultural differences and service encounter

Variable	Mean	SD	1	2	3	4	5	6	7
1. Age	22.31	2.01							
2. Ethnicity <sup>a</sup>	2.47	1.37	0.10						
3. Organizational citizenship behavior	5.87	0.90	0.12	-0.26**	(0.76)				
4. Out group status <sup>b</sup>	0.42	0.50	-0.08	-0.06	-0.07				
5. Cultural differences <sup>c</sup>	0.51	0.50	-0.06	-0.08	0.08	0.04			
6. Metacognitive CQ	5.08	0.96	0.13*	0.08	0.23**	-0.01	0.02	(0.62)	
7. Adaptation	1.44	0.50	0.02	0.13*	0.03	0.18**	0.31**	0.19**	(0.77)

Notes:  $n = 296$ . <sup>a</sup>Ethnicity is represented by 1, White/ Caucasian; 2, African American; 3, Hispanic; 4, Asian; 5, Native American; 6, Pacific Islander; 7, others; <sup>b</sup>out group status is represented as 0, in group condition; 1, out group condition; <sup>c</sup>cultural differences is represented as 0, low cultural differences condition; 1, high cultural differences condition. AVE is displayed on the diagonal where applicable. \* $p < 0.05$ ; \*\* $p < 0.01$

**Table I.**  
Descriptive statistics and correlations

	Step 1		Step 2		Step 3	
	B	SE	B	SE	B	SE
Age	-0.03	0.06	-0.02	0.05	-0.01	0.05
Ethnicity	0.34**	0.11	0.39**	0.10	0.39**	0.10
Organizational citizenship behavior	0.13	0.10	0.07	0.09	0.05	0.09
Out group status			0.65**	0.16	0.60**	0.16
Cultural differences			0.81**	0.15	0.78**	0.15
Metacognitive CQ			0.22*	0.09	-0.02	0.15
Out group × metacognitive CQ					0.11	0.17
Cultural differences × metacognitive CQ					0.34*	0.17
$R^2$	0.049		0.247		0.263	
$F$ (df)	3.51 (208)*		11.07 (208)**		8.93 (208)**	
$\Delta R^2$			0.198		0.016	
$F$ (df)			17.77 (202)**		2.14 (200)	

Notes: \* $p < 0.05$ ; \*\* $p < 0.01$

**Table II.**  
OLS regression of service encounter adaptation on out group status, cultural differences, and metacognitive cultural intelligence

adjustment ( $H3a$ :  $B=0.34$ ,  $p < 0.05$ ), it did not significantly moderate the relationship between perceived out group status and service encounter adjustment ( $H3b$ :  $B=0.11$ ,  $p > 0.05$ ). These results provide preliminary support for  $H3a$  and no support for  $H3b$ .

To determine if the interactions in  $H3a$  followed the expected pattern, simple slopes were plotted for high and low metacognitive CQ one standard deviation above and below the mean (Cohen *et al.*, 2013).  $H3a$  predicted that the relationship between perceived cultural differences and service encounter adjustment would be stronger among subjects with a higher level of metacognitive CQ. As shown in Figure 2, subjects with high levels of metacognitive CQ did exhibit a stronger relationship between perceived cultural differences and service encounter adjustment ( $B = 1.21$ ) than those with low levels of metacognitive CQ ( $B = 0.43$ ). Thus,  $H3a$  was fully supported. Metacognitive CQ may be a valuable competence for service employees as it enables them to better and understand the customers and their needs and facilitate service encounter adjustment.

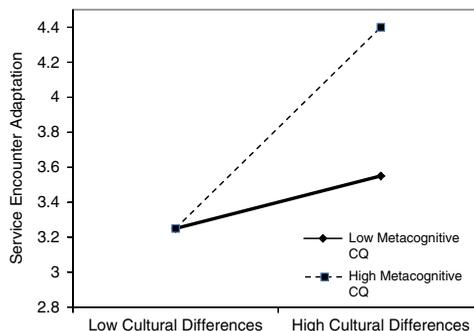
## Discussion

Our discussion highlights the study's findings and the contribution of this research for the services marketing field and its implications for practitioners. We also identify some limitations of the study and present suggestions for future research to help further explore and understand the role of CQ in managing service encounters.

### Implications for research

With rising cultural and ethnic diversity in the US population the likelihood of intercultural encounters taking place in service settings is steadily increasing (Wang *et al.*, 2011). Adaptation of a service encounter to suit the customers' needs and expectations is already a complex process. Cultural differences between the service provider and customer only adds to this complexity. Our study is among the first to introduce the role of the service employees' CQ in adaptation to an intercultural service encounter.

We set out to explore how, when, and why service employees might adapt the service encounter to suit the needs of culturally different customers. By doing so, we extended upon previous research (e.g. Rao Hill and Tombs, 2011; Sizoo *et al.*, 2005) by establishing causality with experimental design and using various behavioral adjustment facets. Following TPB, we theoretically examined and empirically tested how perceived cultural difference between the service employee and the customer affects employees' intent to adapt the service encounter. We also tested for the effect of employees' perceived out group status with respect to customers on employees' intent to adapt the service delivery. Results of our study show that perceived cultural differences and perceived out group status have a positive effect on employees' intent to adapt the service encounter.



