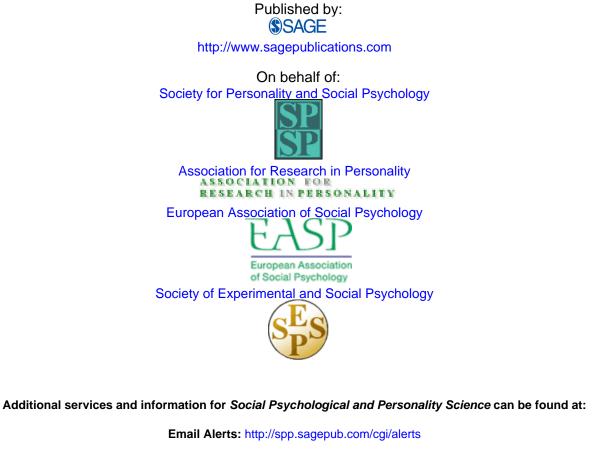
# Social Psychological and Personality Science

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William W. Maddux, Eliza Bivolaru, Andrew C. Hafenbrack, Carmit T. Tadmor and Adam D. Galinsky Social Psychological and Personality Science 2014 5: 608 originally published online 11 December 2013 DOI: 10.1177/1948550613515005

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# Expanding Opportunities by Opening Your Mind: Multicultural Engagement Predicts Job Market Success Through Longitudinal Increases in Integrative Complexity

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#### Abstract

A longitudinal study found that the psychological approach individuals take when immersed in a general multicultural environment can predict subsequent career success. Using a culturally diverse sample, we found that "multicultural engagement"—the extent to which students adapted to and learned about new cultures—during a highly international 10-month master of business administration (MBA) program predicted the number of job offers students received after the program, even when controlling for important personality/demographic variables. Furthermore, multicultural engagement predicted an increase in integrative complexity over the course of the 10-month program, and this increase in integrative complexity mediated the effect of multicultural engagement on job market success. This study demonstrates that even when individuals are exposed to the same multicultural environment, it is their psychological approach and engagement with different cultures that determines growth in integrative complexity and tangible increases in professional opportunities.

#### Keywords

culture, multicultural experience, multicultural engagement, integrative complexity, professional achievement

The Jack Welch of the future cannot be like me. I spent my entire career in the U.S. The next head of General Electric will be somebody who spent time in Bombay, in Hong Kong, in Buenos Aires. We have to send our best and brightest overseas and make sure they have the training that will allow them to be the global leaders who will make GE flourish in the future.—Jack Welch, former chairman, General Electric

How do people get ahead in their careers? In particular, what distinguishes those who succeed professionally from their equally qualified peers? As suggested by the former CEO Jack Welch upon his retirement from General Electric, multicultural experiences may bring about performance benefits in the modern-day economy (e.g., Stahl, Miller, & Tung, 2002). Indeed, a host of recent empirical work has reliably documented the benefits of multicultural experiences, such as increased creativity (e.g., Cheng & Leung, 2013; Cheng, Sanchez-Burks, & Lee, 2008; Leung & Chiu, 2010; Leung, Maddux, Galinsky, & Chiu, 2008; Maddux & Galinsky, 2009; Saad, Damian, Benet-Martinez, Moons, & Robins, 2013). However, this research has also suggested that mere exposure to new cultures is insufficient to bring about the benefits associated with multiculturalism (Cheng et al., 2008; Maddux, Adam, & Galinsky, 2010; Tadmor, Galinsky, & Maddux, 2012; Tadmor & Tetlock, 2006). Rather, what appears to be critical is that individuals *actively engage* with these new cultures in order to produce a transformation in basic cognitive processing and to leave a lasting impact on a wide range of domains (Crisp & Turner, 2011; Tadmor, Tetlock, & Peng, 2009).

