Cultural mosaic beliefs as a new measure of the psychological climate for diversity: Individual distinctiveness and synergy in culturally diverse teams

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Abstract

This article introduces the concept of cultural mosaic beliefs as a component of effective multicultural work groups. Building on theories of group diversity and self-verification, and responding to calls to understand moderators that explain the impact of group diversity on performance outcomes, we conceptualize cultural mosaic beliefs as a psychological climate that individual group members perceive to promote the recognition, acceptance and expression, and utilization of cultural diversity (values, traditions, and practices) in their work. We also propose that cultural mosaic beliefs might attenuate conflict that can sometimes characterize culturally diverse work groups distinguishing groups that falter from those that flourish and benefit from the informational and other potential advantages associated with their diverse cultural composition. In a series of five studies (N=1,119), we develop a 17-item Cultural Mosaic Beliefs (CMB) scale comprised of three factors: Perceived Group Diversity, Cultural Acceptance and Expression, and Culture Utilization. We present evidence of convergent and discriminant validity, showing that the CMB scale is related to but distinct from other measures of diversity. We also demonstrate predictive validity, showing that the CMB scale is related to work group members' identification with the group, commitment to the group, satisfaction with the group, and learning from the group. We conclude by proposing applications of our cultural mosaic beliefs concept and measure to multicultural workplaces and offer future directions for research on cultural diversity, specifically the study of group cultural mosaic beliefs as a moderator of cultural diversity's effects on groups.

Keywords

Cultural Mosaic, Cultural Diversity, Group Diversity, Context, Psychological Climate, Multicultural Groups, Canada

Introduction

Since the 1960s, dramatic demographic and cultural transformations have occurred in the United States, Canada, and other Western societies (Chui, Tran, & Maheux, 2007; Hero, 2010). Increased labour mobility and the rise of the multinational enterprise have led to organizations and work groups whose members come from a wide range of ethnic, national, and cultural backgrounds (Hays-Thomas, 2004; Judy & D'Amico, 1997). These demographic and industrial transformations herald both opportunities and challenges for organizations. In the workplace, culturally diverse work teams are characterized by their variety of cultural attitudes, values, beliefs, and practices (Harrison & Klein, 2007). For team members, culture provides a potent source of personal identity, as well as a set of taken-for-granted values and beliefs, traditions, and practices that shape people's interpretations of the world around them (Stahl, Maznevski, Voigt, & Jonsen, 2010).

Cultural diversity can be challenging, particularly when it involves deep-level differences in values and assumptions, rather than solely demographic differences or surface-level characteristics (Jehn, Northcraft, & Neale, 1999). Indeed, multicultural groups often struggle to manage conflict and contention (Jehn et al., 1999; Webber & Donahue, 2001) and to socially integrate their members (Stahl et al., 2010). However, eliminating or ignoring cultural distinctions is inadequate (Park & Judd, 2005; Plaut, Thomas, & Goren, 2009) and overlooks the tremendous potential benefits cultural diversity holds for task performance (Watson, Kumar & Michaelsen, 1993), creativity, and innovation (Stahl et al., 2010). Cultural diversity offers a pool of functional and experiential resources that work groups can draw upon (Pelled, Eisenhardt, & Xin, 1999; van Knippenberg, DeDreu, & Homan, 2004), including wider social networks, a variety of perspectives and experiences, and a more flexible set of working styles (Williams &

O'Reilly, 1998). The challenge is to create a context in which multicultural teams can overcome divisive social categorization processes while capitalizing on members' unique cognitive assets for information exchange (Joshi & Roh, 2009; van Knippenberg et al., 2004).

To reconcile the challenges and opportunities of cultural diversity, we introduce the cultural mosaic beliefs construct. Drawing on the integration-and-learning perspective described by Ely and Thomas (2001) and self-verification theory (Swann, 2011), we conceptualize cultural mosaic beliefs as a psychological climate that individual group members perceive to promote the recognition, expression and acceptance, and use of cultural diversity at work. By psychological climate, we mean an individual's perception of their work group setting (Glick, 1985). In our case, this climate exists with respect to cultural diversity. In contrast to existing measures of diversity perceptions or beliefs that apply to general attitudes towards diversity or organizational ideologies, cultural mosaic climate refers specifically to one's work group and captures perceptions that one's culture is recognized, accepted, and actively used in the team's work. To our knowledge, this is the first diversity-related measure addressing perceptions that teams "exploit the full elaborative potential of diversity attributes" and therefore introduces a boundary condition that may help unpack positive versus negative effects of work group cultural diversity (Joshi & Roh, 2009, p. 620). We argue that cultural mosaic beliefs, individual team members' perception that their true cultural self is recognized, validated, and utilized at work, will be positively related to group outcomes.

In a series of five studies, we develop and validate a 17-item measure that reliably captures the three dimensions of cultural mosaic beliefs. We demonstrate the convergent and discriminant validity of the scale, and demonstrate its association with important outcomes, including work group identification, commitment, satisfaction, and learning. We conclude by

describing future directions for the study of cultural mosaic beliefs both as a theoretical construct and as an important organizational lever for capturing the potential of cultural diversity in groups.

Theoretical development

The mosaic metaphor

In the decorative arts, the mosaic is an assemblage of unique, individual pieces of glass or stone (called tesserae) arranged to create a unified whole (King, 2006). We think of this as a powerful metaphor for the composition of multicultural groups. In multicultural work groups, individuals (like tesserae in a mosaic) retain their own individual properties and characteristics yet contribute to a unified and meaningful entity.

We draw inspiration from how the mosaic term is described in vernacular use in Canada, as a contrast to the "melting pot" metaphor in the United States. In a melting pot, newcomers' distinct identities are melted and fused into a homogeneous amalgam. The mosaic, by contrast, is pluralistic: Newcomers' cultures are preserved, retained, and integrated into the host culture, a process characterized by both intergroup contact and identity integration (Sam & Berry, 2010). In a mosaic multicultural work group, we expect that individual members contribute to the performance and vitality of their group through the preservation and expression of their distinct cultural values, beliefs, and traditions. Previous work in cross-cultural psychology has used this metaphor to describe individuals with multiple cultural attachments (cf. Chao & Moon, 2005). Here, we broaden the use of the metaphor to describe the individual's perception of their cultural surroundings at work—that is, whether they see their work groups as places that embrace and make use of their cultural diversity in their day-to-day work.

Three dimensions of cultural mosaic beliefs

We describe the three components of mosaic beliefs below, advancing the argument that a "mosaic" psychological climate exists as a team context in which individuals think of their group as (a) capitalizing on diversity to enhance the group's work, (b) openly expressing and welcomingly accepting the expression of cultural diversity, and (c) acknowledging the depth of the group's cultural diversity. We ground the CMB construct in psychological theories on integration and learning to capture how diversity can be put to use and self-verification to explain the critical role of individual team members' perceptions. Basic social categorization processes that define culture group boundaries, create pressures for individual distinctiveness, and motivate group identification are underlying assumptions of our theoretical perspective (Leonardelli, Pickett, & Brewer, 2010).

