Developing Cultural Intelligence and Empathy Through Diversified Mentoring Relationships

Abstract

Given increasing globalization and the foreign-born workforce characterizing many organizations around the world, managers are increasingly called on to effectively manage a culturally-diverse workforce. One way to increase the cultural intelligence (CQ) and empathy of managers was proposed by Ragins (1995; 1997), who indicated that mentors in diversified mentoring relationships (DMRs) may become more culturally intelligent and empathic as a result of exposure to the situations and challenges faced by their lower power protégés. To test this proposition regarding the efficacy of DMRs, a quasi-experimental design was employed using an experiential training intervention involving DMRs between primarily white, affluent student mentors and newly resettled refugees to the U.S. Grounded in the theoretical foundations of contact theory (Allport, 1954) and DMRs (Ragins, 1995, 1997), our findings suggest that DMRs of even limited duration may be influential in increasing CQ and empathy.

Keywords: cultural intelligence, empathy, diversified mentoring relationships
Developing Cultural Intelligence and Empathy Through Diversified Mentoring Relationships

The world is global, diverse, and “flat.” Increases in international trade, more immigrants and refugees flowing across borders, and changes in demographics within countries mean the workplace is diverse, too, in terms of customers and employees. Legally-admitted immigrants, refugees, temporary residents, and undocumented immigrants comprise the ranks of foreign-born workers, and their employment can lead to problems with communication due to a lack of necessary language skills; misunderstandings due to different cultures and norms; and divisions, cliques, and lack of cohesion among staff members (Madera, Neal, & Dawson, 2011). However, research indicates having the skill to manage diversity is important (Middleton, 2014).

At a macro level, racially-diverse firms have been found to perform better financially than homogenous firms (Andrevski, Richard, Shaw, & Ferrier, 2014). Managers in racially-diverse firms leveraged the benefits of diversity by encouraging individuals with diverse knowledge bases to share their knowledge and information, which subsequently increased their organizations’ ability to find and exploit competitive opportunities. These diverse work organizations competed effectively by shortening the time and reducing the development costs necessary for bringing new products and services to market. However, it was not diversity in and of itself that led to better financial performance; it was the ability to recognize, appreciate, and leverage the power of the diversity of the organization, which might not come naturally. For example, in the construction industries in Singapore and Australia, supervisors have been found to hold negative attitudes and bias against workers with low English skills (Loosemore & Lee, 2001). Discrimination against foreign-born workers has been found due to their names, accents,
where their experience was gained, and their countries of origin (Dietz, 2010). Given these findings, managers must consider their own biases against and/or appreciation for, diverse populations of workers. Coincidental with this need is the growing importance of cultural intelligence training to prepare managers for success in multicultural workplaces (MacNab, Brislin, & Worthley, 2012).

As diversity and its attendant challenges are characteristic of the managerial environment into which graduating students enter, preparing them for success in this area is increasingly important. These soon-to-be managers and leaders, whose effectiveness will be assessed based, at least in part, on their success in working with diverse groups and ensuring the success of their multicultural direct reports and teams, therefore require skill in this area, and it is incumbent on business schools to meet this challenge. The realism of a learning situation is linked to learning effectiveness. Having students actually perform a “skill in as realistic situation as possible” and explicitly examining the students’ performance produces the best learning results (Mintzberg, 1973, p. 188). Further, leadership and management competence “can be effectively developed through active and experiential learning” (Bruni-Bossio & Willness, 2016).

Given the importance of managing a culturally-diverse workforce, and the need to develop related skills among students, we examined the impact of a teaching intervention in the form of diversified mentoring relationships (DMRs) and whether it would increase the cultural intelligence (CQ) and empathy of management students acting as mentors. DMRs are those in which the mentor and protégé differ in terms of group membership—membership associated with status differences in society and organizations resulting in “minority” and “majority” labeling. These differences include race, ethnicity, gender, class, disability, national origin, and sexual orientation (Awbrey, 2007). In this teaching intervention, management students (mostly
white U.S. born students attending a predominantly white private four-year college) were assigned to mentor refugees from Africa, the Middle East, South Asia, and South America who were recently resettled in the United States.

Research has demonstrated positive outcomes for minority protégés in DMRs (Eby, Allen, Evans, Ng, & DuBois, 2008), but no empirical studies have examined outcomes for the mentors with race/ethnicity and class privilege; mentor outcomes in any type of mentoring relationship have largely been ignored, to the degree that the mentor has been called a “missing person” (Feldman, 1999). That mentoring relationships are reciprocal in nature, with information flowing both ways between mentor and protégé (Kram, 1985; Allen, 2007), raises the question as to whether the management student mentors in this study might themselves experience positive outcomes.

Ragins (1997) proposed that mentors in DMRs “should obtain more knowledge, empathy, and skills relating to interacting with individuals from different power-related groups” (p. 508), but never tested her propositions. Majority mentors in DMRs, given their increased contact with the everyday lives of minority protégés, might be expected to demonstrate more empathy and enhanced CQ when interacting with their protégés and other minorities in the workplace. Contact theory (Allport, 1954) provides the theoretical basis for why Ragins (1997) predicted more empathic and culturally-intelligent majority mentors in DMRs.