Unlike merely being exposed to a different culture, psychologically engaging with another culture provides the critical contrast that helps individuals both appreciate and question long-held beliefs, practices, and assumptions that characterize one's own culture while also increasing exposure to new

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information about the behaviors, values, and norms that characterize a new foreign culture (Tadmor, Hong, Chao, Wiruchnipawan, & Wang, 2012; Tadmor et al., 2009). Over time, this process of understanding and integrating what is old with what is new, switching between perspectives, and resolving inconsistent cognitions between them (Benet-Martinez, Lee, & Leu, 2006; Tadmor & Tetlock, 2006; Tadmor et al., 2009) can lead to changes in one's ability to exhibit "integrative complexity." A dimension of information processing, integrative complexity, refers to the willingness and capacity to acknowledge and integrate competing perspectives on the same issue (e.g., Tadmor & Tetlock, 2006). Integrative complexity has been suggested to be facilitated by second-culture exposure (Benet-Martinez et al., 2006; Tadmor & Tetlock, 2006; Tadmor et al., 2009) but importantly has been shown to transcend specific cultural knowledge, leading to general psychological and performance advantages (e.g., Tadmor et al., 2009; Tadmor, Galinsky, & Maddux, 2012). Indeed, Tadmor, Tetlock, and Peng (2009) have shown that immersion in two cultures will not only increase culture-related integrative complexity but also transcend to other domains, including that of work because of the fundamental functional equivalence between the cultural and the work domains-each require an ability to deal with value conflicts, accept different points of view, and create an overall coherent judgment.

Despite this growing body of work, several critical gaps remain. First, although most of the research on multiculturalism has documented the psychological and tangible consequences of living abroad or psychologically juxtaposing two cultures, it is yet unclear whether actively engaging in a general multicultural environment involving many different cultures rather than a single and salient new culture can provide distinct benefits. Second, little work has explored the effect of multicultural experiences on real-world, professionally relevant outcomes and not simply on creativity laboratory tasks (Rich, 2009; see Maddux, Leung, Chiu, & Galinsky, 2009, for a response). One study did note an association between biculturalism and managerial promotions for mid-career professionals (Tadmor et al., 2012). However, research has yet to explore whether multicultural experiences could be useful in securing professional opportunities at the outset of one's career, opportunities that could later transform into important advantages in one's career trajectory. Finally, much of the work on multicultural experiences has been cross-sectional. For example, although Tadmor and colleagues (2012) have suggested that dual identification with home and host cultures is what leads to increases in integrative complexity, the crosssectional design of their study precluded establishing a causal relationship between the two. Indeed, it is certainly possible that the direction of causality is reciprocal: Integratively complex individuals may also be more likely to simultaneously identify with their host and home cultures.

The current research uses a longitudinal design and a real-world outcome to help fill in these gaps in the literature. We propose that individuals who are actively engaged in understanding and adapting to new cultures in a multicultural environment will show an increase in integrative complexity over time that will facilitate securing professional opportunities. As noted above, integrative complexity is defined as the willingness and capacity to acknowledge and consider differing views on the same issue (known as *differentiation*) and to forge conceptual links among these perspectives (known as integration; Suedfeld, Tetlock, & Streufert, 1992). We argue that integrative complexity should increase when individuals actively engage in a multicultural environment due to the increased cognitive versatility afforded by making sense of different sets of values, norms, and rules for interacting across multiple cultures (e.g., Maddux, 2011; Tadmor & Tetlock, 2006; Tadmor et al., 2009). This complex style of information processing will then become a habitual way of making sense of other domains, such as the work context, in which conflicts and differing perspectives abound.

We further propose that an increase in integrative complexity may be an important determinant in securing professional opportunities at the outset of one's career. In particular, the process of securing a job entails successfully passing several rounds of interviews with different interviewers and typically involves a series of intellectually challenging questions under time pressure, necessitating spontaneous complex problem solving, often with analyses of complicated business cases (Chapman & Zweig, 2005; Roulin, Bangerter, & Yerly, 2011). Such situations are designed to simulate the complex and dynamic modern business world, where critical, flexible, unique, and creative thinking is increasingly important (Brotheridge & Long, 2007; Friedman, 2005; Roulin et al., 2011). The ability to consider opposing perspectives and synthesize them can help job seekers find more rigorous solutions and appear more attractive to recruiters in the process. Indeed, research has shown that integratively complex individuals are facile at combining disparate pieces of information from different domains, can flexibly approach problems from numerous and often contradictory perspectives, and have a higher tolerance for ambiguous information and information overload (for a review see Streufert & Nogami, 1989). In addition, integrative complexity is directly associated with increased creativity (Tadmor et al., 2012) and creativity in employees has been found to predict job performance (Gong, Huang, & Fahr, 2009). Finally, even to objective observers, integratively complex individuals are seen as creative, open to new experiences, high in initiative, adventurous, clever, and able to bring seemingly unrelated ideas together into meaningful wholes (Tetlock, Peterson, & Berry, 1993). Thus, many of the skills necessary to successfully navigate the interview process are those typically possessed by integratively complex individuals (Roulin et al., 2011).

