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# Speaking out and speaking up in multicultural settings: A two-study examination of cultural intelligence and voice behavior



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#### ABSTRACT

Adopting a voice instrumentality perspective, we argue that cultural distance between the person speaking up and the voice targets will dampen voice behavior because of uncertainty surrounding what is appropriate and effective voice behavior. We further propose that cultural intelligence (CQ) mitigates this negative relationship and advance a mediated moderation model where the interactive effect of cultural distance and CQ on voice is mediated by perceived voice instrumentality. We test our hypotheses in teams (Study 1) and in supervisor-subordinate dyads in a global organization (Study 2). Results demonstrate that cultural distance is negatively related to speaking up to supervisor (Study 2), but not to speaking out to peers (Study 1). However, across both studies, individuals with low CQ engage in less voice to culturally distant voice targets than those with high CQ. In addition, results of Study 2 support mediated moderation and demonstrate that cultural distance has a negative indirect relationship with voice, via perceived voice instrumentality, *only* for individuals with low CQ. We discuss the theoretical and practical implications of our study for voice behavior in culturally diverse settings.

## 1. Introduction

Voice behavior, defined as expressing suggestions for change that aim to improve the status quo (Van Dyne & LePine, 1998), poses a conundrum to contemporary organizations. In hypercompetitive environments, organizations increasingly rely on employee voice for early detection of problems and opportunities (Burris, 2012), as well as to enhance unit performance (Detert, Burris, Harrison, & Martin, 2013). Yet, existing research suggests that voice behavior, due to its changeoriented nature, is less common than affiliative behavior such as helping (LePine & Van Dyne, 2001; Van Dyne, Kamdar, & Joireman, 2008). From a voice instrumentality perspective, an employee's reluctance to voice is driven by the belief that voice is futile and will not make a difference (Detert & Treviño, 2010; Milliken, Morrison, & Hewlin, 2003; Morrison, 2014). Conversely, when employees believe that their voice will bring about desired results (high instrumentality), they are more likely to speak up (Ashford, Rothbard, Piderit, & Dutton, 1998; Tangirala & Ramanujam, 2012).

Adopting the voice instrumentality perspective, we argue that the voice conundrum is exacerbated by cultural diversity. While cultural diversity increases the value of employee voice to organizations (Dahlin, Weingart, & Hinds, 2005), it could also increase the ambiguity of norms for effective voice, thus dampening the belief that voice will

bring about desired results. This is because "in the absence of explicit role-related prescriptions and proscriptions, individuals from different cultures may behave on the basis of very different scripts" (Stone-Romero, Stone, & Salas, 2003, p. 331). Since voice behavior is often seen as discretionary behavior with no clear role prescriptions (Morrison, 2011), we expect that voice norms are more ambiguous and uncertain as cultural differences between the person speaking up (the 'voicer') and the voice target increase.

Our understanding of how cultural diversity affects voice behaviors is surprisingly minimal. Despite the mounting body of work on voice (see the meta-analysis by Chamberlin, Newton, & LePine, 2017), the majority of studies have remained silent about the cultural background of both the voicer and the voice target. This gap has limited our understanding of the dynamics of voice in culturally diverse settings and how we can more fully tap the diverse perspectives and ideas of a culturally diverse workforce. An exception is a study by Troster and van Knippenberg (2012), who found that subordinates who were culturally dissimilar to other team members were less likely to speak up to the leader, unless the leader's nationality matched their own nationality. Troster and van Knippenberg's (2012) finding underscores the challenge of speaking up to culturally dissimilar voice targets, and further demonstrates that the leader's openness can attenuate the negative impact of cultural dissimilarity on member's voice behavior.

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Our research extends Troster and van Knippenberg's (2012) study in two ways. First, we seek a constructive replication of the negative relationship between cultural diversity and voice by assessing cultural distance, a continuous construct that captures the degree of difference in the cultural values between two cultures (Kogut & Singh, 1988), rather than the categorical construct of nationality dissimilarity used by the authors. By examining cultural distance in values (Hofstede, 2001; Shenkar, Luo, & Yeheskel, 2008), we take into account, for instance, that while an American, a Canadian, and a Chinese all have different nationalities, the American and Chinese are likely to have more different role expectations at work because of the greater differences in the cultural values they have been socialized to, compared to the American and Canadian, who tend to share more similar cultural values. Thus, we offer an alternative, more textured analysis of the relationship between cultural diversity (conceptualized as cultural distance) and voice.

Second and more importantly, we adopt a novel focus on the cultural intelligence of the voicer in addressing the challenge of speaking up to culturally dissimilar others. Cultural intelligence (CQ) refers to an individual's capability to function and manage effectively in culturally diverse settings (Ang et al., 2007; Earley & Ang, 2003), and is a theoretically relevant capability for speaking up in culturally diverse contexts. Our focus on capability contrasts with the conventional emphasis on the personality of the voicer (Grant & Mayer, 2009; LePine & Van Dyne, 2001) and the leadership style of the voice target (e.g., Detert & Burris, 2007; Tangirala & Ramanujam, 2012), which suggests that voice is a "will-do" decision shaped by employee preferences (Grant, 2013) and leader behavior (Detert & Treviño, 2010). However, speaking up also requires skills. For instance, Ellis and Van Dyne (2009) proposed that voice is a communication phenomenon that requires communication competence. Grant (2013) highlighted the role of emotions and demonstrated that people with greater emotional regulation skills are more likely to voice. Similarly, we highlight the important role of CQ as a set of capabilities that will buffer the challenges of speaking up in culturally diverse settings, thus extending the nomological network of voice beyond motivational predictors.

We test our hypotheses regarding cultural diversity, CQ and voice in two studies. Given that research suggests voice targeted at peers may differ from voice targeted at supervisors (Liu, Zhu, & Yang, 2010; Ashford, Sutcliffe, & Christianson, 2009), Study 1 examines the effects of cultural distance and CQ on speaking out in a team context (lateral voice), while Study 2 focuses on speaking up in a supervisor-subordinate context (upward voice). Essentially, Study 2 is a "generalization and extension" replication (Tsang & Kwan, 1999) aimed at testing the external generalizability of the proposed effects of cultural distance and CQ on lateral and upward voice (Ashford et al., 2009). We further extend Study 1 by testing the mediating role of perceived voice instrumentality in Study 2.

## 2. Theory and hypotheses

# 2.1. Voice behavior

Voice is a promotive-challenging behavior that focuses on the expression of constructive suggestions and ideas aimed at improving the status quo (Van Dyne & LePine, 1998). Two features of voice distinguish it from related constructs. First, voice focuses on challenging and changing the current ways of doing things. As such, it can potentially damage relationships and hence, is distinct from affiliative forms of extra-role behavior, such as helping. Second, voice emphasizes constructive ways of promoting change. Hence, it is distinct from (1) whistle-blowing, which focuses on halting an activity; (2) principled organizational dissent, which is based on disagreement over moral issues; and (3) complaining, which focuses on expressing dissatisfaction.