Cultural utilization. The integration-and-learning perspective on cultural diversity (Ely & Thomas, 2001) conceives of cultural diversity as a "valuable resource that the work group can use to rethink its primary tasks and redefine its markets, products, strategies, and business practices in ways that will advance its mission" (Ely & Thomas, 2001, p. 240). In other words, multicultural groups can draw on the differences in their members' values, perspectives, beliefs, and experiences to enhance work processes. We think of this as *cultural utilization*, a dimension that captures whether group members perceive their group as making use of its members' distinct cultural values, perspectives, and experiences in completing its work. It is the degree to which group members perceive that cultural diversity informs how work is done, and serves as a source of fresh perspectives and ideas.

Previous research has demonstrated that this perspective helps diverse teams perform more effectively. In Ely and Thomas' (2001) study of a law firm, they found that the integration-and-learning approach allowed the firm to reframe how it thought about the services

it delivered: In their example, the firm was able to leverage the diversity of its staff to pursue litigation work whose connection to the firm's specialty would not have been clear to a more homogeneous staff. Similarly, in a quantitative study of a financial-services firm, Kochan, et al. (2003) found that diversity was utilized to "rethink [the firm's] primary tasks, and redefine its markets, products, strategies, and business practices" (p. 12).

Maintaining a plurality of cultural values could shape work processes in a wide variety of other ways. A multicultural group might preserve divergent thinking and foster a creative mindset (Crotty & Brett, 2012) or offer a broader perspective on problems (Watson et al., 1993). Evidence suggests that people with extensive multicultural experiences solicit ideas from foreign cultures for idea creation and expansion, both hallmarks of cognitive processes related to creativity (Leung et al., 2008). In a group setting, researchers have found a superadditive effect of multicultural experience, such that dyads are more creative when both partners have high multicultural experience, even controlling for individual creativity (Tadmor et al., 2012). Thus, groups with cultural mosaic beliefs may craft processes that balance, synthesize, and harmonize with the group's diverse values, rather than limiting themselves to a single approach (Adair, Tinsley, & Taylor, 2006).

However, simply making use of diversity does not necessarily forge a "mosaic" psychological climate. In order for a psychological climate of diversity to enhance identification and contribute to performance, we argue that other factors are involved: Cultural acceptance and expression, and perceptions of cultural diversity. These elements are necessary in order for group members to feel that they are accurately perceived and understood by others, which we argue is adaptive for individuals and their organizations alike.

Cultural acceptance and expression. This dimension of mosaic beliefs is the perception that the group members accept and encourage the free expression of diverse cultural values, beliefs, and practices. We draw on self-verification theory (Swann, 2011) to argue that *cultural acceptance and expression* is necessary in order for team members to feel understood by others, and to avoid the strain associated with having to suppress their authentic attitudes and beliefs or adopt those of the dominant culture.

An environment that encourages and celebrates the expression of cultural values allows its members to find congruence between their chronic cultural identity and their "situated" work identity (Swann, Johnson, & Bosson, 2009). It also allows group members to avoid the tension and complexity of navigating "boundary work" as cultural identity and work identity either intrude on one another, or are kept uncomfortably segmented (Kreiner, Hollensbe, & Sheep, 2006). Acceptance and expression allows members to have an integrated, coherent, and complimentary view of their cultural attachments, promoting psychological well-being and positive intergroup relations (Amiot & de la Sablonnière, 2010). When self-perceptions and the perceptions of others align, this congruence provides a sense of coherence and order (Swann, 1990) and promotes identification and performance in groups (Polzer, Milton, & Swann, 2002; Swann, Milton, & Polzer, 2000).

Perceived group diversity. In order to utilize and celebrate diverse cultural values, however, group members must first accurately recognize diversity. The perception of one's work group as a mosaic fundamentally requires that the group be seen as accurately recognizing the degree and nature of group diversity—the dimension we describe as subjective *perceived group diversity*. Without this recognition, it is unlikely that the group will foster an accepting climate for the

expression of cultural diversity, and near impossible for it to leverage and make effective use of differences in cultural values.

The recognition of diversity is not necessarily a given in multicultural groups. Homan and colleagues (2010) conclude, "the assumption that objective diversity is always perceived as such is questionable" (p. 478). Previous research shows that subjective judgments about perceived diversity can depart considerably from objectively-measured diversity (Unzueta, Knowles, & Ho, 2012; van Dick et al., 2008). For example, it is easy for groups to become blinded to their cultural diversity when they are homogeneous along a non-cultural dimension (e.g., occupational; Unzueta et al., 2012), or when they share a strong superordinate identity (e.g., organizational identity; Harrison et al., 2002; Homan et al., 2010). Moreover, teams may overlook deep-level cultural diversity (variety in values, beliefs, and practices) when they share surface-level demographic characteristics. A group with the same skin colour or ethnic heritage might seem superficially homogenous, but vary considerably in its core cultural values due to differences in country of origin, linguistic background, religious tradition, subgroup or sub-national identity, or other cultural distinctions.

When groups are diversity-blind, it becomes challenging for team members to align their own cultural self-views with their fellow group members' views of them, and even harder for groups to take advantage of cultural diversity as a resource for work processes and performance. Previous work shows, for instance, that a "colour blind" ideology in multicultural work groups tends to result in lowered psychological engagement among minority group members (Plaut et al., 2009) and can exacerbate bias among majority group members (Richeson & Nussbaum, 2004). We therefore argue that perceived group (cultural) diversity represents a third, vital dimension of cultural mosaic beliefs.

The construct level of cultural mosaic beliefs

Cultural mosaic beliefs are a psychological climate variable. Psychological climates refer to individuals' "perceptions of and the meanings they assign to their environment" (Dickson, Resick, & Hanges, 2006, p. 351). They capture how individuals perceive their organizational surroundings (Parker et al., 2003) and describe individual perceptions of what practices, routines, and behaviours are rewarded, supported, valued, and expected in organizations. Psychological climate is an example of a contextual variable that may moderate the impact of team cultural diversity on work performance by boosting the likelihood that a team will recognize and capitalize on its cultural diversity (Joshi & Roh, 2009).

As a psychological climate, cultural mosaic beliefs describe the degree to which a group member sees the work group as one that recognizes, accepts, and leverages its cultural diversity. In this paper, we measure and analyze mosaic beliefs at the individual level, ultimately tying them to individual attitudes (like individual commitment and identification).

In some groups, these perceptions may come to be shared among group members over the course of their interactions, contributing to a group or an organizational climate as an emergent property. We discuss this possibility in the discussion section of this paper. However, cultural mosaic beliefs do not need to be shared to have an effect. It is a group member's own perceptions of the work group climate—not peers' perceptions, or agreement within the group — that are likely to have the most direct influence on the individual's job attitudes and behaviours.

Overview of studies

We present a series of five studies developing our 3-factor measure of cultural mosaic beliefs among members of multicultural work groups. Study 1 includes item generation and exploratory factor analysis, Study 2 presents confirmatory factor analyses, and Study 3 presents multiple

tests of construct validity. Study 4 demonstrates associations between cultural mosaic beliefs and individual commitment to and identification with a student work group, offering preliminary evidence of the importance of cultural mosaic beliefs in developing effective multicultural workgroups. Study 5 further validates the scale with a sample of full time employees in multicultural work groups, demonstrating the predicted associations of cultural mosaic beliefs with group identification, satisfaction, and learning. Participants' demographics across all five studies are summarized in Table 1 for ease of comparison.