In the current study, we investigated whether the active engagement in a general multicultural environment leads to a greater number of job offers at the outset of individuals' careers, and whether this relationship can be explained by increased integrative complexity following multicultural engagement. Following previous work on the psychological effects of living abroad (Maddux & Galinsky, 2009; Maddux et al., 2010), we define multicultural engagement as the extent to which individuals had adapted to and learned about new cultures. Overall, we predict that multicultural engagement will increase integrative complexity and that this increased complexity will produce more job offers.

To test these hypotheses, we conducted a longitudinal investigation of master of business administration (MBA) students attending a highly culturally diverse 10-month academic program. Using a longitudinal measurement of our core process allowed us to obtain a valid measure of change in integrative complexity as a result of multicultural engagement and to determine its concrete role in predicting job market success. This design allows us to test for changes in integrative complexity and rule out a particular self-selection concern (i.e., that integrative complexity predicts multicultural engagement).

It is important to note that our study also allowed us to hold constant the multicultural context and investigate our hypothesis that it is the way people psychologically approach the environment rather than mere exposure or time spent in the environment itself, that is critical for deriving professional benefits. Taken together, we predicted that multicultural engagement would positively predict job offers received after a graduate educational program and that this relationship would be explained by increases in integrative complexity over time.

# Method

#### Participants

Participants were 115 full-time MBA students (84 male,  $M_{age} = 28.6$ , standard deviation [SD] = 2.13) at an elite, international graduate business school with two full-time campuses—one in France and one in Singapore. Participants were citizens of 39 different countries, with the most common nationalities being the United States (13), France (12), Germany (11), and India (10).

## Multicultural Environment

The study participants were part of a larger class of 499 MBA students (300 of whom started on the French campus and 199 of whom started on the Singapore campus) from 73 different countries. In addition, this group of students also overlapped with two other cohorts of MBA students, one of which started the program 8 months prior and the other of which started the program 4 months later. These overlapping classes of students consisted of 73 and 71 nationalities, respectively, both of which had a highly similar cultural makeup. This cultural diversity was possible because the school's admission policy is explicitly to allow for a maximum of only 10% of students from any particular nationality per cohort. In addition, for the initial 4 months of the program students were placed into study groups of five or six individuals preselected to have a maximum of two students from the same country on a given team, with the vast majority of groups having no more than one student from any particular country. And finally, only 13 of our 115 participants were citizens of France or Singapore, so most individuals were

also living in a foreign country during their graduate studies. Overall, then, the environment during the 10-month program was very culturally diverse, and thus an optimal setting to explore the effect of multicultural engagement on tangible, real-world outcomes.

# Procedure

Participants voluntarily completed two separate surveys for the chance to win 1 of 10 iPad 2s. The Time 1 survey was taken at the beginning of the program in early September and consisted of various control and demographic measures as well as an essay-writing task that served as our measure of integrative complexity. The Time 2 survey was taken in late June at the end of the program and consisted of our measures of multicultural engagement during their graduate program and a second essay task to measure integrative complexity. At a third point in time, approximately 6 months following the Time 2 survey, we received the final, official data from the school's MBA office on job market success.

# Measures

Multicultural Engagement. In the Time 2 survey, students recorded (a) the extent to which they learned about new cultures during the 10-month program and (b) the extent to which they adapted to new cultures during this time. Responses were provided on 5-point scales, with responses ranging from 1 = not at all to 5 = very much ( $\alpha = .70$ ).