The following pages present our study on a teaching intervention in the form of DMRs on management students’ diversity-related skills in terms of CQ and empathy. A review of the DMR literature builds the theoretical basis for hypothesizing DMR effects. The methodology, a quasi-experimental design, follows. Results and discussion are then presented.

**Literature**
Contact Theory and Diversified Mentoring Relationships

Successfully navigating a culturally-diverse, organizational sea requires a type of social behavior influenced by both individual attributes and contextual/situational factors (Lewin, 1951; Bond, 2003; Deutsch, 2007). Some argue that researchers have focused too heavily on individual differences in social relations, ignoring the “social reality in which the subject is participating” (Pippert, 2007, p. 11), such as degree of contact among participants (Allport, 1954). Contact theory (Allport, 1954) explains that as the degree of contact between people of different backgrounds increases, relations and understanding will increase if certain contextual/situational conditions are present.

These conditions have been left to interpretation and exploration, a general critique of Allport’s theory (MacNab et al., 2012). Nevertheless, researchers have focused on four conditions: 1) A reasonable degree of status equity between the participants; 2) establishment of shared goals between the parties; 3) a meaningful degree of direct, interpersonal contact without competition; and 4) support from the administration, leaders, or other influencers associated with those engaging in contact. Thus, contact theory specifies that increased face-to-face contact between culturally-different parties in isolation does not in and of itself lead to increased understanding. Contact is necessary but not sufficient. Allport (1954) specified that contact must be more than casual (e.g., seeing a member of the out-group in one’s grocery store); it must reach the level of “knowledge about and acquaintance with members of minority groups” (p. 267). The participants must not be in a relationship where the roles involve one having more status than another, such as in the employer-employee or teacher-pupil roles. Allport (1954) noted that “contact must reach below the surface in order to be effective in altering prejudice. Only the type of contact that leads people to do things together is likely to result in changed attitudes” (p.
276). Thus, engagement in cooperative striving toward a goal may engender solidarity and reduce negative perceptions.

Extant empirical literature (Wagner, Tropp, Finchilescu, & Tredoux, 2008) supports Allport’s (1954) theory that mutual contact among equal status participants, in pursuit of shared goals, supported by authorities reduces preconceived notions and is conducive to shaping positive intergroup attitudes (Meyer & Warren-Gordon, 2013). Positive contact increases empathy toward the outgroup and acceptance of its perspective, and the effects are far greater for privileged groups than for lower-status groups (Pettigrew et al., 2011). In the case of formal mentoring relationships, all of Allport’s conditions are met with the exception that mentors and protégés are seldom of equal status in a mentoring relationship. However, recent research confirms that the four conditions, while beneficial, are not necessary for demonstrated positive effects of intergroup contact (Pettigrew, Christ, Wagner, & Stellmacher, 2007; Pettigrew & Tropp, 2006; Pettigrew, Tropp, Wagner, & Christ, 2011). Thus, with direct interaction between mentors and protégés, working on shared goals with the blessing of those in the organization, contact theory would predict that DMRs would increase the empathy and CQ of the mentors.

**Empathy**

Ragins (1995; 1997) hypothesized that mentors partaking in DMRs should increase in empathy. The empathy literature has traditionally divided empathy into an emotional and a non-emotional or cognitive form (Fuchsman, 2015). Cognitively, an empathic person intellectually identifies with another person’s perspective, including the other’s thoughts, actions, and experiences (e.g., Dymond, 1949). In the emotional form of empathy, an empathic person has a visceral, affective reaction (e.g., concern, compassion) as a result of another’s emotional condition (Davis, 1983). Consistent with more recent studies (e.g., Batson, Eklund, Chermok,
Hoyt, & Ortiz, 2007) we refer to this form of empathy as empathic concern, and to the cognitive form as perspective taking. While perspective taking has been thought to be a precursor to empathic concern (Batson, 1987, 1991; Batson, et al., 2007), more recent evidence suggests that empathic concern precedes the development of perspective taking (Van Lissa, et al., 2014).

How does being in a mentoring relationship with someone so different from oneself develop perspective taking, particularly given that individuals are more likely to empathize with those most similar, such as within the same culture, than with others (Nelson, Klein, & Irvin, 2003; Fuchsman, 2015)? Evidence can be found in studies on intergroup relations in which empathy has been used as a precursor to reducing prejudice including the negative attitudes individuals have toward social groups. When individuals from a group engage in perspective taking, they may perceive more similarities and less threat, which then reduces prejudice. In a DMR, mentors from one social group interact with protégés from another social group, such as a different cultural group. Top management approval of these mentoring relationships may reduce mentors’ feelings of threat due to the belief that administrators/authorities would not put mentors in harm’s way. Additionally, DMRs in work organizations typically involve some type of common goal, such as getting protégés ready for promotion opportunities or leadership roles, and/or retaining protégés in the organization (McCarty, Hukai, & McCarty, 2005). As a result of having to work cooperatively, people from different social groups may increase in empathy toward individuals in the outgroup (Aronson, Blaney, Stephan, Sikes, & Snapp, 1978; Aronson & Bridgeman, 1979; Aronson & Patnoe, 1997).