The challenging and constructive nature of voice creates a conundrum for organizations and employees. While organizations stand to benefit from constructive suggestions that aim to improve the situation, the challenging nature of voice poses a dilemma for individuals. When suggestions are heard and adopted, voice offers benefits to the individual (Van Dyne, Cummings, & McLean Parks, 1995). However, voice may not result in desired changes because voice targets may not be open to new ideas (e.g., Chiaburu, Farh, & Van Dyne, 2013; Fast, Burris, & Bartel, 2014). Worse, voice may incur negative consequences for employees when it is misinterpreted as "bossiness, unsolicited interference" (Liang, Farh, & Farh, 2012, p. 72).

Given the importance of voice and the barriers to voice, research has examined factors that promote voice behavior. Broadly, Morrison (2014) grouped these factors into five major categories: (1) individual dispositions, (2) job and organizational attitudes and perceptions, (3) emotions, beliefs, and schemas, (4) characteristics and behaviors of leaders and voice targets, and (5) other contextual factors such as voice climate and social support.

Research however, has rarely considered cultural diversity as a potential barrier to voice behaviors (Troster & van Knippenberg, 2012), much less to examine factors that could enable individuals to speak up in spite of the intercultural challenges of voice behaviors. Below, we explain why cultural distance between the voicer and voice target could impede voice behaviors, and why the voicer's CQ could attenuate this relationship.

## 2.2. Intercultural challenges of voice behaviors

Culture plays a major role in shaping role expectations and behaviors in the workplace (Stone-Romero et al., 2003). These role expectations – what behaviors are considered appropriate and effective at work, often stem from the values that are common to the culture that we are socialized in (Triandis, 1980, 1989). For instance, cooperative behaviors are expected to a greater degree in collectivistic cultures where relationships are important, than in individualistic cultures where expressing one's ideas and achieving one's personal goals are more important. In the absence of explicit role prescriptions, individuals tend to rely on their culture-based scripts to engage in sensemaking and perform their roles. Cultural differences in role expectations are therefore a major source of problems and anxiety in culturally diverse workplaces (Stone-Romero et al., 2003).

In the context of voice behavior, cultural differences can create ambiguity surrounding what is appropriate and effective voice behaviors because people from different cultures expect different ways of expressing an idea (Triandis, 2000). For instance, collectivistic and high power distance cultures tend to sample the context of the message more when they communicate (e.g., paying more attention to nonverbal behaviors of the other person), and tend to use more qualifiers and nonverbal behaviors when expressing their views (e.g., Adair, Buchan, Chen, & Liu, 2016; Ward, Ravlin, Klaas, Ployhart, & Buchan, 2016). Conversely, individualistic and low power distance cultures put more emphasis on the content of the message and prefer explicit articulation of ideas and suggestions, regardless of the status of the target. These cultural differences give rise to a "large opportunity for errors and misinterpretations" (Triandis, 2000, p. 149) and can impede voice behavior due uncertainty about reactions to suggestions.

Further we argue that the greater the cultural distance, the greater the challenge for voice because "cultural distance [between the two parties] increases the probability of miscommunication" (Triandis, 2000, p. 151). Expatriate research has shown that expatriates in more culturally distant countries experience greater uncertainty in their environment and interactions, and hence, face more adjustment challenges (Black, Mendenhall, & Oddou, 1991; Chen, Kirkman, Kim, Farh, & Tangirala, 2010; Ronen & Shenkar, 1985). Likewise, we argue that the greater the cultural distance, the harder it is for the voicer to detect voice norms and enact culturally appropriate voice behavior because of the greater differences in cultural schemas (Dragoni et al., 2014). As such,

**H1.** Cultural distance with the voice target(s) will be negatively related to voice behavior directed at peers (H1a: speaking out) and supervisors (H1b: speaking up).

## 2.3. Cultural intelligence (CQ) as a moderator

Individuals, however, differ in their responses to cultural diversity due to their ability to deal with cultural differences. Here, we argue that CQ is an important individual capability that attenuates the negative relationship between cultural diversity and voice. Based on the multiple loci of intelligence proposed by Sternberg and Detterman (1986), Earley and Ang (2003) conceptualized CQ as an aggregate construct that comprises metacognitive, cognitive, motivational, and behavioral dimensions pertaining to inter-cultural interactions. Specifically, those with high CQ are consciously aware of other's cultural preferences and actively check and adjust their mental models during and after intercultural interactions (metacognition). They possess elaborate knowledge structures about cultures and cultural differences (cognition) and are capable of directing and sustaining energy in culturally diverse situations (motivation). Finally, they vary their actions based on the needs of the situation (behavior).

Empirical research has demonstrated the predictive validity of CQ in culturally diverse settings over a wide range of outcomes (Leung, Ang, & Tan, 2014; Rockstuhl & Van Dyne, 2018). This includes psychological and work adjustment in novel cultural environments (e.g., Ang et al., 2007); inter-cultural decision making and task performance (Ang et al., 2007); expatriate performance (G. Chen et al., 2010), cultural sales performance (X.P. Chen, Liu, & Portnoy, 2012); negotiation effectiveness (Groves, Feyerherm, & Gu, 2015; Imai & Gelfand, 2010); global leadership potential (Kim & Van Dyne, 2012); and global leadership effectiveness (Groves & Feyerherm, 2011; Rockstuhl, Seiler, Ang, Van Dyne, & Annen, 2011). A recent CQ meta-analysis by Rockstuhl and Van Dyne (2018) examined the effects of CO on cultural adjustment, well-being, cultural judgement and decision-making, job performance (task, citizenship, and adaptive) and leadership effectiveness. Results confirmed the predictive validity of both an overall latent CQ factor, as well as specific CQ factors.

Importantly, studies have also shown that CQ buffers inter-cultural challenges. In a study of multicultural teams, Rockstuhl and Ng (2008) demonstrated that team members had lower interpersonal trust toward culturally diverse team members than culturally similar ones. This negative effect, however, was attenuated by CQ. In another study of crosscultural learning, Peng, Van Dyne, and Oh (2015) demonstrated that individuals with a strong cultural identity learned less from an overseas experience because their attachment to their own culture predisposed them to reject the foreign culture. However, these negative effects of strong cultural identity were buffered by CQ, such that having a strong cultural identity did not affect the cultural learning of individuals who had high CQ. An interesting exception is a study on motivational CQ. Chen et al. (2010) found that expatriate's motivational CQ positively influenced work adjustment only when cultural distance between the expatriate and the host culture was low. When cultural distance was high, expatriate's motivational CO did not affect adjustment. This finding suggests that having the drive for inter-cultural interactions alone may not be sufficient for dealing with uncertainties posed by cultural differences. Instead, it is important to consider the holistic conceptualization of CQ comprising motivational, cognitive, metacognitive, and behavioral capabilities.