Integrative Complexity. Integrative complexity was measured using the traditional method of content-analyzing participants' open-ended responses (Suedfeld et al., 1992). At both Time 1 and Time 2, students were given an essay-writing task where they were asked to write a minimum of 250-word essay on "the pros and cons of working in multicultural teams." <sup>1</sup> Subsequent coding entailed an assessment of the structure rather than the content of the essays. Specifically, coding focused on two structural dimensions: differentiation and integration. Evidence for differentiation consists of references to more than one dimension of a problem or more than one perspective on an issue. Low differentiation is reflected by a tendency to focus only on one theme in the analysis and to rely without qualification on simple, one-dimensional rules for interpreting events or making choices (e.g., "Exposure to diverse perspectives, increased creativity, and improved decision quality are all examples of the clear advantages of working in multicultural teams"). It is also reflected by the tendency to dismiss alternatives without serious consideration (e.g., "The advantages are tolerance, understanding, and opening of your mind. The disadvantages are not many. In fact, I can't think of any right now"). In contrast, higher levels of differentiation reflect the recognition and acceptance of at least two alternative perspectives or different dimensions of an issue as legitimate and valid (e.g., "There are many disadvantages of working in multicultural teams: the lack of homogeneity within the cultural backgrounds makes communication, politeness, and unspoken communication more difficult. But there are also several advantages. For example, one might open his mind, discover new ways of doing things and therefore improve team efficiency"). When differentiated elements are linked conceptually, evidence of integration is inferred (e.g., "The advantages and disadvantages actually both originate from the same root cause: differences. These differences will in some cases be beneficial and sometimes problematic, depending on the precise situation at hand. Different points of view will increase the chances of coming up with new ideas/perspectives on the same problem. [ ... ] On the other hand, a variety of perspectives can lead to misinterpretations, and bigger effort toward clear communication needs to be made." Note that although the latter two examples describe the same content in terms of the kind of advantages and disadvantages presented, only the latter one conceptually links differentiated elements.

The essays were coded by two trained independent coders on a 7-point scale, with higher ratings denoting higher integrative complexity. Interjudge agreement was high ( $\alpha = .93$ ). Although there is some potential overlap in subject matter between our main independent variable of multicultural engagement and the essay topic of multicultural teams, as we have noted earlier, previous research has shown that integrative complexity levels in the cultural domain have been explicitly generalized to other domains including those of work (Tadmor et al., 2009, 2012). However, asking a question in the cultural but not in the work domain, and then measuring job offers, was arguably a more conservative test of our hypothesis, specifically because the number of job offers a person receives is not likely to be the result of merely having more complex thinking in the cultural domain. However, to empirically verify that our essay topic did not show extensive overlap with our main independent variable of multicultural engagement, one coder also rated the essays for the extent to which they mentioned the themes of learning from and adapting to new cultures. The coder rated the content of the essays at Time 2 in terms of (1) whether each essay addressed learning about new cultures (binary variable); (2) whether each essay addressed adapting to new cultures (binary variable); (3) how central learning about new cultures was to the essay as a whole (ranging from 1 = not at all central to 5 = extremely central), and (4) how central adapting to new cultures was to the essay as a whole (ranging from 1 = not at all central to 5 =extremely central). Results showed that mentioning learning about new cultures was unrelated to multicultural engagement (Mann–Whitney's U test showed Z = -1.00, p = .319) and that mentioning adapting to new cultures was also unrelated to multicultural engagement (Z = -.40, p = .689). Moreover, mentioning learning about new cultures was unrelated to integrative complexity levels (Z = -1.41, p = .158) as was adapting to new cultures (Z = -1.16, p = .248). Centrality of the themes was also unrelated to multicultural engagement and to integrative complexity (all ps > .240).

Job Offers. At Time 3, 6 months after students' graduation (and also 6 months after the Time 2 survey), we contacted the

school's career services office to obtain information on participants' job search. Our main dependent variable was job offers, a relatively objective and unbiased measure of initial employment opportunities which, unlike other measures such as starting salary, is not confounded with or strongly influenced by other variables such as industry (i.e., banking vs. nonprofit) or geographic location. In the Time 2 survey, we asked students about the number of jobs they applied for and the number of interviews they had to use these as control variables.

Control Measures. We included personality and demographic control measures of Big Five personality traits (Costa & McCrae, 1985), age, and gender. In order to show that multicultural engagement during the program itself, and not mere exposure to foreign cultures, predicted integrative complexity increases over time and more job offers after the program, we also controlled for participants' multicultural experience prior to joining the program (number of years that students had spent abroad before joining the program; 86% reported having lived abroad previously). Attending to the same rationale, we also controlled for whether participants studied in their home country during the program (e.g., French students who studied on the France campus). Finally, we controlled for other indicators of intellectual performance and motivation, such as Graduate Management Admission Test (GMAT) scores, whether students made the Dean's List (which is the only measure of academic achievement disclosed to job recruiters as overall grades were confidential), and number of jobs applied for. All control measures apart from making the Dean's list and jobs applied for were collected during the first survey.