When mentors begin to recognize similarities with protégés, biases and assumptions about protégés may be disconfirmed. Mentors may begin to “perceive that they themselves and members of the other group share a common humanity and a common destiny” (Stephan &
Finlay, 1999, p. 735). These thought changes might be at odds with prior attitudes toward the protégé and her or his social group, thus causing cognitive dissonance (Festinger, 1957). Cognitive dissonance theory would predict mentors experiencing such dissonance may change their attitudes toward the previously disliked or feared outgroup, thus leading to increased understanding and the ability to identify with their protégés’ perspective, including their thoughts, actions, and experiences (referred to as situational perspective-taking). “The feelings of threat engendered by concerns over differences in values, beliefs, and norms, misperceptions of realistic conflict, and anxiety over interacting with members of the outgroup may all be dissolved by learning to view the world from the perspective of outgroup members” (Stephan & Finlay, 1999, p. 735).

This use of DMRs to increase the empathy of management students is not the first time that researchers have attempted to increase the empathy of research participants. Empathy training interventions have been used for professionals such as teachers, physicians, social workers, and police officers (Lam, Kolomitro, & Alamparambil, 2011). Overall, researchers have determined that empathy training programs are effective (Lam, et al., 2011; Van Berkhout & Malouff; 2015). In a meta-analysis of 19 empathy training studies using randomized control trials, Van Berkhout and Malouff (2015) found that empathy training was efficacious, with overall effect sizes indicating a moderate effect from training.

In another study on the effectiveness of empathy training, Lam, et al. (2011) examined 29 articles reporting the results of the effectiveness of various empathy training methods/programs. From this review, Lam et al. (2011) concluded that regardless of the training method used, empathy was generally trainable and the most commonly used measure of empathy was Davis’ Interpersonal Reactivity Index (IRI) (1983). The IRI measures the tendency, rather than the
capacity, to empathize (Davis & Franzoi, 1991). Empathic capacities are thought to be universally acquired in individuals by their adolescence. However, simply having the capacity does not mean it will be used. Thus, the IRI measures the likelihood of one using his or her capacity to empathize. For example, the IRI has been used to measure the change in empathy among medical students as empathy is believed to decline during medical school (Quince, Parker, Wood, and Benson (2011).

Experimental studies on the antecedents of empathic concern demonstrated that valuing the other’s welfare led to increased perspective taking, which was, in turn, positively related to empathic concern. Mentors in DMRs may begin valuing their protégés as a result of more positive, cooperative, social interactions with them (Batson, et al., 2007). The research on intergroup interactions suggests that mentors’ cognitions about their protégés may change with increased contact and the increased contact may lead to more positive feelings (valuing the protégé’s welfare), which may then lead to increased perspective taking. While individuals likely already have the capacity to take another’s perspective, interacting with others who are different may stimulate their likelihood of actually using their perspective taking skills. Hence, we hypothesize that:

H1: Participating in a diversified mentoring relationship will increase the mentors’ perspective taking.

It is unlikely that DMR participation will affect mentors’ empathic concern based on the research findings to date on intergroup relations programs. While such programs involve empathy to a greater or lesser extent (Stephan & Finlay, 1999), they focus on perspective taking—to get the in-group to take the role of the out-group (and vice versa) so they can learn to view the conflict or world from the perspective of people on the other side (Cikara, Bruneau, &
Saxe, 2011). While not necessarily explicitly stated, these programs, from an examination of the materials and methodologies used, were focused on cognitive empathy. None focused on or hypothesized that increased contact would lead to increased emotional empathy. Thus, we hypothesize that:

H2: Participating in a diversified mentoring relationship will have no relationship with the mentors’ empathic concern.

While studies of the effectiveness of these inter-group programs (conflict resolution, prejudice reduction, multicultural education programs) on empathy show some promising results (e.g., Paluck, 2009; Bruneau & Saxe, 2012), studies on the effectiveness of inter-personal programs, like that of a DMR, and their effect on empathy, have not been conducted (Stephan & Finlay, 1999). Thus, this study on the effect of DMRs in which members of two different cultural groups are brought together will help build the empirical repository of results regarding interpersonal contact and its relationship with both cognitive and emotional empathy.

Cultural Intelligence

Cultural intelligence (CQ) refers to one’s ability to interact effectively with those from different cultural backgrounds and in different cultural contexts (Brislin, Worthley, & MacNab, 2006; Ng & Earley, 2006; Ang & Van Dyne, 2009). Four dimensions of CQ have been identified and underlie the development process: cognitive and meta-cognitive (e.g., learning strategies and cultural sense making), motivational (e.g., cultural empathy and self-efficacy), and behavioral (e.g., ability to act and respond in a culturally appropriate manner) (Earley & Ang, 2003). Researchers suggest that individuals with higher CQ achieve greater performance, suffer lower burnout, experience greater adjustment and well-being, cope better with conflict, and develop greater trust and cooperation in culturally-diverse contexts (Kim, Kirkman, & Chen, 2009;
CQ is also associated with effective negotiations (MacNab, 2012), suspension of judgment (Brislin et al., 2006), and reduced ethnocentrism (Triandis, 2006). Because culture is not exactly “static and holds sub-cultural nuances,” CQ capacity facilitates cultural interactions, allowing for spur of-the-moment modifications (MacNab, 2012, p. 68).