Applied to voice behavior, we posit that when faced with culturally dissimilar voice target(s), individuals with high CQ are more likely to speak up, compared to those with low CQ). This is because people with high CQ (1) have a sense of self-efficacy in interacting with people from different cultures and hence, a sense of agentic control that they can connect with and influence others (motivational CQ); (2) have elaborate schemas for communication in different cultures, including

differences between low- and high-context communication (Adair et al., 2016; Hall, 1976), giving them less uncertainty about effective ways of speaking up (cognitive CQ); (3) have self-regulatory strategies that allow them to look for cues and adapt their understanding of whether their voice is appropriate and effective (meta-cognitive CQ); and (4) have a range of flexible verbal and non-verbal behaviors for communicating their ideas appropriately in different cultural situations (behavioral CQ).

In short, cultural diversity should pose fewer barriers to individuals with high CQ, compared to those with low CQ because high CQ individuals are more likely to detect and adapt to the voice norms of their culturally diverse voice targets. CQ should have little effect on voice behaviors in the absence of cultural diversity. Taken together, we predict that

**H2.** CQ will moderate the negative relationship between cultural distance and voice behavior to peers (H2a: speaking out) and to supervisors (H2b: speaking up), such that the relationship will be weaker for those with high CQ and stronger for those with low CQ.

## 2.4. Perceived voice instrumentality

We suggest that the interaction between cultural distance and CQ on voice is mediated by perceived voice instrumentality - the belief that voice will be "effective in bringing about the desired result" (Morrison, 2014, p. 180). Research on voice and other change-oriented behaviors such as issue-selling and taking charge often argues that people engage in a decision calculus process of evaluating the pros and cons of these behaviors before enacting (or withholding) such behaviors (Grant & Ashford, 2008). One key outcome of this calculus process that is "found in any foundational works on voice and silence" is voice instrumentality (Morrison, 2014, p. 180). Based on the expectancy theory of motivation (Vroom, 1964), people are more likely to engage in change-oriented, discretionary behaviors when they believe that their efforts will be successful. For instance, Ashford et al. (1998) showed that managers who perceived greater probability of success in selling gender-equity issues were more willing to engage in issue selling. Likewise, Tangirala and Ramanujam (2012) found that consultative managers increased subordinate's voice behavior by enhancing their perceived likelihood of impacting outcomes, which they labeled 'perceived influence.' On the flip side, the perceived futility of voice, or low voice instrumentality, reduces voice and increases silence (Detert & Treviño, 2010; Milliken et al., 2003).

Voice instrumentality is particularly relevant in culturally diverse situations because ambiguous voice norms should make it harder for individuals to believe that they can bring about change through their voice. Consistent with the logic behind Hypothesis 2, we argue that individuals with high CQ are more likely to have voice instrumentality beliefs in spite of cultural differences between them and their voice targets, and hence, are more likely to voice. For individuals who lack the motivation, cultural knowledge, meta-cognition and behavioral repertoire to detect voice norms and adapt their voice behavior to intercultural situations (i.e., low CO), having culturally distant voice targets dampens their voice instrumentality, thus suppressing their voice behavior. In sum, we predicted a first-stage mediated moderation where perceived voice instrumentality mediates the interactive effect of cultural distance and CQ on voice, such that the indirect negative relationship between cultural distance and voice will be stronger for those with low CQ.

**H3.** Perceived voice instrumentality will mediate the interaction between cultural distance and CQ on voice, such that cultural distance will have stronger negative effect on voice, via perceived voice instrumentality, for those with low CQ.

#### 3. Overview of research

We tested our hypotheses in two multiple-source field studies to obtain multiple corroborations for our proposed model. In Study 1, we examined cultural distance of members in project teams (H1a) and the interaction of cultural distance and CQ (H2a) on voice directed at peers. In study 2, we examined cultural distance of employees compared to their supervisors (H1b) and the moderating role of CQ (H2b) in predicting voice directed at supervisors. We also tested the mediated moderation prediction where perceived voice instrumentality mediates the interactive effect of cultural distance and CQ on voice (H3).

## 4. Study 1

## 4.1. Participants and procedures

We collected data from three hundred and twenty five (325) senior students in 51 project teams in an international organizational behavior course at a university in Singapore. Twenty-three participants had incomplete responses and were dropped from the final analyses, resulting in a sample of 303 (response rate of 93%). Sixty-three percent (63%) of the students were from Singapore, and the remaining 37% came from twenty-one countries: Australia, Bangladesh, Canada, China, Finland, Germany, Indonesia, Italy, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Russia, South Korea, Sweden, Switzerland, Taiwan, the United Kingdom, the United States, and Vietnam. Seventy-four percent (74%) of the sample was female, and the average age was 21.6 years (SD = 1.8 years).

Participants were randomly assigned to groups to work on a three-month project that represented 40% of the course grade. Average team size was 5.9 members (range: 4–7). Teams were randomly assigned to a specific pair of cultures (e.g., Netherlands and Thailand) and a specific inter-cultural management challenge (e.g., a negotiation). Teams (a) diagnosed their assigned inter-cultural problems; (b) developed video-based dramatizations of these problems; and (c) recommended strategies for resolving these inter-cultural management challenges. The project was graded by the instructor, and each team member received the same group grade, creating strong outcome interdependence, a defining attribute of teams (Saavedra, Earley, & Van Dyne, 1993).

We measured CQ, nationality, and the control variables at the beginning of the course. We used aggregated peer ratings, obtained at the end of the course after completion of team projects, for our measure of voice.

## 4.2. Measures

**Voice behavior.** Work group peers assessed individual-level voice with four items from Van Dyne and LePine (1998) using a 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Sample items include "This team member communicated his/her ideas even if others in the group disagreed with him/her" and "This team member spoke up in the group with new ideas." Each participant was rated by 3 to 6 peers, with an average of 5 ratings per person. Cronbach's alpha was 0.85, and inter-rater reliability was moderately strong (ICC1 = 0.27, p < .00; ICC2 = 0.65, p < .00; Rwg = 0.85), justifying aggregation of peer ratings to the individual-level.

**Cultural intelligence.** We assessed CQ with the 9-item mini-CQ scale (Ang & Van Dyne, 2008) (1 = strongly disagree; 7 = strongly agree). Sample items include "I enjoy interacting with people from different cultures;" "I know the legal and economic systems of other cultures;" "I am conscious of the cultural knowledge I use when interacting with people from different cultural backgrounds;" and "I change my verbal behavior (accent, tone) when a cross-cultural interaction requires it." Cronbach's alpha was 0.75.