# Results

# Multicultural Engagement and Job Offers

We ran an initial simple regression analysis with multicultural engagement as the predictor variable and the number of job offers received as our criterion variable. As expected, multicultural engagement predicted the number of job offers received ( $\beta = .185$ , b = .340, standard error [SE] = .171, p = .049; see Table 1, Model 1). We subsequently ran a multiple regression that also included the control variables listed earlier and found that multicultural engagement continued to positively predict the number of job offers received ( $\beta = .193$ , b = .352, SE = .175, p = .047; see Table 1, Model 2). Importantly, controlling for the number of job interviews instead of jobs applied to did not change the overall results, so this finding was not simply driven by certain people applying to more jobs than others.

#### Changes in Integrative Complexity

The change in integrative complexity over the 10-month program was calculated by subtracting each participant's integrative complexity score on their first essay at the beginning of the program from their corresponding score on their second essay at the end of the program, such that positive scores indicated increases over time. Across the entire sample, there was

Table I. Results From Regression Analyses Predicting Job Offers.	Table	I. Results	From	Regression	Analyses	Predicting	ob Offers.
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Independent/Control Variable	Model I	Model 2	Model 3	Model 4
Multicultural engagement	0.34* (0.17)	0.35* (0.18)	0.22 (0.18)	0.19 (0.18)
Integrative complexity change		× ,	0.32*** (0.12)	· · · ·
Integrative complexity at Time 2			, , , , , , , , , , , , , , , , , , ,	0.47*** (0.13)
Integrative complexity at Time 1				-0.12 (0.15)
Age		-0.03 (0.08)	-0.03 (0.08)	-0.07 (0.08)
Gender		0.01 (0.36)	0.00 (0.36)	-0.08 (0.36)
Extraversion		0.09 (0.08)	0.12 (0.08)	0.12 (0.08)
Agreeableness		-0.05 (0.12)	-0.15 (0.12)	-0.20 (0.12)
Conscientiousness		-0.21* (0.08)	-0.20* (0.08)	-0.17* (0.08)
Neuroticism		0.01 (0.09)	0.01 (0.09)	-0.01 (0.09)
Openness		0.08 (0.12)	0.05 (0.12)	0.07 (0.12)
GMAT		0.01 (0.00)	0.01* (0.01)	0.01 (0.01)
Previous time abroad		0.03 (0.03)	0.04 (0.03)	0.04 (0.03)
Home-country study		0.26 (0.47)	0.31 (0.47)	0.33 (0.46)
Dean's List		-0.27 (0.49)	-0.27 (0.50)	-0.41 (0.50)
Number of jobs applied to		-0.02 (0.03)	-0.02 (0.03)	-0.02 (0.03)

Note: The results are based on unstandardized regression coefficients, with standard errors in parentheses. Model 1 represents the direct effect, Model 2 represents the direct effect with control variables included, Model 3 represents the full mediational model, and Model 4 uses integrative complexity at Time 2 as the mediator, while controlling for integrative complexity at Time 1. \*p < .05, \*\*p < .01.

an overall small positive increase over time (M = 0.72, SD = 1.35, from M = 1.56, SD = 1.04, range 1.00–5.00 at Time 1, to M = 2.30, SD = 1.33, range 1.00–5.50 at Time 2, t = 5.46, p < .001). Not surprisingly, integrative complexity at Time 1 significantly predicted integrative complexity at Time 2,  $\beta = .320$ , b = .398, SE = .114, p = .001. Further analyses indicated that, as expected, multicultural engagement significantly predicted an increase in integrative complexity (without controls:  $\beta = .274$ , b = .454, SE = .154, p = .004; with controls:  $\beta = .236$ , b = .394, SE = .160, p = .016) and that change in complexity also positively predicted job offers (without controls:  $\beta = .221$ , b = .250, SE = .107, p = .021; with controls:  $\beta = .316$ , b = .351, SE = .113, p = .002).