While the need for preparing more culturally-intelligent future managers who can effectively manage diversity exists, specific models for teaching students how to be more culturally intelligent are few (MacNab et al., 2012). Researchers are investigating the process through which CQ is developed (Ang & Van Dyne 2009; Shannon & Begley, 2009; MacNab et al., 2012) and propose that experiential training methods are most effective for CQ development (Ng, Van Dyne, & Ang, 2009; Rosenblatt, Worthley, & MacNab, 2013). Such methods have been shown to be effective for cross-cultural training (Goldstein & Smith, 1999) – training focused on a single culture and information-based, as in preparing managers for expatriate assignments.

Previous research suggests that the format and content of training interventions may determine which dimensions of CQ are likely to be increased. In terms of increasing cognitive CQ – knowledge of how cultures are different or similar in terms of cultural norms, practices, customs, etc. – researchers suggest that academic courses and learning cross-cultural management are most effective (Earley & Peterson, 2004; Van Dyne, Ang, & Koh, 2008; Rehg, Gundlach & Grigorian, 2012; Eisenberg et al., 2013). Cross-cultural management courses focus on students’ knowledge acquisition regarding different cultures’ religious, business, societal, and other norms, customs and practices.

To increase metacognitive CQ (a consciousness of the cognitive processes and mental maps used for acquiring cultural knowledge), Eisenberg et al. (2013) argue that these cross-
cultural courses may be effective because both cognitive and metacognitive CQ deal with mental processes. Reichard et al. (2015) found that simulation-based, generalized cross-cultural classroom training was effective for increasing metacognitive CQ. However, when cross-cultural courses are focused on a particular culture and/or country, they may not provide metacognitive skill development (Earley & Peterson, 2004). Additionally, experiential training methods (MacNab, 2012) and intercultural contact (as measured by number of countries lived in or total length of time living abroad) (Kim & Van Dyne, 2012) are effective for increasing metacognitive CQ.

These same experiential methods and intercultural contact have also been found to be effective for increasing behavioral CQ (Kim & Van Dyne, 2012; MacNab, 2012), as have lecture-based training on a particular culture (Rehg, Gundlach & Grigorian, 2012) and simulation-based cross-cultural classroom training not focused on a specific culture (Reichard, et al., 2015); though the effect for this training was quite small and “much smaller than the changes in cultural competence than one might expect from an actual international experience” (p. 476).

Intercultural contact is effective in increasing motivational CQ (Kim & Van Dyne, 2012), characterized by feeling intrinsically motivated and self-efficacious regarding handling the demands of cross-cultural interactions (Imai & Gelfand, 2010). Additionally, pairing low and high motivational CQ individuals has been suggested as a training method (Peng, Van Dyne, & Oh, 2015). Cross-cultural training on a specific culture using lecture was not found to be effective for increasing motivational CQ (Rehg, Gundlach & Grigorian, 2012).

Social learning theory (Bandura, 1977) states that the most effective way to learn is via concrete experiences such as having intercultural encounters. Such interactions provide learners with the opportunity to observe culturally-different people and their own reaction to them
Earley & Peterson, 2004). In the case of DMRs, mentors experience first-hand cultural norms and practices different from their own. They may mimic or model these culturally-different behaviors in interactions with their protégés in order to abide by the norms appropriate in the protégé’s culture, resulting in enhanced knowledge of the others’ culture (Johnson, Lenartowicz, & Apud, 2006; Engle & Crowne, 2014). Additionally, in this research study, student mentors were engaged in a course on managing human capital. As part of that course, students learned how to hire, train, and manage the performance of employees. The “employees” in the course were their protégés. As such, we hypothesize that:

H3: Participating in a DMR will increase the mentors’ cognitive CQ.

The cognitive component of CQ deals with the ‘head’ – that is, it includes awareness, self-awareness, and cultural knowledge. Those in the field of CQ training suggest this component of CQ should be the first step in developmental training (Thomas, 2006). This component also includes a metacognitive aspect that relates to thinking about thinking (Earley & Peterson, 2004) or cognitive control (Ang et al., 2007). Metacognitive CQ refers to an individual’s process of gaining and using cultural knowledge (Ang et al., 2007), such as questioning cultural assumptions when in a new cultural environment or questioning stereotypes associated with specific cultures (MacNab et al., 2012).

Engle and Crowne (2014) found that even short-term international experiences of 7-14 days positively increased the metacognitive CQ of students participating in service learning projects abroad. Via interacting with locals and observing cultural norms and modeled behaviors, those experiencing another culture make decisions regarding appropriate behavior based on insights garnered from reflection and contemplation (Shim & Paprock, 2002). Thus, given the dimensions of the DMRs in this study in which student mentors – in close, structured, and
intense contact with their protégés over a four-week period – likely begin to challenge the assumptions, stereotypes, and thinking they had about their protégés and their cultures (Earley & Peterson, 2004; Pettigrew & Tropp, 2000), we hypothesize that:

H4: Participating in a DMR will increase the mentors’ metacognitive CQ.