Cultural distance. We operationalize national cultural distance based on Kogut and Singh's (1988) classic work on national cultural

distance, which refers to the extent to which the cultural norms of one country differ from another country. Consistent with existing studies (e.g., Kogut & Singh, 1988; Manev & Stevenson, 2001), we used Hofstede's (2001) national values (power distance, individualism-collectivism, masculinity-femininity, and uncertainty avoidance) to compute an index of cultural distance for each team member. Following Harrison and Klein's (2007) recommendation on team separation indices, we computed the Euclidean distance for every member in the team. The Euclidean distance of one member, i, from member j, is the root mean squared distance between each of those i, j pairs on the average of the four cultural values in Hofstede's database.

**Controls.** At the individual-level, we account for the possibility that demographic differences in gender (0 = female: 1 = male) and age may influence voice behaviors in groups (e.g., LePine & Van Dyne, 1998). For instance, studies have found that men are more likely to display voice behaviors, possibly because they tend to be more assertive and task-oriented (Kidder, 2002; LePine & Van Dyne, 1998). Choi (2007) also found that age has a positive relationship with making suggestions for change. In addition, consistent with relational demography theory which suggests that individuals who have similar demographics tend to identify with and have more positive interactions with one another (Tsui & O'Reilly, 1989), we controlled for relational demography in gender and age because members who are more similar may tend to speak up more (see Choi, 2007). We computed relational demography using Tsui, Egan, and O'Reilly's (1992) formula. We did not control for educational background or team tenure because there was little variation in the sample.

At the group-level, empirical studies have found that group diversity in demographics such as gender and race/ethnicity is associated with greater interpersonal conflict (e.g., Jehn, Northcraft, & Neale, 1999; Pelled, Eisenhardt, & Xin, 1999). As such, we controlled for team diversity in gender, age, and nationality (in terms of national cultural values) because of the possibility that members in more heterogeneous teams may experience less satisfaction and therefore, be less likely to speak up with suggestions for change (e.g., Morrison, Wheeler-Smith, & Kamdar, 2011). We computed gender diversity using Blau's index  $(1 - \Sigma p_i^2)$ , where  $p_i$  is the fraction of team members from a gender group (Dahlin et al., 2005). We computed age diversity as the standard deviation of age for members of the team. We also controlled for cultural diversity at the team level, using the standard deviation of the averaged national cultural values (Hofstede, 2001) within the team, as suggested by Harrison and Klein (2007). We did not control for ethnic diversity because it was highly correlated with cultural diversity (r = 0.80, p < .00). We also controlled for group size because LePine and Van Dyne (1998) showed that bigger groups tend to have less voice behaviors.

## 4.3. Analyses

We tested hypotheses with hierarchical linear modeling (HLM) to account for the non-independence of data based on group membership. HLM partitions variance of individual-level outcomes into individual-level (level-1) and group-level (level-2) components. Following Enders and Tofighi (2007) recommendations, we grand-mean centered level-2 predictors and group-mean centered level-1 predictors. We specified a null model with no predictors to test for variance in voice behavior between groups. In Model 1, we added level-1 (age, gender, age dissimilarity, and gender dissimilarity) and level-2 (age diversity, gender diversity, cultural distance, and group size) controls. In Model 2, we added individual-level cultural distance and individual-level CQ. Finally, in model 3, we entered the interaction between individual-level cultural distance and CQ.

# 5. Study 1 results

Table 1a presents the means, standard deviations, and correlations

**Table 1a**Study 1 – Means, Standard Deviations, Scale Reliabilities, and Inter-Correlations for Individual Level Variables.

	Individual Level of Analysis	M	SD	1	2	3	4	5	6
1	Voice <sup>a</sup>	4.09	0.43	(0.85)					
2	Cultural Intelligence (CQ) <sup>b</sup>	4.72	0.66	$0.10^{\dagger}$	(0.75)				
3	Cultural Distance	7.06	5.79	-0.10	0.15**	_			
4	Gender Dissimilarity	0.52	0.24	-0.09	0.05	0.23**	_		
5	Age Dissimilarity	1.63	0.79	-0.07	0.10 +	0.17**	0.20**	_	
6	Gender <sup>c</sup>	0.26	0.44	0.08	$0.11^*$	0.09	0.67**	0.17**	-
7	Age	21.59	1.81	0.02	0.14*	-0.03	0.24**	0.38**	0.30**

Note: N = 303.

**Table 1b**Study 1 – Means, Standard Deviations, and Inter-Correlations for Group Level Variables.

	Group Level of Analysis	М	SD	1	2	3	4
1 2 3 4	Cultural Diversity Gender Diversity Age Diversity Group Size	5.73 0.34 1.46 5.94	4.22 0.16 1.17 0.76	0.70** 0.31* 0.12 0.06	- 0.16 0.13 0.13	- -0.07 -0.18	- -0.32*

Note: N = 51.

**Table 2**Study 1 – Results of Hierarchical Linear Modeling Analyses Predicting Voice.

	Model 1	Model 2	Model 3
Level 1 Effects			
Age	0.01	0.01	0.01
Gender <sup>a</sup>	0.04	0.03	0.03
Age Dissimilarity	0.01	0.01	0.01
Gender Dissimilarity	0.35	0.40	0.44
Cultural Distance (CD)		-0.01	-0.01
Cultural Intelligence (CQ)		0.05	0.05
CD X CQ			0.01*
Level 2 Controls			
Age Diversity	0.00	0.00	0.00
Gender Diversity	$-0.37^{\dagger}$	$0.38^{\dagger}$	$-0.38^{\dagger}$
Cultural Diversity	-0.01	0.00	0.01
Group Size	0.13*	0.13*	0.13*
$\Delta R^2$	7%	1%	1%

Note:  $\Delta R^2$  computed as the percentage reduction in the Level 1 variance in the dependent variable of voice behavior.

for variables at the individual level, and Table 1b summarizes group-level descriptive statistics. HLM results for the null model showed significant between-group variance in voice:  $\tau_{00}=0.04$ ,  $\chi^2(50)=117.86$ , p<.00. ICC(1) and showed that 19% of the total variability in voice was explained at the group-level. Table 2 summarizes the HLM results for H1-H2.

H1a predicted that cultural distance would be negatively related to voice behavior toward peers. Results of Model 2 in Table 2 show that cultural distance was not significantly related to voice ( $\gamma = -0.01$ , ns). Hence, H1a was not supported.