## Mediation

When we tested for mediation in the full model with all control variables, integrative complexity change continued to emerge as a significant and positive predictor of number of job offers ( $\beta = .286$ , b = .318, SE = .116, p = .007), while the direct effect of multicultural engagement became nonsignificant ( $\beta = .119$ , b = .218, SE = .180, p = .229; Table 1, Model 3; also see Figure 1). We then ran a bootstrapping analysis with 5,000 iterations (Preacher & Hayes, 2008) and found that the 95% confidence interval around the indirect effect (b = .124, SE = .092) did not include zero [.0020, .3401], providing further support for the existence of the mediation effect.

Because of potential methodological issues with different score variables (e.g., Edwards, 1995), we ran an additional set of analyses using the Time 2 measure of integrative complexity as the mediating variable, controlling for Time 1 integrative complexity. Notably, overall results were largely unchanged from the model using integrative complexity change as the mediating variable, with Time 2 integrative complexity

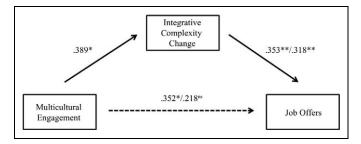


Figure 1. Mediational analysis. The values are based on unstandardized regression coefficients.

\*p < .05, \*\*p < .01.

significantly mediating the direct effect of multicultural engagement on job offers (the 95% confidence interval around the indirect effect (b = .162, SE = .092) did not include zero [.0200, .3678]; for full results, see Table 1, Model 4). We also included fixed effects to control for the type of industry, and the effect sizes remained the same.<sup>2</sup>

# **General Discussion**

Using a culturally diverse sample of MBA students at an international business school, we found that multicultural engagement—the extent to which students adapted to and learned about new cultures during their MBA training—predicted the number of job offers students received after the program. Furthermore, multicultural engagement predicted longitudinal increases in integrative complexity. Finally, integrative complexity increases that occurred over the 10-month MBA program mediated the effect of multicultural engagement on job market success.

The fact that these results held for an elite population of business students suggests a relatively conservative test of our hypothesis: Although students were on average highly qualified, multicultural engagement and subsequent changes in integrative complexity during their 10-month MBA still proved critical in securing job opportunities. In addition, it is important to note that our effects held even though the population of students was already highly multicultural upon entering the program: 86% of our sample had previously lived abroad. Nevertheless, the additional 10 months in a highly multicultural environment proved transformational but only for those who actively engaged with that environment.

#### Empirical Contributions

Our study design allowed us to test for the first time whether integrative complexity increases after active engagement with a diverse multicultural environment. This finding provides additional evidence that cultural exposure alone is not enough in producing psychological transformations (Tadmor, Galinsky, & Maddux, 2012; Tadmor, Hong, Chao, Wiruchnipawan, & Wang, 2012). Importantly, integrative complexity as measured at Time 1 did not predict multicultural engagement (the latter being measured after integrative complexity), consistent with cross-lagged panel designs that test for causation (Campbell & Kenny, 1999). Our design and this finding help rule out self-selection concerns-that integrative complexity leads individuals to seek more multicultural engagement. Thus, a critical contribution of the current research is to show that it is multicultural engagement that predicts changes in integrative complexity.

To our knowledge, this is the first study to use a general multicultural field setting rather than specific cultural experiences like living in a particular foreign country. This general setting demonstrated that benefits were not dependent on acquiring a particular cultural identity or specific cultural knowledge obtained (e.g., Benet-Martinez, Leu, Lee, & Morris, 2002; Leung, Lee, & Chiu, 2013). Rather, they were the result of a generalized ability to psychologically engage with a highly multicultural environment, while the general integrative complexity changes that ensued led to professional benefits. Although most students were living abroad during the MBA program, the vast majority of their time was spent in the environment of an intense MBA program studying and often also living with their multicultural peers, with much less time typically spent among French or Singaporean locals. This suggests that a general but highly multicultural environment can indeed provide psychological benefits.

An additional advantage of the current study is that we kept the focal multicultural experience constant among participants. In addition, the control variables we included help address some alternative explanations. For example, multicultural engagement and integrative complexity were not simply the result of applying to more jobs (ps > .710), suggesting that the students who received the most job offers were not necessarily more conscientious, ambitious, or well informed. Similarly, controlling for the number of job interviews obtained rather than job applications did not change our findings either. This suggests that the effects were unlikely to have been driven by the larger social or professional networks that multiculturally engaged individuals may have had (e.g., Chua, 2011).