Table 1. *Participant Demographics for Studies 1 – 5*

Study	Source	n (% female)	Age in years M (SD)	Years in Canada M (SD)	National cultures identify with	Education	Time in group M (SD)	Hours/wk in group M (SD)
1	Working adults, Global Market Insite (GMI)'s Canadian panel[a]	377 (47%)	42 (14.44)	35 (17.36)	Canadian: 53.8% European: 20.4% Asian: 12.7% South Asian: 4.0% LA[e]: 0.8% Other: 5.3%	Undergraduate degree: 52.4% Some college or university: 29.3% No college or university: 18.3%	41 months (64.39)	28 (16.08)
2	Undergraduate students, large Canadian university (in Quebec)[b]	268 (49%)	22 (3.35)	14 (8.55)	Canadian: 31.0% European: 15.3% Asian: 16.4% South Asian: 4.9% ME[e]: 7.5% LA[e]: 2.6% Mixed: 11.2% Other: 11.1%	–	6.41 weeks (2.90)	2.73 (3.61)
3	Undergraduate students, large Canadian university (in Quebec)	79 (49%)	22 (2.85)	14 (8.33)	Canadian: 34.2% European: 13.9% Asian: 15.2% ME[e]: 11.4% LA[e]: 2.5% Mixed: 6.3% Other: 16.5%	–	6 weeks (2.87)	2 (1.57)
4	Undergraduate students, large Canadian university (in Ontario)[c]	123 (55%)	21 (1.32)	16 (5.46)	Canadian: 52.8% European: 4.9% Asian: 9.8% South Asian: 12.2% ME[e]: 1.6% Mixed: 5.7% Other: 13.0%	–	9 weeks	2 (0.99)
5	Working adults, Mechanical Turk sample[d]	272 (47%)	34 (11.20)	33* (11.58) *Years in USA	American: 77.9% European: 1.5% Asian: 0.7% South Asian: 0.4% ME[e]: 0.4% Mixed: 13.2% Other: 5.9%	–	23 months (49.18)	–

a. 1,535 members of GMI's Canadian panel accessed our pre-screening survey, used to identify adults who currently (or in last five years) work in a culturally diverse group at least 10 hrs/wk.

b. 87% self-selected teams. Groups met on average once a week for course-related assignments.

c. Students randomly assigned to culturally diverse 3-4 person work groups for the semester.

d. Pre-screened for adults currently working in a culturally diverse team in the U.S.

e. ME = Middle Eastern; LA = Latin American

Study 1

Based on our initial theoretical conceptualization, we used a deductive approach to item generation (Hinkin, 1998), selecting and adapting items from existing scales that corresponded to components in the cultural mosaic beliefs construct. We drew from existing scales related to openness to diversity, diversity mind-sets, perceived dissimilarity, and acculturation acceptance (Berry et al., 1989; Hobman, Bordia, & Gallois, 2004; Kossek & Zonia, 1993; Mor Barak, Cherin, & Berkman, 1998; van Dick et al., 2008). We supplemented these items with additional items generated based on hour-long interviews we conducted with graduate students who had experience working in culturally-diverse work groups. An initial battery of 62 items was developed and used as the basis for our exploratory factor analysis.

Method

Participants and procedure. Participants were 377 working adults (47% female) recruited from the Global Market Insite's (GMI) Canadian panel, as described in Table 1. They completed a 30-minute online questionnaire including the original 62-item Cultural Mosaic Beliefs (CMB) survey (measured on a 7-point Likert-type scale, 1 = strongly disagree to 7 = strongly agree) and demographic questions. Sample question are: "My work group consists of many different and distinct cultures", and "In my work group, members can always express their "true" selves. In exchange for participation, respondents received cash-equivalent points from the commercial panel service.

Preliminary analyses. Prior to factor analysis, the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (.90) and Bartlett's test of sphericity ($p < .001$) were determined to be satisfactory. We used parallel analysis (Horn, 1965) to determine the number of factors to retain (Henson & Roberts, 2006; Humphreys & Montanelli, 1975). We followed O'Connor's (2000)

procedure to generate 1,000 random data matrices from our data set, using permutations of the raw data, and setting the desired percentile of the distribution and random data eigenvalues at 95%. The parallel analysis suggested the retention of up to seven factors.

Results

The 62 survey items were subjected to a principal axis factoring extraction method with Promax rotation. Of the seven factors, one factor solely consisted of reverse coded items leading us to analyze a six-factor solution instead. We eliminated items with loadings less than |.50| and those that cross-loaded, resulting in a 38-item six-factor solution.

The first three factors corresponded to our theoretical construct. The first factor, "Cultural Acceptance & Expression," included 12 items such as "My work group members are accepting of my cultural background" and "In my work group, people's ideas are judged based on their quality, and not based on who expresses them" ($\alpha = .93$). The second factor, "Perceived Group Diversity," included six items such as "My work group is culturally diverse" ($\alpha = .84$). The third factor, "Culture Utilization" contained nine items such as "My work group takes the beliefs of group members into account when designing plans and procedures" ($\alpha = .88$).

The remaining three factors did not map onto our construct definition. The first such factor included items describing general attitudes about the value of diversity beyond participants' own organization (factor 4). We did not include this factor in our scale, since its focus is on diversity's value in general, rather than its expression and effects specific to the employee's organization. We also note that there are previously validated measures of attitudes toward diversity as a principle, including that of Mor Barak and colleagues (1998), which we distinguish empirically from mosaic beliefs in Study 3. The second factor that we chose to exclude included items related to the respondent's distinctiveness from their fellow group members (factor 5).

While mosaic beliefs may well have different effects for members of majority groups and various configurations of minority groups (an issue we consider in the general discussion), an individual's identification or status characteristics are distinct conceptually from mosaic beliefs. Lastly, because we aimed to develop a measure that can be used across national boundaries, we did not include in our final scale factor 6, which described items that were particular to Canadian national culture.

Discussion

Study 1 revealed three factors capturing our conceptualization of cultural mosaic groups: Perceived Group Diversity, Cultural Acceptance & Expression, and Culture Utilization. Together, these dimensions measure individuals' perceptions of the degree to which their work group acknowledges, accepts and expresses, and utilizes its cultural diversity in its work.

Before turning to scale validation, we dropped the three factors that did not fit our construct definition. Moreover, since the construct is conceptualized in terms of individuals' perceptions of their organizational context and surroundings, we operationalized these beliefs with referent-shift questions (asking individuals about their perceptions of how their group functions and the values it holds; Chan, 1998) and dropped items that did not use the group as a referent in order to ensure that scale items were consistent and reflected the conceptualized level of the construct (Kozlowski & Klein, 2000). The 3-factor, 17-item CMB scale produced by these refinements (see appendix A) was the focus of our confirmatory factor analysis in Study 2.

Study 2

The purpose of Study 2 was to confirm the dimensionality of the CMB measure by conducting a confirmatory factor analysis (CFA) on the 17-item CMB scale. We expected the 17 items to map

onto our three conceptualized factors of Perceived Group Diversity, Cultural Acceptance & Expression, and Culture Utilization.