If cognitive and metacognitive CQ refer to the ‘head,’ the behavior component of CQ refers to ‘action’ – the ability or skill to consciously adjust one’s behaviors necessary for interacting successfully in a new cultural environment. An individual with high behavioral CQ is aware of where and when new behaviors are needed and can execute these effectively (MacNab et al., 2012). Besides increasing their knowledge and understanding of another culture, mentors in DMRs will likely learn what is and is not appropriate behavior in their protégés’ cultures. Mentors learn about culturally-appropriate behavior by observing and experiencing their protégés’ reactions to their own behaviors (e.g., when an unrelated male mentor reaches out to shake his female Muslim protégé’s hand) (Phillion, 2002). Mentors may learn to choose more appropriate behaviors to begin with and/or modify current behaviors to be in alignment with their protégé’s culture when necessary (Johnson, Lenartowicz, & Apud, 2006). Accordingly, we hypothesize that:

H5: Participating in a DMR will increase the mentors’ behavioral CQ.

Motivational CQ refers to the ‘heart’ or affective component of CQ – that is, to the level of perseverance related to cultural interactions (Earley & Peterson, 2004). Interacting with someone from another culture can be stressful, challenging, and tiring. Thus, one with higher levels of motivational CQ will be less likely to give up and instead will persist in attempting to successfully navigate turbulent cultural waters. While there is limited evidence of the impact of international experience on motivational CQ (Engle & Crowne, 2014), scholars believe that
individuals use all four components of CQ in unison (Ang, Van Dyne, & Koh, 2006; Ng & Earley, 2006). However, using all four components in unison does not mean they develop in unison. Motivational CQ may require a greater length of time to develop the resiliency necessary for engaging in challenging intercultural interactions. Additionally, because Ragins (1997) did not propose that mentors will gain more motivation to interact with those from lower power-related groups, we hypothesize that:

H6: There will be no relationship between participating in a DMR and the mentors’ motivational CQ.

**Methodology**

A quasi-experimental field design was used to test the above hypotheses, with the treatment consisting of participation in a formal, DMR. The treatment group consisted of business management students taking a human capital course at a Mountain West university in the U.S., who, individually or in pairs, were assigned to mentor a refugee from Africa, the Middle East, or South Asia recently resettled in the U.S. The refugees participated in a job-training program conducted by a resettlement agency, but on the university campus. The student mentors were primarily white and of higher socioeconomic status; all were assigned to mentor someone who differed in terms of age, race/ethnicity, class, religion/culture, and U.S. citizenship.

Seventy-three students partnered with 51 refugees (in either a 1:1 or 2:1 mentor-protégé relationship). The mentors ranged in age from 19-26 years old and included 17 males and 56 females. Students met with their protégés during scheduled class times to conduct required course assignments, which included conducting training for one’s protégé, a job interview with another mentor’s protégé for working an event, and a performance appraisal of one’s protégé’s
“performance” during the event. Over the course of four weeks, mentors spent an average of 17.5 hours in direct contact with their protégés.

While some may argue that students do not fit the definition of mentors as those with advanced expertise and knowledge (Kram, 1985), in the context of the American workplace, university students are substantially more experienced with and knowledgeable of expected work customs when compared with refugees new to the country. Student mentors were more experienced than average with all having completed over 500 hours of industry work experience and many having completed an additional 500 of management internship. The university students also received formal career development training in the form of workshops in resume writing and interview skills, formal career mentoring, and indoctrination into the etiquette and norms associated with the American workplace. An individual refugee’s higher education and/or work experience in his or her home country does not mitigate the student mentors’ qualifications.

As students could not be denied access to the experimental teaching approach (being a mentor in a DMR) in the human capital course, it was impossible to randomly assign students to a treatment versus control group as required in a purely controlled experimental design. The design employed here is called nonequivalent groups design; this name derives from the lack of random assignment to treatment or control and the result that although an effort is made to choose similar subjects for inclusion in the treatment and control, it is unlikely that they are as equivalent as in a random assignment situation. Such a quasi-experimental design is superior to simply examining pre- and post-test results for a single group when attempting to tease out a treatment effect (Trochim, 2006). The control group used in this study (n=96; 26 males and 70 females, who were 18-23 years old) consisted of students enrolled in corresponding sections of a
hotel and resort management course taught by the same instructor. Given the nature of the intervention it was impossible for the instructor to be blind to which group received it.

**Measures**

Both mentors and the control group completed surveys at the beginning of each course and again at the end. The survey included measures of CQ, empathic concern, perspective taking, and demographic variables (age, race, sex, time spent living abroad). All measures achieved acceptable alpha reliabilities, ranging from .77 to .89. Pre- and post-test alpha reliabilities for all measured variables are presented on the diagonal in Table 1.

The 20-item, multidimensional cultural intelligence scale (CQS) developed by Ang et al., (2007) was used. The scale taps the four CQ dimensions, metacognitive, cognitive, motivational, and behavioral, on a 7-point agreement scale from 1, strongly disagree, to 7, strongly agree. Six items measured cognitive CQ; four tapped metacognitive CQ; five measured motivational CQ; and five measured behavioral CQ. The scale’s authors note that specific dimensions have special relevance to different outcomes, with metacognitive CQ and cognitive CQ (questioning assumptions, adjusting mental models, and rich cultural knowledge schemas) positively related to making accurate judgments and decisions when situations involve cultural diversity. Evidence of convergent and discriminant validity has been demonstrated for the CQ measures (Ang et al., 2007).