#### Limitations

One concern is that our multicultural engagement measure was self-reported in this study. However, it is important to note that this form of measurement was in line with previous research findings demonstrating the predictive validity of subjective self-reports of learning and adaptation (e.g., Leung & Chiu, 2010; Maddux & Galinsky, 2009; Tadmor et al., 2012). Indeed, our main hypothesis is that it is the psychological approach that individuals take during a particular multicultural experience that is critical to deriving benefits rather than more objective criteria (e.g., time lived abroad) that do not assess the psychological impact of these experiences.

We also acknowledge that only our mediating variable was technically measured longitudinally. However, this finding is of critical value to existing research, given that until now an increase in integrative complexity over time has not been illustrated. Another potential issue is whether our effects were simply driven by being part of an educational program or challenging intellectual experience. However, it is important to note that although we observed a slight overall increase in integrative complexity over the entire sample, we also observed significant differentiation in job success based on which students were more multiculturally engaged, suggesting that experience with the MBA program by itself cannot account for our findings.

Finally, although our sample involved a unique group of participants (highly educated, culturally experienced, studying similar topics), such a sample was nonetheless much more diverse than a typical sample of undergraduate psychology students often found in the literature. And yet, we would argue that finding effects in such a unique sample is actually a conservative test of whether engaging with new cultures can continue to play a vital role in professional success even if one is already intellectually astute and culturally experienced prior to the target experience.

#### Future Directions

An interesting area for future research is to explore the relationship between integrative complexity and dialectical thinking, both of which involve tolerance of contradictions and relatively complex cognition (e.g., Spencer-Rodgers, Peng, & Wang, 2010). As little or no research has explored the relationship between these two constructs, it may be that those higher in dialectical thinking can also procure some of the same psychological and career benefits as those who are high in integrative complexity.

Another interesting avenue for future research is to explore the potential drawbacks of being integratively complex, since research has shown that such individuals can also be perceived as less conscientious and more narcissistic and antagonistic, aspects which may seem to be undesirable characteristics in potential employees (Tetlock et al., 1993). Although research has shown that integratively complex individuals are also promoted at higher rates in companies in which they have worked for several years (e.g., Tadmor et al., 2012), the short timespan afforded by interviews may be particularly conducive for the positive aspects of integrative complexity to be displayed, since applicants will be on their best behavior in such contexts. In addition, especially in the context of business, moderate levels of characteristics such as narcissism might actually be interpreted as confidence (e.g., Campbell, Goodie, & Foster, 2004). However, more negative aspects of integrative complexity may reveal themselves after such individuals have been on the job for some time.

# Conclusion

The current research adds to and extends the growing literature on the importance of multicultural experiences by demonstrating that multicultural engagement in a *general* multicultural environment can lead to positive, tangible effects on professional opportunities. Furthermore, we showed that multicultural engagement produces more career opportunities because it provides a general boost in integrative complexity. Especially, given the long-standing unemployment crisis in the United States and abroad as well as the ever-expanding complexity and internationalization of the world, such active engagement with one's increasingly multicultural environment will likely become an increasingly important advantage in opening the door to opportunity.

#### **Declaration of Conflicting Interests**

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#### Notes

- 1. No participants remembered that the topic of the essay was the same at Time 1 and Time 2.
- 2. Participants' job destinations clustered in three groups: consulting (47%), services (27%), and manufacturing and engineering (26%). We found no significant industry effects across all four regression models (all ps > .122). However, due to missing values on this variable, the *N* drops substantially, which is why we only report the results of the analyses without fixed effects.