H2a predicted that the negative relationship between cultural distance and voice directed at peers would be attenuated by CQ. Model 3

in Table 2 shows that the interaction between individual-level cultural distance and CQ was significant ( $\gamma = 0.01$ , p < .05). We plotted the interaction at one standard deviation above and below the mean of CQ and computed simple slopes for each of the two levels using procedures for multilevel interaction models (Preacher, Curran, & Bauer, 2006). Fig. 1 shows that cultural distance was negatively related to voice for those with low CQ (simple slope: -0.02, p < .05) but not significant for those with high CQ (simple slope: 0.00, ns). Thus, results support Hypothesis 2a and show that CQ buffers the negative effect of cultural distance on voice.

## 6. Discussion

Study 1 tested our hypotheses that those who are more culturally distant from their peers speak out less (H1a), and that this effect is stronger for those with low CQ (H2a). Surprisingly, results did not support a main effect, but supported the interaction effect. Cultural distance negatively affected voice only for those with low CQ.

Results of Study 1 are important because they offer the first empirical evidence that cultural distance with voice targets inhibits voice behavior for team members with low CQ.

However, given that the targets of voice in Study 1 were other team members (speaking out to peers), it is not clear if our significant (H2) and non-significant (H1) findings would generalize to voice aimed at

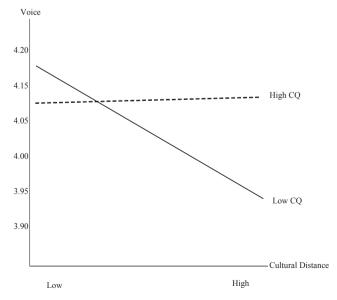


Fig. 1. Study 1 – Interaction of Cultural Distance and CQ in Predicting Voice Directed at Peers (Speaking Out).

a Peer-rated.

<sup>&</sup>lt;sup>b</sup> Self-rated.

<sup>&</sup>lt;sup>c</sup> 0 = Female, 1 = Male.

 $<sup>^{\</sup>dagger} p < .10.$ 

<sup>\*</sup> p < .05.

<sup>\*\*</sup> p < .01.

 $<sup>^{\</sup>dagger}p < .10.$ 

<sup>\*</sup> p < .05.

<sup>\*\*</sup> p < .01.

 $p^* < .01.$ 

 $<sup>^{</sup>a}$  0 = Female, 1 = Male.

 $<sup>^{\</sup>dagger} p < .10, p < .05.$ 

supervisors (speaking up) (Liu et al., 2010). Further, we did not have data to test the mediating role of perceived voice instrumentality in Study 1.

We addressed these issues in a second study with field data obtained from a global organization. Specifically, Study 2 examined whether our proposed main (H1) and interactive effects (H2) would be supported for voice behavior targeted at superiors (speaking up). We also tested H3 – perceived voice instrumentality as one mechanism that can shed light on why the interaction of cultural distance and CQ predicts voice. Additionally, we used peer-assessment of CQ instead of self-report to rule out potential biases in self-assessments as suggested by Kruger and Dunning (1999) and to further enhance generalizability of results.

## 7. Study 2

## 7.1. Sample and procedures

We sent surveys to 248 employees working for a global organization with offices in 43 countries located in Africa, Asia, Australia, Europe, Middle East, North, or South America. These employees were participants in an inter-cultural leadership program designed to equip them for working with stakeholders from around the world. We also sent surveys to the direct supervisor of each employee and to three peers identified by the organization as those who would be knowledgeable about the inter-cultural capabilities of the focal employees.

We obtained matched data for 205 employees, 126 supervisors, and 713 peer ratings (obtained from 522 peers), giving us a response rate of 83%. Superiors provided data on employee voice. Of the 126 supervisors, 85 (67%) rated one employee, and the remaining 41 supervisors (33%) rated between 2 and 7 employees. Peers provided data on employee CQ; and focal employees rated their perceived voice instrumentality. Employees and their supervisors also provided demographic information.

Fifty percent of the focal employees were male. The average age was 41.8~years (SD = 8.5), and average organizational tenure was 7.1~years (SD = 5.8). 84% of the superiors were male, with an average age of 46.6~years (SD = 0.8.0).

## 7.2. Measures

Voice behavior. Supervisors rated employee voice with two items adapted from Van Dyne and LePine (1998) to focus on withholding voice, as requested by the organization (e.g., "This employee tends not to speak up with suggestions for change"), using a 7-point Likert scale (1 = strongly disagree; 7 = strongly agree). We reverse coded items so that higher scores reflect more voice behavior. Cronbach's alpha was 0.75.

**Perceived voice instrumentality.** Participants rated perceived voice instrumentality with three items adapted from Korsgaard and Roberson (1995), using a 7-point Likert scale (1 = strongly agree; 7 = strongly disagree). A sample item is "My ideas for change are often considered seriously by my supervisor." Cronbach's alpha was 0.87.

**Cultural intelligence.** Peers who worked closely with employees and who could observe them in multicultural interactions rated focal employee's CQ with the 9-item Mini CQ scale used in Study 1. We obtained an average of three peer ratings per employee (range: 1–4). Cronbach's alpha was 0.87, and inter-rater reliability (ICC1 = 0.28, p < .00; ICC2 = 0.54, p < .00; Rwg = 0.80) justified aggregation of peer ratings to the individual-level.

**Supervisor-subordinate cultural distance.** As with Study 1, we used Kogut and Singh's formula (1988) to compute the Euclidean distance between the supervisor's and subordinate's national cultural values based on Hofstede's (2001) database.

**Controls.** We controlled for employee gender (0 = female; 1 = male), age, and organizational tenure (years). In addition, we controlled for employee's prior cultural experience because those with

more cultural experience tend to have higher CQ (Ang et al., 2007) and may also have greater confidence in speaking up in culturally diverse settings. We assessed cultural experience with standardized responses to three items: prior experience interacting with (a) people from other countries, (b) people from other cultures (1 = no experience; 5 = very experienced), and (c) the number of countries lived in for at least six months. Cronbach's alpha was 0.79. We also controlled for English language efficacy because although English is the lingua franca in this global organization, 79% of the participants were not native English speakers. Research has shown that low language self-efficacy is a source of anxiety that can cause withholding of communication (Daly & Stafford, 1984). We assessed English language self-efficacy with four items from Ang, Van Dyne, and Begley (2003) and had participants rate their confidence in speaking, listening, reading, and writing in English (1 = very poor; 7 = excellent). Cronbach's alpha was 0.97.

We also controlled for gender and age diversity of the dyads because relational demography research demonstrates that demographic differences between the supervisor and subordinate can negatively influence supervisor's affect and ratings of subordinate's effectiveness (Tsui & O'Reilly, 1989). Following Tsui and O'Reilly, we created a dichotomous variable for gender diversity (0 = the same; 1 = different) and computed the absolute difference score between supervisor and subordinate age for age diversity.