**Figure 2.** Simple slopes for the interaction of cultural differences and metacognitive CQ on service encounter adaptation

We also found that metacognitive CQ moderates the relationship between cultural differences and employee's intent to adapt the service encounter. For service providers high in metacognitive CQ, cultural differences with the customers could provide such a social contextual cue and serve to activate their metacognitive CQ, which would result in a higher degree of adaptation of the service encounter. Culturally different customers who are attended upon by an employee high in metacognitive CQ are more likely to be satisfied with the service encounter, be more willing to engage with the firm in the future, as well as recommend the firm to other potential patrons.

Finally, we sought to understand why cultural differences and perceived out group status are connected to whether a service employee might adapt the service encounter. While boxes and arrows can add order to a concept by explicitly delineating patterns and causal connections, they rarely explain why the proposed connections will be observed (Sutton and Staw, 1995). We suggest that a customer service employee wants to adjust how he or she behaves in order to reduce the uneasy feeling of not belonging to the culturally different majority or perceived in group. Attitudes (formed by the service employees about the consequence of performing adjustment behaviors) and subjective norms (the influence that other people have on the behavioral intent through perceived pressure) may particular drive the service employee to reduce the distinctiveness between him/her and the customer through adaptation (Fishbein and Ajzen, 1975; Miller, 2005). Furthermore, as the intent to adjust the behavior may stimulate positive reactions in others, the service employee is even more inclined to adapt due to the potential of higher compensation (e.g. tips). Finally, if that person understands that they have the behavioral control over the situation as they have the ability to interact with those that are different than them (high metacognitive CQ), they will proactively engage in adjusting their behavior.

#### *Implications for practice*

As the interface between customers and the organization, frontline employees are a key source of competitive advantage for service organizations. Not only are frontline employees the "face" of the organization, they are also responsible for innovations in service delivery and value co-creation (Åkesson *et al.*, 2016). Intercultural service interactions carry far reaching implications for firms, employees, as well as customers, by offering both a unique challenge and an opportunity. With rising cultural diversity of both employees and customers, the service encounter is becoming an increasingly complex interaction with the potential for misunderstandings in communications and expectations, and possible service failures. This is in particular true as customers prefer interactions with individuals who share comparable behaviors, languages, and are culturally similar. However, scholars have shown that perceived cultural differences can motivate some customers to avoid service encounters because of an expectation of service failure (Hopkins *et al.*, 2005).

Results of our study show why and under which circumstances service employees adjust the service encounter to better meet the customers' needs. Adjustment of the service encounter has been linked to higher satisfaction, less complaints, and higher repatronage intentions. In this regard, it then becomes extremely important to understand how employees' CQ can help them understand the customers' expectations better and adapt the service encounter accordingly, thereby mitigating any potential negative outcomes arising from cultural differences.

Results of our study also indicate that intent to adapt the service encounter in intercultural situations is even higher for employees high in metacognitive CQ. Thus, service employees high in metacognitive CQ can be a valuable asset for the firm since they are better at recognizing when adaptation may be required. These individuals are also more sensitive regarding the potential cultural needs and are motivated to act upon the differences. Metacognitive CQ is certainly not the only skill required by service employees

for effectively managing intercultural service encounters, but it is an important one. Service firms that experience intercultural interactions on a regular basis need to ensure that their frontline employees either possess high metacognitive CQ or are trained to increase it (Ang *et al.*, 2006). Both firms and the research community recognize the importance of hiring the right personnel, especially to work as frontline employees. The screening of potential employees for personality traits and psychometrics is even more important for service firms (Bateson *et al.*, 2014). Assessment of metacognitive CQ can be made a part of the screening process at the time of hiring. Previous research suggests that out of the Big Five personality dimensions, conscientiousness and openness to experience are related to metacognitive CQ (Ang *et al.*, 2006). This relationship makes intuitive sense as individuals inherently open to new experiences in general would be open to learning, understanding, and acting in accordance with other cultures. Research also indicates that CQ is not necessarily an innate characteristic but can also be learned (Earley and Mosakowski, 2004; Magnusson *et al.* 2013).

It needs to be remembered that training for CQ would go beyond objective knowledge about another country and would also entail being sensitive to perceptual and behavioral nuances. Insensitive overt adaptations on the part of the service provider might end up veering toward the offensive, increasing the likelihood of a negative service encounter rather than preventing it.

### **Limitations and future research opportunities**

Lastly, the study is not without limitations. While we made an attempt to include respondents from varying cultural backgrounds in our sample, the scenarios used to conduct the study are set in the USA. It would be interesting to see if the findings are consistent across a different cultural backdrop. Using a restaurant setting also limits the generalizability of the study over other contexts such as the service component of manufacturing or business to business. Particularly, the importance of service adaptation in a business to business context cannot be highlighted enough (Zhu and Zolkiewski, 2016). Previously seen as manufacturing firms, firms like IBM and General Electric compete on their service offerings and the services they provide have costly implications for their customers (Gwinner *et al.*, 2005). Exploring the role of CQ in these service settings would be a valuable avenue of research.

