The Relation of Multicultural Experiences to Moral Judgment and Mindsets

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Multicultural experience is considered to be beneficial, but it remains a difficult construct to measure. We tested the validity of a new assessment tool, the Multicultural Experiences Questionnaire (MEQ), using an undergraduate sample ($N = 164$), and examined the relation of multicultural experience to moral judgment, closed-mindedness, growth, and fixed mindsets. We expected that greater multicultural experience would be related to lower levels of closed-mindedness and higher levels of moral judgment and growth mindsets. Higher MEQ scores were correlated with decreased closed-mindedness and higher moral judgment scores. In regression analyses, controlling for age and sex, higher MEQ scores positively predicted participant scores on postconventional moral judgment and growth mindsets, but negatively predicted use of less developed moral judgment and fixed mindsets. Overall, these results support the validity of the MEQ and suggest that multicultural experiences are positively linked to measures of moral judgment and growth mindsets.

Keywords: moral development, moral judgment, multiculturalism, openness, mindset

In the face of increasing diversity and globalization, psychologists have called for greater multicultural competence across areas of education, practice, training, and research (e.g., Sue, Bingham, Porche-Burke, & Vasquez, 1999). Pedersen (1999) suggested that multiculturalism is an emerging fourth historic force in psychology, joining the issues of humanism, behaviorism, and psychodynamism. At its core, multiculturalism represents "a principled moral argument that a monocultural psychology is not simply less accurate or generalizable, but positively distortive and oppressive" (Fowers & Richardson, 1996, p. 611). Indeed, William James (1909) considered pluralism, the forerunner to multiculturalism, critical for the formation of a philosophical and social humanism required to build a more egalitarian society. Fowers and Richardson (1996) suggested that

multiculturalism signals a "moral movement" that is not only concerned with decreasing oppression but seeks to "enhance the dignity, rights, and recognized worth of marginalized groups" (p. 609). Through the process of understanding the challenges that others encounter, one gains insight into their plight and moves toward increased tolerance and decreased prejudice (Fowers & Richardson, 1996; Ridley, Chih, & Olivera, 2000; Roccas & Brewer, 2002).

Researchers have suggested that a profession's lack of multiculturalism can hurt its clientele (e.g., Spindler & Spindler, 1994), even to the extent of pathologizing those who exhibit different cultural patterns (e.g., Sue & Sue, 1990). In this way, multiculturalism becomes an ethical issue for professionals and thus integral to ethical education (Stables, 2005). Multicultural experiences allow an individual to encounter viewpoints that contrast with the indigenous culture and can lead to an adjustment in thinking, a broadening of perspective, and greater cognitive flexibility. Cognitive flexibility and similar capacities of ethical sensitivity are critical for ethical behavior in professionals and lay alike (Narvaez & Endicott, 2009).

There are two goals to the research presented here: (a) to validate the Multicultural Experi-

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ences Questionnaire (MEQ) and (b) to relate it to measures of moral cognition, closed-mindedness, and mindsets. First, despite the perceived importance of multicultural experience for increasing sensitivity to others, it is difficult to assess (e.g., Brislin & Yoshida, 1994; Landis & Bhagat, 1996), and there are few tools to measure it. A new measure was designed to sample behaviors and attitudes related to greater experience of multiculturalism. Second, many theorists link multiculturalism to morality because the ability to take the perspectives of multiple others is foundational for advanced moral reasoning (e.g., Colby & Kohlberg, 1987; Kohlberg & Gilligan, 1971; Selman & Damon, 1975). Nevertheless, few studies have investigated empirically whether increased multicultural experience is related to higher levels of moral development (although see Endicott, Bock, & Narvaez, 2003; Sirin, Brabeck, Satiani, & Rogers-Serin, 2003).

What Develops From Multicultural Experience?

Cognitive growth typically occurs when a person encounters new ideas, interacts significantly with people who are different, or tries out new behaviors. These experiences force cognitive disequilibrium, which leads to changes in patterns of response, such as conceptual structures or schemas (e.g., Piaget, 1952). Schemas are generalized knowledge structures that filter incoming percepts, influence conceptual development, and guide behavioral responses (Augoustinos & Walker, 1995; Neisser, 1976; Rumelhart, 1984; Taylor & Crocker, 1981). Incoming information is interpreted according to the schemas one has constructed from prior experience. According to Piaget's (1952) adaptational view of intelligence, new information is either assimilated into existing schemas and/or provokes the transformation of existing schemas as a means to accommodate to information inconsistent with the old schemas. When a person accommodates schematic knowledge structures to new experience, these structures become more flexible, allowing for more integrative thought processes and better problem solving.