Method

Participants and procedure. Participants, as described in Table 1, were 268 undergraduate students, who were members of multicultural project teams. They completed demographic measures and the 17-item CMB scale and received extra course credits for their participation.

Results

We performed CFA with Amos 18.0 to test a model with three correlated factors. Intercorrelations for the three factors of the CMB scale were .48 (Perceived Group Diversity, Cultural Acceptance & Expression), .46 (Perceived Group Diversity, Culture Utilization), and .35 (Cultural Acceptance & Expression, Culture Utilization) with all *p's* < .001. The overall Cronbach's alpha for the CMB scale was 0.88, and the alphas for the subscales were 0.90, 0.87, and 0.84 for Perceived Group Diversity, Cultural Acceptance & Expression, and Culture Utilization respectively, all exhibiting acceptable reliability.

To assess model fit, the chi-square goodness of fit, comparative fit index (CFI; Hu & Bentler, 1999) and root-mean-squared error of approximation (RMSEA; Browne & Cudeck, 1993) were used. The proposed model (Model A, see Table 2) fit well. The chi-square was significant, $\chi^2(116, N = 268) = 295.64$, $p < .001$, but chi-square is sensitive to sample size (Bentler, 1990), leading us to examine CFI and RMSEA as better indicators of model fit. The CFI value of 0.92 and RMSEA value of 0.08 (pclose < .001) indicate a close fit by the standards described by Hu and Bentler (1999) and Browne and Cudeck (1992).

We fit alternative models and compared them to the proposed model (Model A, three

correlated factors) using the expected cross-validation index (ECVI; Browne & Cudeck, 1993). The alternative models were a three-factor model with only Cultural Acceptance & Expression and Utilization correlated (Model B1), an uncorrelated three-factor model (Model B2), three versions of a correlated two-factor model (Models C1-3), and a one-factor model (Model D). The fit statistics and comparison indexes are shown in Table 2. None of the alternative models fit as well as the proposed model; the chi-square values ranged from 378.18 to 1,151.08 (with 118 to 119 degrees of freedom), CFI values ranged from 0.55 to 0.89, and RMSEA values ranged from 0.09 to 0.18. Moreover, the proposed model yielded the lowest ECVI (1.51) value compared to all other models (ECVI = 1.81 – 4.69), and smaller ECVI values indicate a better fit (Browne & Cudeck, 1993). The results showed that our a priori three-factor correlated model fit better than all the alternative models.

Table 2. *Study 2: Results of Confirmatory Factor Analysis*

Model		χ^2	df	CFI	RMSEA	pclose	ECVI
A	A priori three-factor, correlated (Diversity, Acceptance/Expression, Utilization)	295.64***	116	.92	.08	<.001	1.51
B1	Three-factor, only two factors correlated (Diversity, Acceptance/Expression & Utilization)	378.18***	118	.89	.09	<.001	1.81
B2	Three-factor, uncorrelated (Diversity, Acceptance/Expression, Utilization)	404.77***	119	.88	.10	<.001	1.90
C1	Two-factor, correlated (Diversity + Acceptance/Expression, Utilization)	718.03***	118	.74	.14	<.001	3.08
C2	Two-factor, correlated (Diversity, Acceptance/Expression + Utilization)	782.05***	118	.71	.15	<.001	3.32
C3	Two-factor, correlated (Diversity + Utilization, Acceptance/Expression)	757.75***	118	.72	.14	<.001	3.23
D	One-factor (Diversity + Acceptance/Expression + Utilization)	1,151.08***	119	.55	.18	<.001	4.69

Note. Diversity = Perceived Group Diversity, Acceptance/Expression = Cultural Acceptance & Expression, Utilization = Culture Utilization; CFI = comparative fit index; RMSEA = root-mean-squared error of approximation; ECVI = expected cross-validation index.

*** $p < .001$.

Discussion

Study 2 showed that the proposed model of three correlated factors fit the data better than alternative factor structures, supporting our three facet conceptualization of cultural mosaic beliefs, namely (a) Perceived Group Diversity, (b) Cultural Acceptance & Expression, and (c) Culture Utilization. With a validated 3-factor model in hand, we turn to the question of construct validity, addressed in Study 3.

Study 3

To establish the convergent and discriminant validity of our construct, we examined whether the subscales correlate in theoretically expected directions with related constructs, and show low or no correlation with unrelated constructs (Hinkin, 1998). In particular, we aimed to show that our construct is positively correlated to, but non-redundant with, other related measures of a group's perceived approach to diversity, including fusion teamwork and group openness to diversity.

Secondly, we sought to establish the distinctiveness of mosaic perceptions of the group from individuals' own attitudes toward diversity in general. In Study 1, we chose to omit from the final scale a factor that included these kinds of beliefs; this study test whether the mosaic measure captures individuals' perceptions of their specific group environment distinct from their individual differences in attitudes about diversity in general (diversity values).

Finally, we tested to ensure that our measure is not polluted by individuals' impression-management concerns. An overview of the predicted relations (and results) is presented in Table 3.

Table 3. *Study 3: Summary of the Predicted and Observed Relations between CMB Subscales and Other Measures*

Construct	Construct Definition	Citation	α	Predicted Correlation			Observed Correlation			Predictions supported?
				PGD	CA/E	CU	PGD	CA/E	CU	
Fusion teamwork	Perceptions of whether the team allows for co-existing cultural norms and meaningful participation in group deliberation	Crotty & Brett, 2012	0.78	—	C+	C+	.17	.45**	.36**	Yes
Group openness to diversity	Perceptions of the atmosphere toward diversity, as evidenced by attitudes and behaviours observed in the group	Hobman, Bordia, & Gallois, 2004	0.93	—	C+	C+	.15	.33**	.40**	Yes
Diversity values	Perceptions of the values that diversity brings to an organization	Mor Barak, Cherin & Berkman, 1998	0.72	C+	—	—	.30*	.38**	.15	Yes
Impression management	Socially-desirable survey responding designed to convey a positive impression in the eyes of others	Paulhus, 1991	0.74	D	D	D	-.17	.01	.17	Yes

Note. Dimensions: PGD = Perceived Group Diversity; CA/E = Cultural Acceptance & Expression; CU = Culture Utilization. Predicted correlations: C+ = convergent validity, positively correlated; C- = convergent validity, negatively correlated; D = discriminant validity; — = no prediction.

* $p < .05$. ** $p < .01$.

Method

Participants and procedure. Data were collected from 79 undergraduate students, described in Table 1. Participants completed an online questionnaire including demographic measures, the 17-item CMB scale, additional scales for testing construct validity, and a measure of socially-desirable responding. Participants received extra course credit for their participation.

Predictions and Measures

Group approaches to diversity. Because cultural mosaic beliefs capture individuals' perceptions of their work group's expression and acceptance, and utilization of cultural diversity, we expected it to correlate positively with (but be distinct from) existing perceptual measures of groups' openness to and utilization of diversity, specifically fusion teamwork and group openness to diversity. Fusion teamwork (Crotty & Brett, 2012; Janssens & Brett, 2006) is conceptualized as a team *process* characterized by the flexible and dynamic adoption of different combinations of work norms based in team members' different cultures. Fusion teamwork is measured by an 8-item unidimensional scale ($\alpha = .78$). The scale includes items about team cultural respect and tolerance (e.g. "The team uses a combination of norms or practices from different members' cultures"), which relate to Cultural Acceptance & Expression, and items about the team's use of its members' unique cultural backgrounds in its work, similar to Culture Utilization. It also includes items unrelated to our mosaic construct (e.g., "Each team member participates in decision making"). We therefore expected fusion teamwork to positively and moderately correlate with the Cultural Acceptance & Expression and Culture Utilization dimensions of our CMB scale.