Another limitation and avenue for future research is to study perceived out group as a moderator instead of a direct effect on the dependent variable. As we mentioned in the introduction, perceived out group individuals may notice cultural differences more than those that are not part of the out group. This logic lends to the development of hypotheses that would test whether perceived out group strengthens (or weakens) the perceived cultural differences – dependent variable relationship.

While adjustment is an interesting outcome, we did not take into consideration other possible consequences of cultural compatibility or cultural clash. Future research may investigate the different service encounter responses from service employees and customers following the described scenarios. We have also studied the impact of CQ from the perspective of the service employee. The customer also plays an important role in the success of a service encounter. For future research it would be interesting to study the effect of customer's CQ on the success of the service encounter. Customers high in CQ might possess the ability to either adjust their expectations upon coming across cultural differences in a service encounter, or be able to communicate better with a culturally different service provider. Since cultural differences can lead to possible miscommunication and misunderstandings during an encounter, a customer high in CQ would be less prone to such misunderstandings, giving allowances for the employee's cultural background.

## Conclusion

In summary, we believe this study is interesting because it sheds light on the mechanism driving service employees to bridge differences with culturally distinct customers. The TPB guides us toward an understanding of why cultural differences and out group status affect the propensity of the service employee to adapt. Furthermore, we showed that metacognitive CQ is an intangible asset that can influence the propensity to adapt. This ability to adapt in an increasing diverse society should play an important part in recruitment, selection, and training of current and future employees.

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**Appendix 1**

Cultural differences high

Cultural differences low

*Out group high*

Imagine you are an American waiter serving a group of Chinese in a traditional Chinese restaurant. You observe several differences between you and the customers you are serving. For example, these customers are different from you in the style and color of clothing that they wear and communicate mostly in their native language. Most of the other customers in the restaurant are Chinese and are similar to the other patrons in the restaurant, but different from you as a server

Imagine you are an American waiter serving a group of Australians in a traditional Chinese restaurant. You observe some differences between you and the customers you are serving, such as their accents. In general though, these customers are similar to you in the style and color of clothing that they wear, etc. Most of the other customers in the restaurant are Chinese and are similar to the other patrons in the restaurant, but different from you as a server

*Out group low*

Imagine you are an American waiter serving a group of Chinese in a traditional American restaurant. You observe several differences between you and the customers you are serving. For example, these customers are different from you in the style and color of clothing that they wear and communicate mostly in their native language. Most of the other customers in the restaurant are Americans and are similar to the other patrons in the restaurant, but different from the group you are serving

Imagine you are an American waiter serving a group of Australians in a traditional American restaurant. You observe some differences between you and the customers you are serving, such as their accents. In general though, these customers are similar to you in the style and color of clothing that they wear, etc. Most of the other customers in the restaurant are Americans and are similar to the other patrons in the restaurant

**Table A1.**  
Scenarios

## Appendix 2. Scales

### 1. Perceived cultural differences (or manipulation check)

Based on the scenario provided above, please indicate how much you, as a waiter, agree with the following statements (Likert Scale ranging from 1 “I completely disagree” to 7 “I completely agree”).

1. I feel similar in terms of clothing to the group of customers I served in this restaurant.
2. I feel similar in terms of ethnicity to the group of customers I served in this restaurant.
3. I feel similar in terms of language to the group of customers I served in this restaurant.
4. I feel similar in terms of behavior to the group of customers I served in this restaurant.
5. I feel similar in terms of social norms to the group of customers I served in this restaurant.

Developed from Ghemawat (2001).

### 2. Perceived out group status (or manipulation check)

Based on the scenario above, do you feel as if you, as a waiter, were in the cultural majority with respect to the majority of other patrons in the restaurant?

Yes  No

### 3. Adaptation of the service encounter

Based on the scenario described above, are you willing to exert extra efforts to adjust the service encounter to overcome the cultural differences you perceived? Please rate the following categories based on your willingness to adapt (I strongly agree to I strongly disagree).

1. I change my verbal behavior (e.g. accent, tone) when a cross-cultural interaction requires it.
2. I use pause and silence differently to suit different cross-cultural situations.
3. I vary the rate of my speaking when a cross-cultural situation requires it.
4. I change my non-verbal behavior when a cross-cultural intersection requires it.
5. I alter my facial expressions when a cross-cultural interaction requires it.

CQ Behavior subscale (Ang *et al.*, 2007)

**4. Metacognitive cultural intelligence** Please rate the following categories (1= I strongly disagree to 7= I strongly agree).

<b>Metacognition</b>	<b>1</b>	I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds.
	<b>2</b>	I adjust my cultural knowledge as I interact with people from a culture that is unfamiliar to me.
	<b>3</b>	I am conscious of the cultural knowledge I apply to cross-cultural interactions.
	<b>4</b>	I check the accuracy of my cultural knowledge as I interact with people from different cultures.

Cultural subscales of metacognitive, cognitive, and motivational cultural intelligence (Ang *et al.*, 2007)

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