Schema theory has been introduced to explain development in cultural sensitivity (e.g., Ridley et al., 2000; Ridley, Mendoza, Kanitz,

Angermeier, & Zenk, 1994). Individuals begin with relatively impoverished schematic representation of an unfamiliar culture or group. With more experience, schemas become more and more differentiated, as in expertise development (Bransford, Brown & Cocking, 1999). Cultural schema development can be viewed as a move away from strict, stereotypic views about a culture to more flexible and nuanced cognitions (Leung & Chiu, in press; Leung, Maddux, Galinsky, & Chiu, 2008). Multicultural experience can be considered an accumulation of intercultural encounters.

Intercultural encounters broadly speaking are those in which a person is exposed to a different or unfamiliar cultural practice or perspective. When juxtaposed against the home culture, intercultural encounters typically lead to dissonance and subsequent cognitive adjustment (Chiu, in press), transforming an individual's standards of possibility. When there is true intersubjectivity between individuals, a fusion of disparate horizons may occur (Gadamer, 1975; Taylor, 1992). Denson and Chang (2009) summarized the positive psychological outcomes of what they called "interaction diversity" in college:

> cognitive and affective development . . . student learning and personal development . . . learning and democracy outcomes . . . civic, job-related, and learning outcomes . . . critical thinking skills . . . academic self-confidence and social agency . . . action-oriented democratic outcomes . . . intellectual and social self-confidence and student retention . . . and student satisfaction with their overall college experience . . . (p. 4)

When a person has more opportunity for diverse experience, there is a greater likelihood for growth (Gurin et al., 2002). Greater intercultural experience typically fosters improved intercultural competencies, including cognitive and behavioral flexibility, empathy, openness to new experiences and people, and tolerance for ambiguity (Paige, 1996). We were particularly interested in the effects on moral reasoning development.

The Influence of Multicultural Experience on Moral Reasoning

Schema theory also has been used to describe moral reasoning development (Narvaez, 1998; Narvaez & Bock, 2002). Moral schemas represent generalized knowledge structures built

from sociomoral experience and can range from perceptual schemas to schemas for moral action (Narvaez, 2005). Moral judgment schemas are used to determine moral action and reasons for action (Rest, Narvaez, Bebeau, & Thoma, 1999), and influence the processing of moral reasoning in discourse (Narvaez, 1998, 1999). Moral schemas can be mapped developmentally (Rest et al., 1999) and in terms of expertise (Narvaez & Gleason, 2007). With age and experience, moral judgment schemas shift from a concern for "personal interests" to a concern for "maintaining norms" (status quo) to the ability to think "postconventionally" (Rest et al., 1999). Postconventional schemas are more complex and flexible than personal interest or maintaining norms schemas, with a broad concern for adjusting social contracts, policies, and institutions for maximal justice. Postconventional thinking allows one to better consider and accommodate multiple perspectives, take a broad human rights viewpoint, and understand the spirit of the law, which includes the ability to consider modifications of existing laws and structures toward greater justice.

A common thread then between moral development and the effects of multicultural experience is the promotion of greater perspective taking and a wider worldview. Individuals with more complex social understanding have more flexible schemas and can adapt cognitively more easily to a given social situation; they are not restricted to their own perspective. Indeed, Rest (1986) found that greater general social experience was related to higher trajectories for growth in moral judgment over time (adolescence to middle adulthood). Of all variables used to measure freshman-to-senior change, moral judgment shows one of the largest effect sizes (Pascarella & Terenzini, 1991).

Endicott, Narvaez, and Bock (2003) made a first attempt to find a link between moral judgment and multicultural experiences. In their study, participants' depth of multicultural experiences was positively correlated with postconventional reasoning. However, their study failed to provide a conclusive link between multicultural experiences and moral reasoning development for two reasons. First, not all of their multicultural experiences subscales correlated with moral reasoning development. Second, the subscales were positively, albeit nonsignificantly, related to the use of the lowest form of

moral reasoning, the personal interest schema, when one would expect a negative relationship. One reason for the inconclusive results may be Endicott et al.'s (2003) measure of multicultural experiences, described in greater detail below. Given the exploratory nature of their study, the authors cast a broad net during item selection, ending up with an overly inclusive 105-item scale. However, a briefer measure may provide greater precision to find the expected relationships with moral reasoning development.