Group openness to diversity (Hobman et al., 2004) captures the perceptions that a team is motivated to be inclusive to all members, regardless of age, gender, ethnicity, or other

dimensions of diversity. Because this scale includes items about openness and acceptance of diverse ethnicities and cultures, we expected it to be positively correlated with the Cultural Acceptance & Expression and Culture Utilization dimensions of our CMB scale. Openness to diversity was measured using Hobman and colleagues' 6-item scale (e.g. "In my team, members enjoy doing jobs with people of different ethnicity, gender, and/or age", $\alpha = .93$).

Diversity values. To test that cultural mosaic beliefs describe individuals' perceptions of their work environments, rather than their attitudes about diversity in general, we looked at the association between cultural mosaic beliefs and diversity values. Diversity values capture individual beliefs about diversity (in general) as a work-related competency and a source of value for organizations (Mor Barak et al., 1998). Because our mosaic construct includes recognition of cultural diversity, we expected that individuals who value diversity will be more likely to recognize and acknowledge diversity; thus, we expect that diversity values will positively correlate with our CMB scale's Perceived Group Diversity dimension. Participants' personal view of the value of diversity was measured by Mor Barak et al.'s (1998) 3-item Personal Diversity Value subscale of the Diversity Perceptions Scale (e.g. "I think that diverse viewpoints add value"; $\alpha = .72$).

Impression management. Given many organizations' enthusiasm for diversity initiatives, we wanted to ensure that participants were not tailoring their responses to create a positive impression. A positive correlation between impression management tendencies and the CMB scale could indicate that participants were giving a less-than-genuine endorsement of cultural mosaic beliefs simply to convey a positive impression of themselves. We measured impression management with the 20-item Impression Management subscale of the Paulhus's (1991)

Balanced Inventory of Desirable Responding (BIDR) Version 6 – Form 40 (e.g. "I sometimes tell lies if I have to"; $\alpha = .72$).

Results

Table 4 presents the correlations between the three CMB subscales and the measures used to test construct validity. Together, the results lend support to the convergent and discriminant validity of our cultural mosaic beliefs construct. As expected, mosaic beliefs are significantly associated with both perceptions of fusion teamwork and group's openness to diversity. Cultural Acceptance & Expression was positively and moderately correlated with fusion teamwork ($r = .45$, $p < .01$) and group openness to diversity ($r = .33$, $p < .01$). Culture Utilization was also positively related to fusion teamwork ($r = .36$, $p < .01$) and group openness to diversity ($r = .40$, $p < .01$). Also as predicted, Perceived Group Diversity was positively related to personal diversity values ($r = .30$, $p < .05$). Although not predicted, personal diversity values were also positively correlated with Cultural Acceptance & Expression ($r = .38$, $p < .01$).

Also as expected, the impression management measure did not correlate significantly with our CMB scale's Perceived Group Diversity ($r = -.17$, *n.s.*), Cultural Acceptance & Expression ($r = .01$, *n.s.*), or Culture Utilization ($r = .17$, *n.s.*) subscales.

Table 4. *Study 3: Intercorrelations, Means, Standard Deviations, and Alpha Reliabilities for Scores on the CMB, Fusion, Group Openness to Diversity, Diversity Perceptions, and Impression Management*

Variable	M	SD	1	2	3	4	5	6	7
1. CMB, Perceived Group Diversity	5.72	1.29	**.90**						
2. CMB, Cultural Acceptance & Expression	5.99	1.17	.49**	**.93**					
3. CMB, Culture Utilization	4.56	1.29	.17	.22	**.90**				
4. Fusion	3.75	.62	.17	.45**	.36**	**.78**			
5. Group Openness to Diversity	3.66	.83	.15	.33**	.40**	.57**	**.93**		
6. Diversity Perceptions, Personal Diversity Values	5.22	.88	.30*	.38**	.15	.36**	.46**	**.72**	
7. Impression management	4.08	.72	-.17	.01	.17	.20	.17	.08	**.74**

Note. Scale reliabilities (Cronbach's alphas) are indicated on the diagonal in bold. CMB = Cultural Mosaic Beliefs.

* $p < .05$. ** $p < .01$.

Discussion

The results of Study 3 offer support for the convergent and discriminant validity of the CMB measure and its three subscales. The positive but moderate correlations with fusion teamwork and group openness to diversity suggest that our construct is related to, but distinct from, these other constructs. We also found that impression management did not correlate with the CMB scale, confirming that cultural mosaic beliefs perceptions are not coloured by individuals' concerns about social desirability.

We found a modest but significant association between individuals' (general) diversity values and the degree to which they saw their group both as culturally diverse and accepting of cultural expression. In fact, it may be that those who view (general) diversity as important are more likely to recognize the cultural diversity of their work colleagues.

Study 4

Culturally diverse groups are frequently challenged by low social integration (Stahl et al., 2010). Indeed, research shows that cultural diversity reduces group identification among majority group members (van der Zee & van der Gang, 2007). Our theoretical development, however, suggests otherwise: Cultural mosaic beliefs may, in fact, temper or even reverse these effects. When team climate is perceived to promote tolerance and when self-verification is possible, group members can retain their authentic cultural identity while still strongly identifying with their work group. As discussed previously, diversity can be leveraged to enhance performance (Ely & Thomas, 2001); as well, subjectively-perceived achievement and performance of a group is central in developing employee identification (Carmeli, Gilat, & Waldman, 2007). Taken together, these research findings suggest a positive relationship between cultural mosaic beliefs and group identification. Moreover, because identification enhances commitment (and

attenuates group members' desire for individual mobility; Ellemers, Spears, & Doosje, 1997), we should expect that the members of culturally diverse groups, who hold cultural mosaic beliefs should feel stronger commitment to their groups. We therefore predict that cultural mosaic beliefs will be positively associated with group members' identification as well as commitment to their groups.

Method

Participants and procedure. Participants were 123 undergraduate students, as described in Table 1. As part of a class exercise, all students in the course completed an online survey that included demographic questions, the 17-item CMB scale, and measures of group identification and commitment. Of the 311 class members, 123 students gave permission for their data to be used in this study, and were granted extra course credit for their participation.

Measures. Group identification was measured using a 3-item, 7-point Likert-type scale (e.g. "I feel strong ties with members of my work group", $\alpha = .88$) adapted from Doosje, Ellemers, and Spears (1995). To measure group commitment, participants responded to four questions on a 7-point Likert-type scale (e.g. "I would like to stay in my work group", $\alpha = .90$) adapted from van der Zee, Atsma and Brodbeck (2004).