Finally, we controlled for two supervisor attributes that may affect their ratings of subordinate voice behaviors. First, since interpersonal affect toward someone could result in more lenient ratings of performance (Cardy & Dobbins, 1986; Tsui & O'Reilly, 1989), we controlled for interpersonal liking (reported by the supervisor) using three items adapted from Tsui and O'Reilly (1989). A sample item is "How well do you like this person?" (0 = not at all; 7 = to a very great extent). Cronbach's alpha was 0.73. Second, we controlled for employee perceptions of the supervisor's support for cultural diversity to take into account the possibility that these supervisors are more likely to encourage voice from subordinates who are culturally different. We used a 3-item measure adapted from McKay, Avery, and Morris (2008) (e.g., My supervisor frequently emphasizes the benefits of cultural diversity). Cronbach's alpha was 0.93.

## 7.3. Analyses

We examined discriminant validity with confirmatory factor analysis (CFA) using LISREL 8. Results support the hypothesized seven-factor structure (voice, perceived voice instrumentality, CQ, English self-efficacy, cultural experience, interpersonal liking, and perceived supervisor support for cultural diversity) and demonstrate good fit to the data ( $\chi^2$  (168, N = 205) = 250.19, p = .00; RMSEA = 0.05; SRMR = 0.05; NNFI = 0.98; CFI = 0.98). All items loaded significantly on their predicted constructs. This model provided better fit than alternative models, including a 6-factor structure that combined voice and perceived voice instrumentality [ $\Delta \chi^2$  (6, N = 205) = 50.95, p < .00]; a 3-factor structure that combined measures reported from the same source [ $\Delta \chi^2$  (18, N = 205) = 1,048.51, p < .00]; and a 1-factor structure [ $\Delta \chi^2$  (21, N = 205) = 1,456.87, p < .00]. In sum, CFA results support discriminant validity of the constructs.

Since all hypotheses were at the individual-level, we tested predictions with moderated hierarchical regression. Given that one-third of the supervisors provided voice ratings for more than one subordinate, we used heteroskedasticity-consistent standard errors (Hayes & Cai, 2007) to account for possible supervisor effects in the voice ratings. Heteroskedasticity-consistent regression provides standard error estimates that do not assume homoskedasticity, and thus provides a more robust test of our hypotheses.

We entered control variables in Model 1; cultural distance and CQ in Model 2; the interaction between cultural distance and CQ in Model 3; and perceived voice instrumentality in Model 4. We mean-centered all variables to reduce multicollinearity and enhance interpretability of the

Table 3
Study 2 – Means, Standard Deviations, Scale Reliabilities, and Inter-correlations.

	Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13
1	Voice <sup>a</sup>	5.27	1.33	(0.75)												_
2	Voice Instrumentality <sup>b</sup>	5.55	0.96	0.29**	(0.87)											
3	Cultural Intelligence <sup>c</sup>	5.33	0.65	$0.17^{*}$	0.16*	(0.87)										
4	Cultural Distance	1.46	1.55	$-0.15^{*}$	0.12	0.07	-									
5	Gender Diversity	0.44	0.50	-0.08	0.01	$-0.19^{**}$	$-0.14^{*}$	-								
6	Age Diversity	132.26	166.62	0.04	0.05	$-0.15^{*}$	0.11	0.06	-							
7	Gender <sup>d</sup>	0.50	0.50	0.05	0.19**	0.11	0.13	-0.69**	0.01	-						
8	Age	41.83	8.51	-0.11	-0.00	0.07	0.00	-0.12	$-0.14^{*}$	0.07	-					
9	Org Tenure	7.12	5.80	-0.26**	-0.24**	-0.11	0.09	0.06	$-0.14^{*}$	$-0.17^{*}$	0.35**	-				
10	English Self-Efficacy <sup>b</sup>	5.89	0.97	0.25**	0.38**	0.21**	0.11	-0.08	0.01	0.16*	-0.02	-0.25**	(0.97)			
11	Cultural Experience <sup>b</sup>	0.00	0.84	$0.17^{*}$	0.33**	0.27**	0.20**	-0.10	0.06	$0.19^{**}$	0.14	$-0.27^{**}$	0.47**	(0.79)		
12	Liking of Subordinate <sup>a</sup>	3.93	0.69	0.31**	0.08	0.25**	-0.03	-0.08	-0.08	0.01	0.03	0.06	0.01	0.03	(0.73)	
13	Sup Support for Div <sup>b</sup>	5.36	1.36	0.02	0.32**	0.15*	0.17*	0.03	-0.03	-0.13	0.01	0.02	0.13	0.10	0.10	(0.93)

N = 205

interaction. We used procedures recommended by Edwards and Lambert (2007) to compare the indirect effects of cultural distance on voice behavior, via perceived voice instrumentality, for employees with high CQ (+1SD) versus low CQ (-1SD), based on 1,000 bootstrap samples.

## 8. Study 2 results

Table 3 presents the descriptives and correlations for Study 2. Table 4 presents heteroskedasticity-consistent regression results for voice behavior.

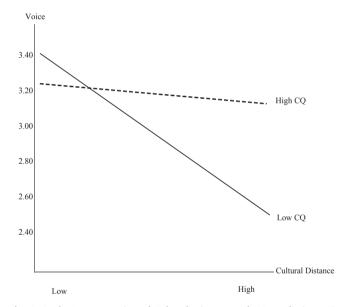
H1b predicted a negative relationship between cultural distance and voice targeted at the supervisor. Results of Model 2 in Table 4 show that supervisor-subordinate cultural distance was negatively related to subordinate voice ( $\beta = -0.17$ , p < .01). Thus, H1b was supported.