Measuring the Effects of Multicultural Experience

Given that multicultural experiences can be quite beneficial, research would benefit from a universally accepted method for assessing such experiences. As Leung and colleagues (Leung et al., 2008) reported, the construct of "multicultural experiences" has been operationalized in different ways across studies. For example, multicultural experience has been defined as time spent in another culture, interactions with people from other cultures, and cultural salience, as manipulated in the laboratory. Among those who work in intercultural development or multicultural education in higher education, the typical approach has been to develop a program or intervention and test its effects on student attitudes and behaviors (e.g., Gurin, Nagda, & Lopez, 2004). For example, several research initiatives have purposefully increased intercultural and interethnic group dialogue and interaction and found positive effects for participants in comparison to controls in terms of attitudes, cognitive growth and skill development (e.g., Zuñiga, Nagda, Chesler, & Cytron-Walker, 2007).

Whereas most evaluation programs use self-report items from existing measures to assess student effects (e.g., "cross-racial interaction" or CRI from items on the College Student Survey; Chang, Denson, Saenz, & Misa, 2006), we were interested in developing a stand-alone measure. Because the construct is complex, a reliable measure of multicultural experiences should capture the multiplicity of the construct. Moreover, a measure should assess both the extent of multicultural experiences (behavior) and openness to such experiences (attitudes). That is, assessment should include both the number of multicultural experiences and one's

openness to these experiences (Leung & Chiu, 2008).

In searching for other stand-alone measures, we found two. The Behavioral Assessment Scale of Intercultural Communication (BASIC; Koester & Olebe, 1988) measures the effectiveness of intercultural communication (e.g., display of respect, empathy, interaction management, tolerance for ambiguity), but it requires an observational assessment of capacities. In another approach and using a broad definition of multiculturalism, Endicott and colleagues (Endicott et al., 2003) developed the Multicultural Experiences Questionnaire (MEXQ) to measure both the extent of multicultural experiences (behavior) and openness to such experiences (attitudes). The MEXQ was a 105-item, self-report that measured retrospective experience and prospective attitudes toward diverse groups, "including ethnic minorities, immigrants, resident aliens, women, men, and homosexuals (sic), as well as a range of political and religious orientations" (Endicott et al., 2003, p. 410). The MEXQ had two subscales: attitude toward multiculturalism and experience with multicultural activities. The latter had two subscores, breadth of multicultural activities (e.g., number of countries visited, number of languages spoken) and depth of multicultural activities (e.g., intensity of relationships, courses taken as well as amount of time spent in another culture). The authors found that both subscales were informative when examining effects.

In developing our measure, we heeded the advice of the extant literature. First, we sought a measure that considered both number of experiences and openness to multicultural experience. Second, we included items to capture both breadth and depth of experience. Third, given that Endicott et al. (2003) found inconsistent results with their expansive measure, we sought to develop a shorter measure in hopes of finding more precise and consistent results.

Current Research

In this study we developed a new measure of multicultural experience intended to measure both deliberate and incidental intercultural experience among college students.

Preparing the Questionnaire

In preparing the questionnaire, items considered most representative of breadth and depth of multicultural experience from Endicott (Endicott et al., 2003) were combined with new items that better capture openness to multicultural experience, resulting in 17 items (see the Appendix). As a means to assess whether we had a good breadth and depth of items, we asked undergraduates participating in an ethnic-minority student summer program to complete the 17-item measure. The sample consisted entirely of ethnic-minority participants who came from across the United States. After completing the questionnaire, participants were asked whether the MEQ accurately characterized their multicultural experiences and, if not, to provide additional questions or ideas. Only two participants thought that the items did not reflect their experiences using a yes-or-no answer format, but neither provided any additional insights or suggestions.

Given that the items appeared to tap the different types of multicultural experiences, we proceeded to pilot the scale to test its reliability and validity. First, the reliability of the 17-item measure was assessed to evaluate whether any items should be deleted or adjusted. Second, construct validity was tested using measures assessing cultural closed-mindedness. Higher MEQ scores were expected to be negatively correlated with the two measures of cultural closed-mindedness.