Results

Table 5 presents the correlations between the three CMB subscales and the measures of identification and commitment (which were, as expected, closely correlated, $r = .82$, $p < .001$). As predicted, cultural mosaic beliefs were significant correlated with both group identification and group commitment. All three CMB subscales correlated positively with group identification: Perceived Group Diversity ($r = .34$, $p < .001$), Culture Acceptance & Expression ($r = .31$, $p < .001$), and Culture Utilization ($r = .34$, $p < .001$). The same was true for group commitment:

Perceived Group Diversity (r = .23, p < .01), Culture Acceptance & Expression (r = .31, p < .001), and Culture Utilization (r = .22, p < .05).

Table 5. *Study 4: Intercorrelations, Means, Standard Deviations, and Alpha Reliabilities for Scores on the CMB, Group Identification and Group Commitment*

Variable	M	SD	1	2	3	4	5
1. CMB, Perceived Group Diversity	5.19	1.17	**0.88**				
2. CMB, Cultural Acceptance & Expression	5.92	0.94	.42**	**0.88**			
3. CMB, Culture Utilization	4.25	0.94	.40**	0.05	**0.84**		
4. Group Identification	4.84	1.37	.34***	.31***	.34***	**0.88**	
5. Group Commitment	5.02	0.50	.23**	.31***	.22*	.82**	**0.90**

Note. Scale reliabilities (Cronbach's alphas) are indicated on the diagonal in bold. CMB = Cultural Mosaic Beliefs.

* p < .05. ** p < .01. *** p < .001.

Discussion

Study 4 provides initial evidence for our core proposition that group members in an environment with mosaic-type beliefs about cultural diversity are likely to identify with and feel committed to their group. More specifically, we argue that having a psychological climate that group members perceive as promoting the recognition, acceptance and expression, and utilization of diverse cultural values, traditions, and practices can distinguish groups that falter from those that flourish

and benefit from their diverse cultural composition. Because our data are cross-sectional, our findings should be considered provisional; however, our results are consistent with this view. Diverse groups are thought to be at risk for fragmentation and conflict. Our results provide a preliminary indication that groups perceived as multicultural mosaics may inspire stronger identification and affective ties among their members, and bolster commitment and intentions to remain in the group.

Study 5

In Study 5, we sought to extend our findings from Study 4 that cultural mosaic beliefs as a psychological climate contribute to individual group members' experience in their culturally diverse group. Using a sample of working adults, we examined whether cultural mosaic beliefs increased the chances of individuals identifying with, learning from, and feeling satisfied with their culturally diverse work group. Lastly, we tested whether our new measure of cultural mosaic beliefs explains variance in these outcomes—identification, satisfaction, and learning from one's group—above and beyond measures of individual beliefs related to cultural diversity often cited in the literature, namely diversity beliefs, multicultural ideology and cultural intelligence.

Method

Participants and procedure

Participants were 272 working adults residing in the United States, as described in Table 1. A total of 300 individuals who were currently part of a culturally diverse work group completed an online survey through Mechanical Turk; twenty-eight individuals were dropped from the sample because of inattentiveness (defined as failing one or both of the attention checking items included in the survey), resulting in 272 participants in the final sample. Participants completed

the CMB scale, as well as measures of individual satisfaction with the group, identification with the group, and learning from the group. In addition, they completed the range of established diversity attitude scales (diversity beliefs, multicultural ideology, and cultural intelligence). They received $3.00 as remuneration.

Measures

Cultural mosaic beliefs were measured using our 17-item scale. Reliabilities for the subscales are reported in Table 6, and are consistent with the previous studies (αs .87 to .92). Individual satisfaction with the group was measured using a 4-item, 7-point scale (Park & DeShon, 2010; e.g. "All in all, how satisfied are you with the members in your team?"α = .91). Identification with the group was assessed using a 7-item, 5-point scale combining items from two existing scales of group identification and commitment (Doosje, Allegers & Spears, 1995; van der Zee, Atsma & Brodbeck, 2004, e.g., "I feel strong ties with members of my work group", α = .91). Individual learning from the group was measured with a 4-item, 5-point scale (Cooper, 2013; e.g., "Being a part of this team has been a great learning experience for me", α = .88).

We used three established measures of diversity-related attitudes. Diversity beliefs were measured using a 5-item, 5-point scale (adapted from van Dick et al., 2008; e.g., "I think that work groups benefit from the involvement of people from different ethnic backgrounds", α = .76). Multicultural ideology was measured using a 10-item, 5-point scale (adapted from Berry and Kalin, 1995; e.g. "A society that has a variety of ethnic and cultural groups is more able to tackle new problems as they occur", α = .88). Finally, cultural intelligence (CQ) was measured using a 20-item, 5-point scale (Ang, van Dyne, and Koh, 2006; e.g., "I am conscious of the cultural knowledge I use when interacting with people with different cultural backgrounds", α = .90).

Analyses

Data were analyzed using hierarchical multiple regression analyses for each of the three outcomes (identification, satisfaction, and learning from the group). In the first step of each analysis, we entered the three diversity attitudes (individual diversity beliefs, multicultural ideology, and cultural intelligence, or CQ). In the second step, we entered the three CMB subscales in order to test their incremental effects on the outcomes, above and beyond these established diversity attitudes

Results

Table 6 presents the correlations between the three CMB subscales and the three measures of individuals' diversity-related attitudes (diversity beliefs, multicultural ideology, and CQ). We found that the dimensions of CMB were moderately and significantly correlated with each of the diversity attitude measures (rs = .25 - .61, ps < .01).

Table 6. *Study 5: Intercorrelations, Means, Standard Deviations, and Alpha Reliabilities for Scores on the CMB, Diversity Beliefs, Multicultural Ideology, and Cultural Intelligence*

Variable	M	SD	1	2	3	4	5	6
1. CMB, Perceived Group Diversity	6.01	.84	**.92**					
2. CMB, Cultural Acceptance & Expression	5.93	.89	.41**	**.87**				
3. CMB, Culture Utilization	5.03	1.23	.33**	.49**	**.92**			
4. Diversity Beliefs	3.80	.66	.27**	.48**	.41**	**.76**		
5. Multicultural Ideology	3.91	.67	.28**	.42**	.38**	.61**	**.88**	
6. Cultural Intelligence	3.52	.56	.28**	.31**	.39**	.25**	.29**	**.90**

Note. N = 272. Scale reliabilities (Cronbach's alphas) are indicated on the diagonal in bold. CMB = Cultural Mosaic Beliefs.

* $p < .05$. ** $p < .01$.

Results from hierarchical regression (see Table 7) show that CMBs are positively associated with individuals' identification, satisfaction, and learning from the group, and explain variance in those outcomes above and beyond diversity beliefs, multicultural ideology, and CQ. Moreover, the changes in r-squared from adding CMBs to the models are significant, ranging from .24 to .32.

We also found that the three dimensions of CMB are related in different ways to our three criterion variables. Perceived Group Diversity relates to group satisfaction ($B = .10$, $SE = .05$, $p < .05$) and learning from the group ($B = .08$, $SE = .03$, $p < .05$). In contrast to our findings in Study 4, we did not find a relationship between Perceived Group Diversity and identification

with the group (*B* = -.01, *SE* = .04, *ns*), though we did replicate the finding with the other two dimensions of CMB. The Culture Acceptance & Expression and Culture Utilization dimensions were significantly associated with all three outcomes (*Bs* = .08 - .49, *SEs* = .03 - .05, *ps* < .05).