H2b predicted that the negative relationship between cultural distance and voice would be weakened by employee CQ. Model 3 in Table 4 shows a significant interaction between cultural distance and CQ ( $\beta$  = 0.17, p < .05). We plotted the interaction at -1SD and +1SD of CQ and computed simple slopes (Preacher et al., 2006). Fig. 2 shows

**Table 4**Study 2 – Results of Heteroskedasticity-Consistent Regression Predicting Voice.

Age         -0.00         -0.01         -0.01           Gender         0.26         0.22         0.28           Org Tenure         -0.05**         -0.05**         -0.05**           English Self-Efficacy         0.24*         0.24*         0.26*           Cultural Experience         0.03         0.07         0.08           Gender Diversity         -0.24         -0.28         -0.34           Age Diversity         0.00         0.00         0.00           Interpersonal Liking         0.63**         0.59**         0.57**           Sup Support for Diversity         -0.04         -0.01         -0.01           Cultural Distance (CD)         -0.17**         -0.18**           Cultural Intelligence (CQ)         0.09         0.15           CD × CQ         0.17*           Voice Instrumentality         7.16**         6.94**         7.65**		Model 1	Model 2	Model 3	Model 4
Cultural Distance (CD) $-0.17^{\circ\circ}$ $-0.18^{\circ\circ}$ Cultural Intelligence (CQ) $0.09$ $0.15$ CD $\times$ CQ $0.17^{\circ}$ Voice Instrumentality	Gender Org Tenure English Self-Efficacy Cultural Experience Gender Diversity Age Diversity Interpersonal Liking	0.26 -0.05** 0.24* 0.03 -0.24 0.00 0.63**	0.22 -0.05** 0.24* 0.07 -0.28 0.00 0.59**	0.28 -0.05** 0.26* 0.08 -0.34 0.00 0.57**	-0.01 0.50* -0.05** 0.18 0.03 -0.51* 0.00 0.55**
R-square 0.21 0.25 0.26 R-Square Change 0.04 0.01	Cultural Distance (CD) Cultural Intelligence (CQ) CD × CQ Voice Instrumentality F R-square	7.16**	-0.17** 0.09 6.94** 0.25	-0.18** 0.15 0.17*  7.65** 0.26	-0.08 -0.17** 0.13 0.13 0.35** 8.21** 0.30 0.04

 $<sup>^{</sup>a}0 = \text{Female}, 1 = \text{Male}; p < .05.$ 



**Fig. 2.** Study 2 – Interaction of Cultural Distance and CQ Predicting Voice Directed at Supervisors (Speaking Up).

that cultural distance was negatively related to voice for those with low CQ (simple slope: -0.29, p < .00), but not for those with high CQ (simple slope: -0.07, ns). Thus, Study 2 replicates and extends the buffering role of CQ on peer-directed voice in Study 1 to voice directed at supervisors, providing further support for H2.

H3 predicted first-stage mediated moderation where perceived instrumentality of voice mediates the interactive effect of cultural distance and CQ on voice. Results in Model 3 of Table 5 show that CQ moderated the relationship between cultural distance and perceived voice instrumentality ( $\beta=0.12,p<.05$ ). The form of this interaction was consistent with our expectations. Cultural distance was negatively related to perceived voice instrumentality for those with low CQ (simple slope: -0.09, p<.10), but not for those with high CQ (simple slope: 0.06, ns). Further, Model 4 in Table 4 shows that perceived instrumentality of voice was positively related to voice behavior ( $\beta=0.35, p<.01$ ). Taken together, these results provide initial support for a mediated moderation model.

We next tested for mediated moderation (H3) using Edwards and Lambert (2007) procedures. Results in Table 6 show that the effect of

a Supervisor-rated.

<sup>&</sup>lt;sup>b</sup> Self-rated.

c Peer-rated.

 $<sup>^{</sup>d}$  0 = Female, 1 = Male.

<sup>\*</sup> p < .05.

<sup>\*\*</sup> p < .01.

<sup>\*\*</sup> p < .01.

**Table 5**Study 2 – Results of Heteroskedasticity-Consistent OLS in Predicting Perceived Voice Instrumentality.

	Model 1	Model 2	Model 3
Age	0.00	0.00	-0.00
Gender	$-0.67^{**}$	$-0.67^{**}$	-0.63**
Org Tenure	-0.02	-0.02	-0.02
English Self-Efficacy	0.23**	0.23**	0.24**
Cultural Experience	$0.16^{\dagger}$	0.16*	$0.17^{*}$
Gender Dissimilarity	0.55**	0.55**	0.51**
Age Dissimilarity	0.00	0.00	0.00
Liking of Subordinate	0.07	0.07	0.06
Sup Support for Diversity	0.22**	0.22**	0.22**
Cultural Distance (CD)		-0.01	-0.02
Cultural Intelligence (CQ)		0.02	0.06
$CD \times CQ$			$0.12^*$
F	11.79**	9.62**	8.90**
R-Square	0.34	0.34	0.35
R-Square Change		0.00	0.01

 $<sup>^{</sup>a}0 = \text{Female}, 1 = \text{Male}; p < .05.$ 

**Table 6**Study 2 – Results of Mediated Moderation Analysis for H3.

	Stage		Effect		
	First Stage	Second Stage	Direct	Indirect	
Low CQ (-1SD) High CQ (+1SD) Difference between High and Low CQ)	-0.10** 0.06 0.16**	0.34** 0.25 -0.09	-0.27** -0.09 0.16**	-0.03** 0.01 0.04*	

cultural distance on voice, via perceived instrumentality, differed significantly as a function of CQ. Specifically, the indirect effect of cultural distance on voice, via perceived voice instrumentality, was significant only for those with low CQ ( $\beta=-0.03,\ p<.01$ ), but not for those with high CQ ( $\beta=0.01,\ ns$ ). Additionally, the difference in indirect effects for low and high CQ was significant ( $\Delta$   $\beta=0.04,\ p=.05$ ). As expected, analysis provides no evidence supporting a rival second-stage moderated mediation model ( $\Delta$   $\beta=-0.09,\ ns$ ). Thus, results show full support for H3.

## 9. General discussion

Our research was motivated by the conundrum of voice in the context of cultural diversity. Although a multicultural workforce offers potential organizational benefits based on diverse perspectives of employees, we argued that cultural differences would inhibit voice because diversity makes norms for voice more difficult to detect and interpret. More importantly, we proposed that individual's CQ would mitigate the negative effects of cultural distance on voice. Our results support the moderating role of CQ for voice directed at peers (Study 1) and voice directed at supervisors (Study 2). Furthermore, Study 2 demonstrated that perceived voice instrumentality mediated the interactive effect of cultural distance and CQ on voice. These results suggest that CQ is an important capability that mitigates the challenges of speaking up to culturally diverse voice targets by strengthening individual's perceptions that their voice will make a difference. Below, we discuss three key implications of our findings for research on voice.

## 9.1. Theoretical contributions and implications

First, our study examines the neglected context of culture in influencing voice behavior (Bashshur & Oc, 2015; Edwards & Greenberg,

2009). Whereas research has shown that cultural differences in values such as power distance affect voice (e.g., Botero & Van Dyne, 2009; Huang, Van de Vliert, & Van der Vegt, 2005), our research directs attention to how the multicultural context affects voice. This focus on the "dynamics of culture in intercultural encounters" (Gelfand, Erez, & Aycan, 2007) is timely and important given the increasingly global workplace and the conundrum of cultural diversity (Shore et al., 2009).