We tested 56 undergraduates (57% women, $M_{age} = 19.4$ years) who took part in an online survey in return for partial course credit. For ethnicity, participants could endorse all categories that applied from a list; the top three choices were White/Caucasian (66%), Asian (21%), and Hispanic (11%). All participants provided informed consent and were properly debriefed following the survey. Participants completed the 17-item MEQ as part of a larger survey. We measured closed-mindedness with two measures described in greater detail later: right-wing authoritarianism (Altemeyer, 1998) and blind patriotism (Schatz, Staub, & Levine, 1999).

The internal consistency of the 17-item questionnaire was assessed, as well as the corresponding correlations between the individual items and total scale score. One item was elim-

inated due to its low item-total correlation ("I have acquaintances from cultural-racial-ethnic backgrounds different than my own"). The resulting 16-item scale demonstrated adequate reliability ($\alpha = .75$). Given this apparent internal consistency, construct validity tests for the MEQ were then performed. Following predictions, MEQ scores were negatively related to measures of closed-mindedness: blind patriotism, $r(56) = -.40$, $p < .01$, and right-wing authoritarianism, $r(56) = -.36$, $p < .01$ (see Table 1 for means). Given this initial support for its reliability and construct validity, we implemented the MEQ to assess the primary questions of interest.

Present Study

In the current study, we first evaluated the factor structure of the MEQ. Following this factor analysis, we assessed whether greater multicultural experiences predict more developed moral reasoning, growth, and fixed mindsets. First, we were interested in finding out whether scores on the MEQ were related to more sophisticated moral reasoning. The Defining Issues Test–2 (DIT–2; Rest & Narvaez, 1998; Rest et al., 1999) was used to assess moral reasoning development. According to Rest and colleagues (1999), the DIT measures three types of moral thinking. At the lowest

level, the focus of moral judgment is "personal interests," such as personal pleasure/pain or the welfare of close friends and family. At the next level of development, individuals take a society-as-a whole view and focus on "maintaining norms" (e.g., one must always obey existing laws). At the highest level, the individual is able to reason using "postconventional" thinking, which reflects the capacity to consider multiple viewpoints in the community when deliberating about moral action. MEQ scores were expected to be negatively predictive of personal interest and maintaining norms reasoning and positively predictive of postconventional moral reasoning. Although college experience alone can influence moral reasoning development (Rest & Narvaez, 1991; Rest et al., 1999), we expected MEQ scores to be independent of year in school.

In terms of mindsets, we looked again at closed-mindedness, as in the pilot study, but also at growth and fixed mindsets (Dweck, 2006). Individuals with fixed mindsets believe that people largely cannot change intellectual abilities or who they are. In contrast, those with growth mindsets believe that individuals can grow and change in skills, abilities and/or personality. Growth mindsets are related to achievement success because one views challenges and failures as opportunities for further growth (Blackwell, Trzesniewski, & Dweck,

Table 1
Means and Standard Deviations of Major Variables for the Pilot and the Current Study

Variable	Pilot ($n = 56$)	Current study ($n = 164$)
MEQ	53.02 (7.78)	48.75 (7.67)
Right-wing authoritarianism	140.98 (48.13)[a]	69.70 (21.20)[a]
Blind patriotism	37.77 (13.16)	37.88 (10.75)
Moral judgment variables		
Personal interest	—	26.66 (12.86)
Maintaining norms	—	29.98 (13.12)
Postconventional	—	37.57 (15.54)
N2	—	36.93 (15.21)
Mindset variables	—	
Fixed intelligence	—	6.30 (2.01)
Fixed personality	—	5.85 (1.76)
Growth intelligence	—	5.84 (1.87)
Growth personality	—	6.80 (1.56)

Note. MEQ = Multicultural Experiences Questionnaire; N2 = combination of endorsed postconventional items and also rejected personal interest items.
[a] The pilot study used a 32-item Right-Wing Authoritarianism scale, whereas the planned study used a 20-item measure.

2006). In these studies, we tested whether multicultural experience is related to closed-mindedness, fixed, and growth mindsets.