Table 7. *Study 5 Hierarchical Multiple Regression Results of Diversity Beliefs, Multicultural Ideology, Cultural Intelligence, and Cultural Mosaic Beliefs on Group Identification, Satisfaction, and Learning*

	Identification with group		Satisfaction with group		Individual group learning	
Variables and steps	Step 1	Step 2	Step 1	Step 2	Step 1	Step 2
Diversity beliefs	.23**	.00	.20*	-.07	.12*	-.06
	(.07)	(.06)	(.08)	(.07)	(.06)	(.05)
Multicultural ideology	.16*	.05	.23**	.08	.23***	.13*
	(.07)	(.06)	(.08)	(.07)	(.06)	(.05)
Cultural intelligence	.20**	.05	.19*	-.03	.24***	.06
	(.07)	(.06)	(.08)	(.07)	(.06)	(.05)
CMB, Perceived Group Diversity		-.01		.10*		.08*
		(.04)		(.05)		(.03)
CMB, Acceptance & Expression		.42***		.49***		.24***
		(.04)		(.05)		(.04)
CMB, Culture Utilization		.08**		.09*		.13***
		(.03)		(.04)		(.03)
R^2	.19	.48	.16	.47	.24	.49
ΔR^2	.19***	.29***	.16***	.32***	.24***	.24***

Note. Figures represent unstandardized coefficients. Standard errors are reported in parentheses. CMB = Cultural Mosaic Beliefs.

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

Discussion

Study 5 uses a sample of working adults to further validate the cultural mosaic beliefs construct by replicating its relationship with group members' identification. It also extends our previous findings by establishing a relationship between cultural mosaic beliefs and members' satisfaction and learning from the group.

The study further establishes the discriminant validity of the CMB measure, and demonstrates the contribution of the mosaic approach above and beyond existing approaches to measuring diversity-related attitudes. The distinct effects of each of the cultural mosaic beliefs factors suggest that each of the mosaic components may have unique functions in shaping employee perceptions of their work groups.

General discussion

Cultural diversity in the workplace can be challenging as multicultural work groups struggle to manage conflict, socially integrate members, and strive to achieve high performance levels. Ely and Thomas' (2001) integration-and-learning perspective suggests that with the right outlook, work groups can transform their cultural diversity from a conflict-inducing liability to an asset that enhances work processes and outcomes. In this paper, we extend and elaborate on this perspective: We propose and empirically validate a construct that captures the "right outlook" described in their research. Drawing on self-verification theory (Polzer et al., 2002; Swann, 1999; Swann, 2011; Swann et al., 2000), we stress the need for groups to recognize and encourage the preservation and expression of members' diverse cultural identities. The cultural mosaic beliefs construct we develop (and validate) captures team psychological climate as a contextual variable that leverages diversity's potential while avoiding the obstacles that often accompany heterogeneity and differences. Group members with cultural mosaic beliefs

perceive that their multicultural group recognizes the full extent of its cultural diversity, encourages and accepts the expression of members' cultural values, practices, and traditions, and of course, integrates this diversity meaningfully into the process and practice of work.

This new construct is distinct from other conceptualizations of multicultural teams currently in the literature (e.g., see Study 3). In third culture or hybrid culture models, members of culturally diverse groups come to develop a shared understanding of team values and norms (Adair et al., 2006; Earley & Mosakowski, 2000). In cultural mosaic groups, however, individuals' cultural distinctiveness in values and norms are preserved and utilized. Like cultural mosaic beliefs, the cultural fusion model emphasizes meaningful participation and co-existence in multicultural teams; but, fusion also emphasizes subgroups and dynamic, changing team approaches (Janssens & Brett, 2006). In contrast, cultural mosaic beliefs is rooted in self-verification theory and emphasizes recognition by individual team members of the group's high levels of cultural acceptance across all tasks. Finally, whereas melting pot groups may be diverse in members' national origins but have little or no cultural variation (Nemetz & Christensen, 1996), cultural mosaic groups recognize, appreciate, and make use of existing cultural diversity in values, beliefs, and practices.

As shown in Studies 3 and 5, our construct is also distinct from other general perspectives on diversity, such as diversity values (Mor Barak et al., 1998), diversity beliefs (van Dick et al., 2008), and multicultural ideology (Berry & Kalin, 1995). Although these concepts have advanced our understanding of diversity, they have been limited to the intrinsic benefits of diversity. Our construct, too, treats diversity as positive and valuable, but by incorporating self-verification theory (Swann, 1999) and the integration-and-learning perspective (Ely & Thomas, 2001), it also captures perceptions of how a group expresses differences and puts them to

practical use. Unique to our conceptualization (and measure) is a psychological climate defined by individual team members' perceptions that their true cultural self is not only recognized and accepted, but also utilized in work.

The distinctiveness of our approach goes beyond the dimension of utilization and also includes the factor of perceived, rather than demographic, diversity. Whereas other conceptualizations and measures assume diversity, ours reflects an understanding that objective diversity is not always evident in group members' subjective perceptions of diversity (Harrison & Klein, 2007). Thus, the cultural mosaic beliefs construct we establish is multidimensional, offering a novel, nuanced view of a team's diversity climate based in team members' perceptions of their cultural self-maintenance, verification, and utilization.

Our research also offers a reliable, valid, 17-item dimensionalized measure of cultural mosaic beliefs. Across five studies involving 1,119 individuals, the three subscales – Perceived Group Diversity, Cultural Acceptance & Expression, and Culture Utilization – demonstrate high levels of reliability in addition to construct validity. They are positively associated with group identification, commitment, satisfaction, and learning, offering predictive power above and beyond existing diversity belief constructs. The CMB measure not only provides conceptual consolidation, but also a practical contribution to diversity researchers' toolkits.

Limitations and future directions

As in all research, there are limitations that suggest fruitful next steps. In this paper, we conceptualize and measure cultural mosaic beliefs as a psychological climate, which taps individuals' perceptions of how their work group environment operates. Because we are interested in subjective perceptions, we gathered individual-level self-report data. Though self-report data are the most appropriate measurement method for our focal construct, there are

nonetheless measurement biases that can result from self-report measures (Spector, 2006). To the extent possible, we have attempted to mitigate these issues in our research.

Following Conway and Lance (2010), we not only established the appropriateness of the measurement method, but also took additional steps to avoid issues with common-method bias. Our scale development, over the course of several studies, establishes the factor structure, internal consistency, and convergent and discriminant validity of our CMB scale. We measured socially-desirable responding to detect potential concerns with response distortions. In our final studies, we chose criterion variables (e.g. identification, commitment, satisfaction, and learning) that had no item overlap with our focal construct. Though commitment and identification are closely-related constructs, with some similar scale items, previous research establishes their distinctiveness (van Knippenberg & Sleebos, 2006; Riketta, 2005); in addition, a multi-source study of commitment affirms the validity of self-report commitment measures (Goffin & Gellatly, 2001). We suggest, however that Future research on a broader set of behavioural correlates of cultural mosaic beliefs would benefit from multi-source data. As well, combining our mosaic scale with objective organizational data (for example, employee turnover) could provide a more robust validation of our scale, as well as yielding important insights for practitioners.