Empathy was assessed using two subscales from Davis’ (1980) Interpersonal Reactivity Index (IRI). The seven-item empathic concern subscale of the IRI measures the tendency to experience “feelings of warmth, compassion, and concern for others” (Davis, 1983, p. 169). The seven-item perspective taking subscale of the IRI measures the tendency to assume the point of view of others in everyday life. Both subscales use a five-point scale ranging from (1) “totally
disagree” to (5) “totally agree.” Quince and colleagues (2011) report that the subscales indicate good psychometric properties, with reliability, as measured by Cronbach’s alpha, typically greater than 0.75. The subscales also show convergent as well as discriminant validity (Davis & Franzoi, 1991).

Given the nonequivalent groups design, it is helpful to know whether there were significant differences between the groups at Time 1. An ANOVA revealed no significant differences between the groups on any of the CQ and empathy measures. To quantitatively examine changes in empathy and CQ, a MANOVA was run using a multivariate general linear model with the difference scores for the CQ and empathy measures as outcomes; treatment group, sex and whether the mentorship occurred in a dyad or triad were entered as fixed factors, with months living abroad entered as a covariate. All those in the sample are required to study abroad, though not all had when they completed one or both courses. This variable also serves as a proxy for race as nearly all those in the sample who are non-white were international students.

It should be noted that since the design of the study was quasi-experimental, with membership in the treatment and control groups non-random, we followed the procedure recommended for non-equivalent group analysis. Program evaluation researchers routinely deal with such data and, in order to address non-random group assignment, reliability-correct the pretest outcome measure scores (Trochim, 2006). Doing so is a proxy for correcting pretest measurement error; since the amount of error is unknowable, correcting for measure reliability is the best available procedure (Trochim, 2006). The reliability-corrected scores are calculated using the following formula: Xadj = Xbar + r(X-Xbar), where Xadj is the reliability corrected score, Xbar is the uncorrected mean score for the variable being adjusted, r is the reliability
(Cronbach’s alpha) for the measure of that variable and X is the uncorrected score for each case (Trochim, 2006).

**Results**

Table 1 presents the partial correlations for all measured variables, with scale reliabilities on the diagonal.

**INSERT TABLE 1 ABOUT HERE**

In the multivariate test associated with the MANOVA, treatment group was the only significant fixed factor or covariate; thus, none of the control variables was significant. Significant between subjects effects were revealed for behavioral CQ and meta-cognitive CQ, with another significant effect for empathic concern. Table 2 presents the MANOVA results, including the mean difference scores for the outcome variables.

**INSERT TABLE 2 ABOUT HERE**

No support was found for H1, which predicted a treatment effect for perspective taking. The significant result for empathic concern fails to provide support for H2, which predicted no effect. However, this significant outcome caused us to examine these results more closely. The control group significantly declined in empathic concern over the measurement period while the treatment group’s empathic concern rose significantly. Thus it appears that the treatment group’s mentoring experience had positive and buffering effects.

H3 in which an increase in cognitive CQ was predicted for the treatment group relative to the control was not supported. H4, predicting an increase in metacognitive CQ received support, though not due solely to a rise in metacognitive CQ in the treatment group; there was also a decline for the control. H5, predicting a treatment effect on behavioral CQ, was supported. In this case there was also a decline in the control group, but there was a significant rise in the
treatment group. Finally, in H6 we predicted there would be no treatment effect for motivational CQ and no evidence to the contrary was found.

To sum up, three hypotheses (H4, H5, H6) received support and three were clearly not supported (H1, H2, and H3). H2, however, produced a significant effect that was not hypothesized and bears further examination.

**Discussion**

The workplace is increasingly diverse with more heterogeneous work groups; having the knowledge, skills, and abilities to work in diverse groups leads to higher performance (e.g., Rose & Palma-Rivas, 1998; Aghazadeh, 2004). While simply interacting with those who are different (in this case, by race/ethnicity, class, citizenship status, education, and language) provides the opportunity to develop sensitivity, knowledge, and empathy, the intimacy and friendship characteristics of the mentoring relationships (Kram, 1985) mean that mentors in diversified mentoring relationships may be in a better position to develop those diversity skills (Ragins, 1997), particularly if the relationship is of a more substantial duration than in this study.

Our research study examined Ragins’ (1997) propositions regarding the impact of DMRs and the influence of contact (Allport, 1954) on the mentors’ diversity management skills, operationalized as CQ and empathy. Importantly, we performed this examination by introducing a DMR teaching intervention in an undergraduate course on managing human capital. It was hoped that this realistic, experiential approach would enhance student participants’ CQ and empathy, both of which will be required of them when they become managers of a multicultural workforce. While the concept of CQ is typically applied to cross-national contexts, it applies equally to domestic contexts characterized by cultural diversity (MacNab et al., 2012). It is precisely this type of diversity of employees, and the life experiences they bring to bear on the
workplace, that highlights the importance of building managers’ cultural intelligence and empathy.