Method

Participants

There were 164 undergraduates (52% men, M_{age} = 19.3 years) from a Midwestern private university who completed the measures as part of a larger online survey. Participants were allowed to endorse all ethnicities they deemed appropriate, and the top three chosen were White/Caucasian (79%), Hispanic (12%), and Asian (9%). All participants provided informed consent and were properly debriefed following the survey.

Measures

Closed-mindedness. We measured closed-mindedness with two instruments used frequently in political psychology, Right-Wing Authoritarianism Scale (Altemeyer, 1998) and Blind Patriotism (Schatz et al., 1999). Both are proxies for rigid thinking. The Right-Wing Authoritarianism (RWA–20) scale assesses the acceptance and promotion/protection of societal authorities, and rigid adherence to particular traditions and social norms of society. It is not "right" in a political sense but in the old sense of doing what is lawful (Altemeyer, 2006) and is related to rigidity of thinking (Altemeyer, 1988; Jost, Glaser, Kruglanski, & Sulloway, 2003). Participants rated 20 items on a 7-point Likert-type scale (1 = strongly disagree to 7 = strongly agree), with higher scores indicating more authoritarian attitudes. A sample item is "This country would work a lot better if certain groups of troublemakers would just shut up and accept their group's traditional place in society." Cronbach's alpha for this sample was .94. The Blind Patriotism scale assesses "an attachment to country characterized by unquestioning positive evaluation, staunch allegiance, and intolerance of criticism" (Schatz et al., 1999, p. 151). Participants rated the 13 items on a 6-point Likert-type scale (1 = strongly disagree to 6 = strongly agree), with higher scores indicating more blind patriotic allegiance. A sample

item is "I would support my country right or wrong." Cronbach's alpha for this sample was .90.

Moral judgment. The DIT–2 (Rest & Narvaez, 1998; Rest et al., 1999) is a multiple-choice test that presents five dilemmas for which respondents are asked to make an action choice, and then rate 12 statements for how important they were in making the decision. After rating the statements, respondents rank order the four most important statements. From these ratings and rankings, several indexes are calculated: "personal interests schema" represents the lowest level of moral reasoning measured by the DIT, focusing on personal gain or the welfare of close friends and family; "maintaining norms schema" indicates that individuals take a society-as-a whole view and are concerned about law and order; "postconventional thinking" is the highest level measured and represents the ability to consider multiple viewpoints when deliberating about moral action. We expected those with more multicultural experience to have higher scores on postconventional thinking and lower scores on personal interest.

From these ratings and rankings, one can then measure how much participants preferred each of the three moral schemas (personal interest, maintaining norms, and postconventional). In addition to these three measures, we used the DIT's "N2" score, a combination of the extent to which participants endorsed postconventional items and also rejected personal interest items. Thus, we used four DIT–2 scores: personal interest, maintaining norms, postconventional or "P-score," and "N2." Individuals with higher P and N2 scores exhibit higher moral reasoning development. Scores were calculated using the computer scoring service provided by the University of Minnesota's Center for the study of Ethical Development.

Mindsets. We tested four mindset constructs with two-item variables: Fixed Intelligence, Fixed Personality, Growth Intelligence, Growth Personality (Dweck, 2006). A sample item for Fixed Intelligence was "Intelligence is something very basic about a person that he or she can't change very much"; a sample item for Fixed Personality was "An individual is a certain kind of person, and there is not much that can be done to really change that." A sample item for Growth Intelligence was "No matter how much intelligence someone has, they can

always change it quite a bit"; a sample item for Growth Personality was "You can always change basic things about the kind of person you are." We expected participants with greater multicultural experience to have growth rather than fixed mindsets, as indicated by higher scores for Growth Intelligence and Growth Personality, but lower scores on Fixed Intelligence and Fixed Personality.

Results

Analyses were conducted with significance level set at .05 and were grouped into four categories. First, the reliability and the factor structure of the MEQ were assessed. Second, construct validity of the MEQ was examined using measures of closed-mindedness. Third, regression analyses tested whether the MEQ predicted variance in the DIT–2 measures above that accounted for by sex and school year. We expected that the MEQ would be positively predictive of the more advanced P and N2 scores, and negatively predictive of the personal interest and maintaining norms measures. Fourth, we tested whether MEQ scores were related to mindset variables.