Because our research focuses on the individual level, future research might also investigate how cultural mosaic beliefs emerge to become shared in a group. That is, when individuals' perceptions of the group's "mosaic" character are congruent, does a shared psychological climate emerge? And, would such a group-level psychological climate have effects above and beyond those of individual-level cultural mosaic beliefs? Groups that have both majority and minority subgroups might have very different mosaic belief perceptions:

Some subgroups might see the group as a highly effective mosaic, while others within the same group may perceive it as mediocre or poor at recognizing, accepting/expressing, and leveraging diversity. These intriguing possibilities suggest that future researchers examine both the level (central tendency) of mosaic beliefs and the strength (dispersion or agreement) of these perceptions (cf. Schneider, Salvaggio & Subirats, 2002).

Another important limitation is that our studies, though they are in the context of multicultural teams and work groups, do not consider whether the effects of cultural mosaic beliefs differ for those in a group who are members of the majority group versus a minority group. Do the payoffs from mosaic perceptions suggested in our data (identification, satisfaction) accrue to members of cultural minorities within groups, to members of the dominant culture, or both? Research suggests that minority group members' experiences can differ depending on the demography of the group, changing depending on whether minority group members see themselves as facing a "solo, token, or tilted situation" (Jackson, Joshi & Erhardt, 2003). The work of Dovidio, Gaertner and Saguy (2007), for instance, shows that seeing oneself as part of a single group drives commitment in multicultural groups – but only for majority group members. For minority group members, the "one group" view is not commitment-enhancing, but seeing oneself as members of a common *team* with a shared purpose does enhance commitment. In short, the effects of diversity ideologies and perceptions can differ meaningfully for majority versus minority group members. In our first study, we excluded from our scale items that described people's sense of difference from the majority. We encourage future research to consider this variable not as a part of mosaic beliefs *per se*, but as a potential moderator of their effects.

The most immediate future direction for research is to more thoroughly examine the consequences of cultural mosaic beliefs. Two avenues are clearest. One fruitful avenue for research is to extend the set of criterion variables. In this paper, we focused on consequences of CMB for variables most closely related to performance; however, we did not have access to individual (or group) performance data. Our findings for individual identification, commitment, satisfaction, and learning are suggestive of performance enhancement but future study is necessary. Research is also needed on the consequences of CMB for social processes in cultural mosaic groups. Questions about the effects on acceptance of new group members, on risk taking, information sharing, and interpersonal trust and trustworthy behaviour, among others, merit investigation. For example, are mosaic groups less prone to the negative social categorization processes that tend to detract from diversity-related process and performance gains (van Knippenberg & Schippers, 2007)? Lastly, while at the individual level, we find strong empirical support for relationships between cultural mosaic beliefs and individuals' team identification, commitment, satisfaction, and learning, these findings merit longitudinal examination to identify the causal links connecting members' cultural mosaic beliefs to their bonds with the group.

Although our research was conducted largely in Canada, where multiculturalism is part of the national identity, our final study sampled a U.S. population. While the U.S. has a large immigrant population like Canada, its national multicultural ideology is more akin to a melting pot than to a cultural mosaic, as in Canada. Nevertheless we found in Study 5 that our cultural mosaic beliefs construct showed reliability, validity, and positive correlations with workplace outcomes using a U.S. sample that were similar to our findings with our Canadian samples. We propose that future research examine the prevalence and endorsement of cultural mosaic beliefs

in other national contexts that may be more culturally homogeneous or hold different national multicultural ideologies (e.g. China, Korea).

Lastly, even though we offer a validated tool for measuring the degree to which groups are seen as recognizing, celebrating, and making use of diversity, we still cannot say anything about the organizational contexts in which such climates emerge. Joshi and Roh (2009) emphasize the importance of contextual factors, such as organizational demography or strong vs weak situation that can influence the relationship between team diversity and performance. Reward structures set by organizations or group leaders also might influence the emergence of mosaic beliefs, as reward structures can bridge demographic or cultural divides (Homan et al., 2010). Managers or group leaders may be able to influence the existence or strength of cultural mosaic beliefs by personally endorsing or modeling them. At Cisco Systems, a multinational technology firm, for example, a mosaic approach is encoded into the corporate culture as described on the company website. According to John Chambers, chairman and CEO, diversity at Cisco is "about inclusion and how we develop and optimize the contributions of our workforce who bring diverse life experiences, cultures, talents and perspectives to the business. Our inclusive culture promotes a creative, innovative, and collaborative environment that helps drive our globalization strategy" (Chambers, n. d.). Future research needs to examine how the structures, processes, and policies that organizations adopt—including the commitments and rhetoric of senior management—may lead people to see their broader work environments (as well as their work groups) as cultural mosaics.

Conclusion

With continued growth in globalization and the use of teams in organizations, employees can expect to work closely and interdependently with teammates from different cultures. Our

research offers a conceptual frame and practical measurement tool for understanding individuals' perceptions of their multicultural teams. As work environments become increasingly plural and diverse, organizations need to find ways of leveraging diversity's potential while avoiding the obstacles that often accompany heterogeneity and differences. Future research is challenged to identify additional organizational factors, such as leadership approach or organizational demography that facilitate the development of CMB team climates. Our mosaic metaphor and CMB measure will not only help advance understanding of how differences are acknowledged, accepted, expressed, and utilized in culturally diverse work groups, but also help distinguish groups that falter from those that flourish and benefit from their diverse cultural composition.

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Appendix A

Cultural Mosaic Beliefs (CMB) Scale (17 items)

Regarding your work group, please rate each statement based on how much you agree or disagree using a 7-point scale (1 = strongly disagree, 7 = strongly agree). Culture as referred to here is the "shared way of life of a group of people," that is, the behaviors and beliefs characteristic of a particular ethnic group. It is a set of shared attitudes, values, goals, and practices that characterizes the group. The culture we are referring to does NOT include "high culture" (i.e. painting, classical music, etc.) nor pop, comic, and queer culture.

Perceived Group Diversity

1 My work group consists of many different and distinct cultures.

2 My work group is culturally diverse.

3 Others in my work group come from cultures that are different from mine.

4 Not everyone in my work group has the same cultural background.

5 My work group is made up of members with different cultural backgrounds.

Cultural Acceptance and Expression

6 In my work group, people's ideas are judged based on their quality, not based on who expresses them.

7 In my work group, each member's cultural background is always accepted by the group.

8 In my work group, members can always express their "true" selves.

9 The atmosphere in my work group is always non-threatening to cultural differences.

10 In my work group, all members are treated equally regardless of their cultural background.

Culture Utilization

11 My work group takes the beliefs of group members into account when designing plans.

12 My work group members' cultural backgrounds improve my work group’s performance.

13 My work group takes cultural practices of group members into account when designing plans and procedures.

14 The cultural background of other members of my work group is utilized by the group in doing tasks.

15 My work group utilizes the distinct cultural backgrounds of group members in our group's tasks.

16 Members of my group are encouraged by each other to challenge typical host culture way of thinking.

17 Knowledge that comes from work group members' cultural backgrounds is relevant to my group's tasks.