Drawing on Stone-Romero et al.'s (2003) arguments on the effects of culture on role behaviors, we predicted that cultural distance with voice target(s) would be negatively related to voice directed at peers (Study 1) and supervisors (Study 2). Our results were mixed across the two studies. While we found the predicted negative relationship for voice directed at the supervisor (H1b: Study 2), we did not find a significant effect of cultural distance on voice directed at peers (H1a: Study 1). This finding could suggest that cultural distance matters more for leader-directed voice (e.g., Troster & van Knippenberg, 2012) than for peer-directed voice due to higher stakes in leader-member relationships. We recommend that more replication studies should be conducted to compare effects of cultural distance on peer-directed versus leader-directed voice.

Second, our research highlights the novel and important role of CQ for voice and acknowledges that voice requires skills and abilities. As with other forms of proactive behaviors, voice often lacks explicit role prescriptions or rules (Grant & Ashford, 2008). Unless individuals have the requisite skills and abilities to speak up appropriately, the risks of voice will likely cause people to remain silent. For instance, Grant (2013) demonstrated that individuals with emotional regulation knowledge are more likely to voice, and their voice is more likely to result in favorable evaluations. We extend this new stream of research and examine CQ as a capability that has direct relevance to multicultural settings. Across both studies, we find clear and consistent interactions – CQ attenuates the negative effect of cultural distance on voice, both for voice targeted at peers and voice targeted at supervisors. This finding adds to emerging research that recognizes that individual skills and abilities can facilitate or hinder voice behavior.

Third, our research sheds light on a mediating mechanism that provides one explanation for how the novel interactive effect of cultural distance and CQ influences voice. Our mediated moderation result demonstrates that perceived voice instrumentality is important in explaining why skills and abilities such as CQ affect voice behavior. This makes intuitive sense because voice can be costly. Without some degree of certainty that one's voice will be heard and make a difference, individuals are unlikely to speak up. We believe that perceived instrumentality belief is a promising cognition that may also predict other proactive behaviors lacking in clear rules or prescriptions. This could help to address our lack of understanding about why knowledge, skills, and abilities matter to proactive behaviors (Grant & Ashford, 2008).

## 9.2. Strengths, limitations and future research directions

We examined the effects of cultural distance and CQ on speaking out to peers and speaking up to supervisors to assess the generalizability of our results across these two types of voice. Our findings suggest that while more research is needed to ascertain the effect of cultural distance on peer-directed voice, the interactive effect of cultural distance and CQ on voice is robust across the two targets of voice. Further, we used multiple source research designs to minimize common method bias concerns. In Study 1, voice behavior was assessed by team members; cultural distance was calculated based on secondary data on national cultural values (Hofstede, 2001); and CQ was self-reported. In study 2, voice behavior was assessed by supervisors; cultural distance was computed; CQ was assessed by peers; and perceived voice instrumentality was self-reported.

At the same time, our study has several limitations. First, our use of national-level indices of cultural values does not account for intra-cultural variation in values and may capture other national differences

<sup>\*\*</sup> p < .01.

such as language. Future research could assess individual-level cultural values to avoid potential ecological fallacy and alternative explanations. To mitigate potential language confounds, we controlled for English language self-efficacy in Study 2. Results showed that employees with higher English language self-efficacy reported higher perceived voice instrumentality (r = 0.38, p < .00) and engaged in more voice behaviors (r = 0.25, p < .00). We urge future research to explore more deeply the interplay between language ability and CQ in affecting voice behaviors in culturally diverse contexts. An interesting question for instance, is whether language proficiency can compensate for a lack of CQ, and vice versa, in predicting voice. Another fruitful avenue is to explore cultural differences in voice norms – that is, how expectations of appropriate and effective voice behavior differ across cultures. This would help to substantiate our argument that voice norms differ across cultures and could also serve as a training tool to broaden global employee's repertoire of voice behavior.

Second, we examined the mediating role of perceived voice instrumentality in supervisor-subordinate dyads in Study 2, but not in the multicultural teams in Study 1. As such, we cannot conclude that perceived voice instrumentality explains the interactive effects of cultural distance and CQ on voice in team settings. Future research should test the mediating role of perceived voice instrumentality on voice in team settings. Future research could also consider other potential mechanisms to explain the effects of cultural distance on voice, including psychological safety – beliefs about the risks of voice (Kish-Gephart, Detert, Treviño, & Edmondson, 2009), and voice efficacy – beliefs about the capability to engage in voice behavior (Janssen & Gao, 2015).

Third, the cross-sectional design of Study 2 does not allow us to draw causal inferences. It is possible that culturally dissimilar employees who speak up develop higher CQ and higher perceived voice instrumentality or that greater voice behavior influences perceived voice instrumentality. These alternatives, however, are less theoretically sound and are not empirically supported by our data. Nonetheless, for stronger internal validity, scholars could use experimental designs to manipulate levels of cultural diversity, and longitudinal designs to assess constructs across multiple points in time.

Future research could also consider different types of voice. Recent research has demonstrated different nomological networks for constructive versus complaining voice (e.g., Chiaburu, Peng, & Van Dyne, 2015); promotive versus prohibitive voice (Chamberlin et al., 2017); prosocial voice, defensive voice, and acquiescent voice (Van Dyne, Ang, & Botero, 2003); and supportive, constructive, defensive, and destructive voice (Maynes & Podsakoff, 2014). For instance, while our study suggests that cultural diversity may dampen constructive voice, future research could assess whether cultural diversity could promote complaining, defensive, and destructive voice.

## 9.3. Practical implications

Organizations need to be aware that having a culturally diverse workforce does not necessarily provide the benefits of culturally diverse perspectives. Here, we offer two broad practical implications. First, organizations should recognize that cultural diversity could impede voice because of uncertainty surrounding the norms and consequences of voice. To address this challenge, supervisors should develop clear norms, provide training to facilitate effective voice behaviors, and reward those who offer constructive suggestions.

Second, the accumulating evidence on the predictive validity of CQ suggests that organizations would benefit by selecting employees who are not just technically competent, but also culturally intelligent. In addition, organizations should also invest in CQ training to increase employee's (1) confidence in inter-cultural interactions; (2) understanding of how culture influences behavior; (3) sense-making of unfamiliar cultural situations, and (4) flexibility in expressing voice that is culturally appropriate (see Raver & Van Dyne, 2018, for a review of research on developing CQ).

## 10. Conclusion

We argue that while cultural diversity increases the value of employee voice to organizations, it could also dampen the display of voice. To address this conundrum, we propose that CQ is an important capability that can mitigate the negative effect of the cultural distance between the voicer and the voice target on voice, and that this effect is mediated by perceived voice instrumentality. Results from two multiple-source studies support this key argument. We hope that our research stimulates future studies that deepen our understanding of voice in culturally diverse settings and that research continues to help organizations reach the potential benefits of the culturally diverse workforce.

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