Reliability and Factor Structure

When evaluating the reliability of the MEQ, another item demonstrated a negligible item-total correlation and was removed ("The culture of the past is the culture of the future."), resulting in a 15-item instrument with adequate internal consistency ($\alpha = .80$). Next, the factor structure of this final 15-item version was assessed using a principal components factor analysis. Using parallel analysis criteria (Lautenschlager, 1989), both the two- and three-factor solutions seemed possible. However, the three-factor solution had few unique item indicators, and thus the two-factor solution was compared to a single-factor solution. This two-factor solution had poor interpretability, as four items either had similar loadings on both factors or did not load on either factor. Therefore, it appears that the 15-item MEQ does tap a single factor. See Table 2 for the factor analysis results.

Construct Validity Analyses

The construct validity of the MEQ was then assessed. First, correlational analyses indicated that MEQ scores were moderately negatively correlated with the two measures of rigid thinking RWA, $r(164) = -.48$, $p < .001$, and with blind patriotism, $r(164) = -.52$, $p < .001$. Overall, the validity of the construct measured by the 15-item MEQ was supported.

Predicting Moral Judgment Levels

Next, we conducted hierarchical regressions to assess whether MEQ scores predict moral

Table 2
Factor Analyses for Two- and Three-Factor Solutions With Varimax Rotation

Item No.	Two-factor solution		Three-factor solution		
	Factor 1	Factor 2	Factor 1	Factor 2	Factor 3
1	.03	.65	.05	.27	.61
2	.68	.00	.72	−.01	.03
3	−.12	.70	−.05	.11	.76
4	.52	.20	.55	.08	.21
5	.17	.38	.35	−.27	.65
6	.49	.10	.56	−.08	.20
7	.82	.01	.81	.13	−.05
8	.44	.34	.42	.27	.25
9	.58	.35	.45	.58	.06
10	.78	.25	.71	.41	.06
11	.64	−.02	.56	.31	−.19
12	.25	.28	.08	.62	.07
13	.19	.49	.14	.37	.35
14	.09	.57	−.07	.70	.23
15	.50	.45	.41	.51	.22

judgment, controlling for sex and year in school. This involved a series of four regressions, in which we predicted each of the four DIT–2 measures (personal interest, maintaining norms, P score, and N2 scores). For each regression we entered first sex, then year in school, and last MEQ scores. It was expected that the MEQ would be unrelated or negatively predict scores on the lower indexes of moral judgment and positively predict scores on the higher indexes of moral judgment. See Table 3 for a summary of the regression results.

First, as expected the MEQ was marginally negatively predictive of endorsement of the personal interest schema, $\beta = -.15$, $t(160) = -1.90$, $p < .06$, and significantly negatively predictive of the maintaining norms schema, $\beta = -.19$, $t(160) = -2.38$, $p < .05$. Second, the MEQ was positively predictive of postconventional scores, $\beta = .32$, $t(160) = 4.24$, $p < .001$, and N2 scores (rejection of personal interest items and preference for postconventional items), $\beta = .23$, $t(160) = 3.02$, $p < .01$. As expected, multicultural experiences were negatively predictive of scores on lower stage moral judgment and positively predictive of scores representing higher levels of moral judgment development.

Predicting Mindsets

We tested the relation of MEQ scores to the mindset variables in correlational and regression analyses. Correlational analyses supported our primary hypotheses. First, MEQ scores were negatively related to Fixed Intelligence, $r(164) = -.19$, $p < .05$, and Fixed Personality, $r(164) = -.18$, $p < .05$. Second, MEQ scores were positively related to Growth Intelligence, $r(164) = .21$, $p < .01$, and Growth Personality, $r(164) = .22$, $p < .01$. We then tested how well MEQ scores predicted the mindset variables when year in school and sex were controlled in regression analyses. A regression analysis was conducted for each mindset variable (see Table 4). The mindset variable was the dependent variable and sex, year in school and MEQ scores were entered as predictors. After controlling for sex and year in school, MEQ scores remained negatively predictive of both Fixed Intelligence scores, $\beta = -.16$, $t(160) = -2.07$, $p < .05$, and Fixed Personality scores, $\beta = -.15$, $t(160) = -1.97$, $p < .06$. MEQ scores were positively predictive of Growth Intelligence, $\beta = .21$, $t(160) = 2.67$, $p < .01$ and positively predictive of Growth Personality scores, $\beta = .20$, $t(160) = 2.62$, $p < .01$. There-