Ragins (1997) surmised that mentors could build empathy and develop communication skills that cross ethnic, racial, gender, and class lines. Our data provide the first support for Ragins’ proposition – a positive relationship between DMRs and CQ. This support comes in the form of the significant effects we found for behavioral and meta-cognitive CQ. Cultural competence is increasingly critical given multicultural work teams, departments, and communities and the mentorship experience the treatment group received resulted in a significant skill increase in this area.

However, mentors in these DMRs did not increase in their perspective taking relative to those in the control group, despite the theoretical logic behind Ragins’ (1997) proposition. This non-significant finding comes despite a small but significant rise in perspective taking among the mentors (t=2.504, p=.015) and no change in the control group (t=0.848, p=.399). The DMRs the mentors experienced did not sufficiently help them get outside of themselves and their own challenges to see the world through their protégés’ eyes. We believed that meeting and meaningfully interacting with a refugee from an area in crisis would have put a spotlight on the privileged lives these college students lead and enable them to see the world via a lens through which they would not otherwise have looked. However, the refugee protégés in the program share the difficulties they have endured to widely differing degrees, so some mentors may not have learned as much about their protégés’ worldviews and how they developed as did others.

The significant finding for empathic concern was a pleasant surprise, despite this relationship not being hypothesized. The decline in empathic concern among the control group during the measurement period could be an artifact of when the post-treatment measurement
took place. Rather than administering the post-test immediately following the four week mentorship experience, we did so at the end of the course as students worked on projects and papers and prepared for final exams. Perhaps their impending exams and other major due dates caused the participants to experience great stress and had the effect of concentrating their thoughts on their own problems. Such an effect could explain the drops in empathic concern among the control group and could have also dampened the small, but significant positive effect in the treatment group. This result points to a buffering effect that may exist from participating in the mentorship relationship. Even though the stresses and problems of the students in the treatment group were front and center, they may have been somewhat mitigated by the memory of what their protégés faced working to make new lives for themselves in the U.S. More data is needed to explore this finding further. It would also be interesting to explore whether moving the post-test administration from the final exam period would mitigate against an erosion or dampening of empathic concern.

The findings for H1 and H2 support the notion that empathic concern is the precursor to perspective taking (Van Lissa, et al., 2014). We found no treatment effect on perspective taking; it may be that the taking the perspective of a refugee, who may have lived for years in a refugee camp before being resettled in the U.S., was too big a leap for the students to take. Their imaginations may not have permitted them being able to fathom their protégé’s thoughts, actions, and experiences, which are so far removed from their own life experiences.

Despite the time the members of the treatment group spent with their protégés, no effect was found for cognitive CQ. The lack of an effect was not surprising; though the mentors may have learned something about their protégés’ cultures, such learning was not the focus of the mentoring relationship, nor is a DMR the most effective intervention for triggering enhanced
cognitive CQ. Rather, the intervention’s purpose was to aid the protégé in integrating into the U.S. workplace. Hence, it appears the mentors did not learn enough about the protégés’ cultures, let alone cultural differences in terms of customs, traditions, and practices, to move the needle on cognitive CQ.

A positive treatment effect was predicted for metacognitive CQ and one was found, though the effect was not driven solely by an increase in the treatment group. Those with high metacognitive CQ “are consciously aware of others’ cultural preferences…[and] they also question cultural assumptions and adjust their mental models during and after interactions” (Ang et al., 2007, p. 338). Experiential methods and intercultural contact are the most effective means of driving metacognitive CQ (Kim & Van Dyne, 2012), and our DMR intervention had elements of both approaches, which are also recommended for growing behavioral CQ (Kim & Van Dyne, 2012; MacNab, 2012). Via journal assignments and final presentations we have evidence that students in the treatment group came to question their own assumptions and update their schema as a result of the DMR.

Given the significant finding for behavioral CQ but not cognitive, it is interesting to note that cross-cultural training typically focuses on cognitive and metacognitive CQ as precursors of behavioral CQ (Thomas, 2006). Perhaps, treatment group participants felt, to some degree, an expectation on the part of the faculty that they would behave in ways that demonstrated that they valued their protégés. These behaviors were modeled by the faculty involved in both the refugee training and teaching the university students. Further, it may be that since grades were attached to mentor performance the mentors felt obligated to behave thusly. Cognitive dissonance (Festinger, 1957) can help explain why behavioral CQ might occur as antecedent to cognitive and/or metacognitive CQ. It may be that if the treatment period lasted longer, and the pressure to
engage in behaviors that demonstrate behavioral CQ was experienced by the treatment group for a longer period, they would have to update their schema and values to match what they may have experienced as mandated behavior. This possibility requires empirical testing.

Finally, from a CQ perspective, our expectation that the mentorship period would not be long enough to produce an increase in motivational CQ was borne out by these data. Though intercultural contact is required to drive motivational CQ, researchers have conceptualized such contact as the number of countries in which one has lived and/or the length of time spent living abroad. Although the DMR provided intercultural contact, it was not immersive and we found no significant difference between the treatment and control groups’ change in motivational CQ over the measurement period.

In addition to providing important information about the impact of DMRs on empathy and CQ, this study supports the notions that realistic, experiential teaching interventions can significantly affect student learning, particularly in management and leadership competence. The work the business students did with the refugees was made possible via a community partnership with a refugee resettlement agency. This relationship is an example of the new model of service learning based on partnership, not patronage; service is not performed solely for the sake of the experience of giving back to the community. Rather, the service itself facilitates and enables student learning that would not be possible to the same degree without the service component. This particular collaboration created in the classroom the kind of complexity students will face in the multicultural workplace.