Table 3
Regression Analyses Predicting Moral Judgment From MEQ Scores

Variable	B	SE β	β
Predicting personal interest schema			
Sex	−3.06	2.01	−.12
School year	−0.54	0.97	−.04
MEQ	−0.25	0.13	−.15[†]
Predicting maintaining norms schema			
Sex	0.03	2.06	.00
School year	0.08	1.00	.01
MEQ	−0.32	0.13	−.19[*]
Predicting postconventional schema			
Sex	4.56	2.31	.15[*a]
School year	0.65	1.12	.04
MEQ	0.64	0.15	.32[**]
Predicting N2 (postconventional minus personal interest)			
Sex	4.40	2.32	.15[†a]
School year	0.87	1.12	.06
MEQ	0.46	0.15	.23[**]

Note. MEQ = Multicultural Experiences Questionnaire; N2 = combination of endorsed postconventional items and also rejected personal interest items.
[a] Females scored higher.
[†] $p < .1$.   [*] $p < .05$.   [**] $p < .01$.

Table 4
Predicting Mindset Variables From MEQ Scores

Predictor	B	$SE\ B$	β
Predicting fixed intelligence			
Sex	−.84	.31	−.21**
School year	−.17	.15	−.09
MEQ	−.04	.02	−.16*
Predicting fixed personality			
Sex	−.60	.27	−.17*
School year	−.26	.13	−.15*
MEQ	−.04	.02	−.15†
Predicting growth intelligence			
Sex	−.06	.29	−.02
School year	.01	.14	.00
MEQ	.05	.02	.21**
Predicting growth personality			
Sex	.30	.24	.09
School year	.14	.12	.09
MEQ	.04	.02	.20**

Note. MEQ = Multicultural Experiences Questionnaire.
† $p < .1$.   * $p < .05$.   ** $p < .01$.

fore, it appears as though multicultural experiences may influence mindset, even when controlling for educational and sex differences.

General Discussion

In this paper we reported on the development of the MEQ. Scale items included not only depth and breadth of multicultural experience, but also desire to learn about and accommodate the views of others. We demonstrated the internal reliability and factor structure of the MEQ and validated it with several measures. As predicted, scores on the MEQ were related to closed-mindedness as measured by right-wing authoritarianism and blind patriotism. Overall, the validation analyses were successful.

The main research questions concerned moral judgment and mindsets. MEQ scores were positively related to higher levels of moral judgment (postconventional reasoning) and negatively related to lower levels of moral judgment (personal interests and maintaining norms) even when year in school and sex were controlled, suggesting that experience (specifically multicultural experience) predicted moral judgment scores beyond maturation and sex. These findings more strongly confirm previous suggestions of the link between diverse experiences and moral judgment (Endicott et al., 2003; Rest, 1986).

MEQ scores were also related to mindsets variables, here represented as attitudes toward the possibility of personal change in intelligence and personality. Mindset variables were predicted by MEQ scores even after sex and year in school were controlled, suggesting again that experience was a predictor of mindset beyond maturation and sex. The findings concur with previous research showing that multicultural experience is related to more flexible and open thinking. Longitudinal and experimental studies will need to confirm these findings.

Future Directions

There are several promising avenues for further research. First, we did not conduct an experiment to test the causal direction between multicultural experience and the other variables. So it could be the case that those who are open-minded at the outset are those who seek out multicultural experiences. Denson and Chang (2009) reported how multicultural experience influences self-change in racial-cultural engagement and academic skills, an awareness of self-growth. It would be interesting to test whether multicultural experiences are directly affecting growth mindset. Further, it is possible that people with more sophisticated moral reasoning skills are more likely to take part in multicultural experiences than those who are less developed (Rest, 1986). To test causality, the MEQ could be used with multicultural interventions as a pre–postassessment or in longitudinal studies.

Second, moral development research suggests that although enriched social experiences foster perspective taking and moral judgment development, individuals differ in how much they take advantage of opportunities (Rest, 1986). The MEQ may offer a way to measure which students take advantage of diverse experiences while at college. Although educators often cannot physically take their classes to experience other cultures, they can instill a sense of openness to these experiences. Educators can, whenever possible, challenge their students to be open to ideas and viewpoints not indigenous to their own culture, encouraging them to experience new things and places, as in study abroad. The MEQ may offer a way to measure the success of the persuasion.

Third, it would be of interest to further assess the complex relationships between multicultural experiences, moral development, and cultural ideology. Narvaez, Getz, Rest, and Thoma (1999) suggested that the development of moral reasoning and cultural ideology are mutually influential in late adolescence, setting the trajectory for future growth, and collectively predicting the level of cognitive development, specifically moral reasoning. It would be of interest to measure whether level of multicultural experience at the end of college moderates the relationships between either moral or ideological variables and one's views on different issues as an adult. For example, individuals of a more orthodox ideology may report having more liberal views if they have had more multicultural experiences or if their religion emphasizes openness to nonmembers (e.g., Kraybill, Nolt, & Weaver-Zercher, 2008). This is an area ripe for further research.

Fourth, it might be worthwhile to connect the use of the MEQ with measures of campus climate. As Hurtado and colleagues (Hurtado, Griffin, Arellano & Cuellar, 2008) pointed out, campus climate research initially examined frequency of experience with diversity (e.g., Pascarella, Edison, Nora, Hagedorn, & Terenzini, 1996) and only later moved toward the quality of interactions in multiple contexts (e.g., Gurin et al., 2002). Although the number of diversity experiences may be increasing among students generally, the quality of experience may depend on the individual's prior experiences that influence readiness to learn. These kinds of outcomes are only apparent in longitudinal studies (e.g., Sáenz, Ngai, & Hurtado, 2007). Hurtado and colleagues (2008) suggested that one must gather baseline data at college entry to determine the effects of prior experience on subsequent outcomes. The MEQ could be used in freshman–senior longitudinal studies to quickly sample prior experience in freshmen as well as college-based diversity experiences in seniors. The MEQ or similar measures could provide needed information about how much campus members take advantage of the opportunities for multicultural experience, especially in relation to multiple measures of campus diversity (for instance, see Umbach & Kuh, 2006).

Limitations

There were several limitations to the study. First, we did not have a broad representation across ethnic and racial groups, with no representation from African Americans and Native Americans groups. Further research should examine whether members of different subcultures respond in a manner similar or different from other groups. For example, perhaps those who benefit from multicultural experiences are primarily European Americans. Second, although the MEQ is intended to be inclusive of intercultural experience within one's own country, perhaps this should be explicitly stated in the directions. In addition, Questions 1 and 2 might be moved to later in the questionnaire so as to not give the impression that the questionnaire is only about foreign travel experience.

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Appendix

Final 15-Item Version of the Multicultural Experiences Questionnaire

1. I travel out of the country.
   Never   *1 to 2 times in my life*   *3 or more times*   *Regularly*

2. I want to travel outside of my country.
   1   2   3   4   5
   Not true at all   *Very true*

3. I speak well.
   1 language   2 languages   3 languages   More than 3 languages

4. I *want* to learn or am learning to speak another language.
   1   2   3   4   5
   Not true at all   *Very true*

5. I correspond currently with people from other countries [or cultures].
   Never   1 country   2 to 3 countries   More than 3 countries

6. I have friends from cultural–racial–ethnic backgrounds different than my own.
   0 friends   1 friend   2, 3, 4, 5, or more friends

7. I *want* to have friends from different cultural–racial–ethnic backgrounds.
   1   2   3   4   5
   Not true at all   *Very true*

8. I work with people with cultural–racial–ethnic backgrounds different from my own.
   1   2   3   4   5
   Never   *Always*

9. I go out of my way to hear/read/understand viewpoints other than my own.
   1   2   3   4   5
   Never   *Always*

10. I try to get to know people who are different from me.
    1   2   3   4   5
    Never   *Always*

11. I respect the traditions of a culture.
    1   2   3   4   5
    Strongly disagree   *Strongly agree*

12. I have had courses in intercultural communication.
    0   1 course   2 courses   3 or more courses

13. I have lived in a contrasting community (with a very different culture from my own).
    0   1 to 2 months   3 to 6 months   6 to 9 months   over 9 months

14. I pay attention to news about the world beyond the U.S.A.
    Never   *Rarely*   *Sometimes*   *Frequently*   *Always*

15. I enjoy media and art from different cultures.
    Never   *Rarely*   *Sometimes*   *Frequently*   *Always*

Items That Were Eliminated

I have acquaintances from cultural–racial–ethnic backgrounds different than my own.
The culture of the past is the culture of the future.