**Limitations**

This study, as with all research, has limitations. First, we were unable to randomly assign participants to the treatment and control groups. The participants were students who were
enrolled in one of two courses, one of which was the treatment and the second the control. This limitation is mitigated somewhat by the statistical correction for measure reliability. The fact that our participants were students at a particular university is also a limitation; the degree to which they are representative of all college students or the larger population is unknown. External validity is also restricted by the academic rather than workplace setting in which these DMRs occurred. Finally, the fact that the student mentors were graded on the assignments executed through the refugee mentorship might have an effect on outcomes and should be investigated in future research.

Conclusion

This paper contributes to the literatures around management education, mentorship, diversity management, the development of cultural intelligence, and empathy. It is the first empirical test of Ragins’ (1997) propositions addressing the impact of DMRs on the mentor, and was performed via a DMR teaching intervention. The study points to the power of realistic, experiential teaching interventions and demonstrates that they may be facilitated by service learning partnerships with community organizations.

We found that a DMR experience positively and significantly affected the development of behavioral and metacognitive CQ among students in a course on managing human capital. Perhaps a larger sample would have produced a significant effect on cognitive CQ. It may also be that the mentorship experience could be deepened in ways that could enhance its impact. An alteration currently being implemented is the addition of a mentor visit to the protégé’s home. In the workplace, the duration of such a DMR program could also be lengthened, which might produce additional effects.
Newly resettled adult refugees have often lived in under-resourced refugee camps for an average length of time of 17 years (Haffejee & East, 2016; UNHCR, 2008). As a consequence, refugees arrive in the US with limited resources and experience multiple and complex challenges (such as little-to-no formal education, lack of English and job skills, as well as low literacy) even as they are trying to integrate into the American workforce (Haffejee & East, 2016). Additionally, refugee participants in this study were also diverse (e.g., race/ethnicity, culture, age, religion, and class) and hold the status of refugee. Because of these multiple categories of difference our study design had unequal status relationships. Thus, this study also provides the first evidence that equal mentor-protégé status may not be a precondition for cross-cultural contact to affect the mentor’s diversity-related skills.

Finally, we had mixed, and somewhat surprising results for empathic concern and perspective taking. Though hypothesized, no relationship was found between mentoring and perspective taking. Deepening the experience via the home visit may have a significant impact on this variable in the future. Empathic concern was, perhaps, the biggest surprise. There was a significant effect produced by a significant decline in the control group and rise in the treatment group. This backsliding merits further exploration to determine if it was an artifact of post-test administration timing. Last, we provide the first hints that the proposed relationship between perspective taking and empathic concern may not have merit. Even with our findings, this area of inquiry remains somewhat open and unresolved, and is important to explore further, particularly given the proliferation of crises around the world that are displacing millions of people who must make new homes in new countries and the many foreign-born workers who end up in low pay, low status jobs. Extracting the value of this human capital requires culturally-competent managers who can successfully supervise, encourage, and develop these employees. Working
with foreign-born employees requires CQ skills and empathy. Creating formal diversified mentoring programs may have the potential to be a cost-effective, powerful tool in developing diversity-related skills for supervisors and managers.

**Future Research**

In the United States refugee newcomers occupy a position at a neglected juncture of many categories of difference, such as race/ethnicity, class, language, culture, and country of birth (Tomlinson, 2010), and are pushed to the fringe of U.S. society (Haffejee & East, 2016). The predominantly white private university students who mentored the diverse refugees in this field experiment are, by their own admission, privileged. They are U.S. citizens and clearly of higher status in the U.S. context. Future research exploring the role of status would be a great contribution to both the literature and society. Our findings also indicate that additional research is required to reexamine empathic concern, particularly in terms of its relationship with perspective taking, but other potential antecedents as well.

Further, Ragins’ (1997) work and contact theory point to a need to study the impact of relationships such as those studied here on ethnocentrism. Researchers and practitioners alike have been searching for ethnocentrism’s negative antecedents (Engle & Nehrt, 2012), particularly those that may be increased by training. Ang et al. (2007) recommended that future research examine individual difference characteristics such as ethnocentrism as a potential predictor of CQ. Whether CQ influences ethnocentrism, or vice versa, is an empirical question further research should address.
References


doi:10.5465/amle.2013.0043


Table 1

Scale Reliabilities and Partial Correlations Controlling for Experimental Group

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Note: CogCQ is cognitive CQ, MotCQ is motivational CQ, BehCQ is behavioral CQ, MetaCQ is Metacognitive CQ, EmpConcern is empathic concern, and PersTaking is perspective taking. Variables labeled 1 are pretest correlations and reliabilities; those labeled 2 are post-test.

** significant at p=.01, two-tailed
* significant at p=.05, two-tailed
Table 2

MANOVA Results for Difference Scores by Treatment/Control

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<th>Control (n=95)</th>
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¹Note that a positive mean difference score indicates a rise in the measure as difference scores were computed by subtracting the pre-test score for each measure from the corresponding post-test score.