#### References

- Benet-Martinez, V., Lee, F., & Leu, J. (2006). Biculturalism and cognitive complexity: Expertise in cultural representations. *Journal of Cross-Cultural Psychology*, 37, 386–407.
- Benet-Martinez, V., Leu, J., Lee, F., & Morris, M. W. (2002). Negotiating biculturalism: Cultural frame switching in biculturals with oppositional versus compatible cultural identities. *Journal of Cross-Cultural Psychology*, 33, 492–516.
- Brotheridge, C. M., & Long, S. (2007). The "real-world" challenges of managers: Implications for management education. *Journal of Management Development*, 26, 832–842.
- Campbell, D. T., & Kenny, D. A. (1999). A primer on regression artifacts. New York, NY: The Guilford Press.
- Campbell, W. K., Goodie, A. S., & Foster, J. D. (2004). Narcissism, confidence, and risk attitude. *Journal of Behavioral Decision Making*, 17, 297–311.
- Chapman, D. S., & Zweig, D. I. (2005). Developing a nomological network for interview structure: Antecedents and consequences of the structured selection interview. *Personnel Psychology*, 58, 673–702.
- Cheng, C.-Y., & Leung, A. K.-Y. (2013). Revisiting the multicultural experience–Creativity link: The effects of perceived cultural distance and comparison mind-set. *Social Psychological and Personality Science*, 4, 475–482.
- Cheng, C.-Y., Sanchez-Burks, J., & Lee, F. (2008). Connecting the dots within: Creative performance and identity integration. *Psychological Science*, 19, 1178–1184.
- Chua, R. Y. J. (2011). Innovating at the world's crossroads: How multicultural networks promote creativity (Harvard Business School Working Paper, No. 11–085). Retrieved from http://hbswk.hbs. edu/item/6645.html
- Costa, P. T., Jr., & McCrae, R. R. (1985). The NEO Personality Inventory manual. Odessa, FL: Psychological Assessment Resources.
- Crisp, R. J., & Turner, R. N. (2011). Cognitive adaptation to the experience of social and cultural diversity. *Psychological Bulletin*, 137, 242–266.
- Edwards, J. R. (1995). Alternatives to difference scores as dependent variables in the study of congruence in organizational research. *Organizational Behavior and Human Decision Processes*, 64, 307–324.
- Friedman, T. L. (2005). The world is flat: A brief history of the twentyfirst century. New York, NY: Farrar, Straus & Giroux.
- Gong, Y., Huang, G.-C., & Fahr, J.-L. (2009). Employee learning orientation, transformational leadership, and employee creativity: The mediating role of employee creative self-efficacy. *Academy* of Management Journal, 52, 765–778.
- Leung, A. K.-Y., & Chiu, C.-Y. (2010). Multicultural experience, idea receptivity, and creativity. *Journal of Cross-Cultural Psychology*, 41, 723–741.
- Leung, A. K.-Y., Lee, S.-I., & Chiu, C.-Y. (2013). Meta-knowledge of culture promotes cultural competence. *Journal of Cross-Cultural Psychology*, 44, 992–1006.
- Leung, A. K.-Y., Maddux, W. W., Galinsky, A. D., & Chiu, C.-Y. (2008). Multicultural experience enhances creativity: The when and how. *American Psychologist*, 63, 169–181.

- Maddux, W. W. (2011). A moveable feast: How transformational cross-cultural experiences facilitate creativity. In R. Kramer, G. J. Leonardelli, & R. Livingston (Eds.), *Festschrift volume in honor* of Marilynn B. Brewer (Association for Psychological Science Festschrift series, pp. 339–360). New York, NY: Psychology Press.
- Maddux, W. W., Adam, H., & Galinsky, A. D. (2010). When in Rome Learn why the Romans do what they do: How multicultural learning experiences facilitate creativity. *Personality and Social Psychology Bulletin*, 36, 731–741.
- Maddux, W. W., & Galinsky, A. D. (2009). Cultural borders and mental barriers: The relationship between living abroad and creativity. *Journal of Personality and Social Psychology*, 96, 1047–1061.
- Maddux, W. W., Leung, A. K.-Y., Chiu, C.-Y., & Galinsky, A. D. (2009). Toward a more complete understanding of the link between multicultural experience and creativity. *American Psychologist*, 64, 156–158.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40, 879–891.
- Rich, G. J. (2009). Big C, little c, big M, little m. American Psychologist, 64, 155–156.
- Roulin, N., Bangerter, A., & Yerly, E. (2011). The uniqueness effect in selection interviews. *Journal of Personnel Psychology*, 10, 43–47.
- Saad, C. S., Damian, R. I., Benet-Martinez, V., Moons, W. G., & Robins, R. W. (2013). Multiculturalism and creativity: Effects of cultural context, bicultural identity, and ideational fluency. *Social Psychological and Personality Science*, 4, 369–375.
- Spencer-Rodgers, J., Peng, K., & Wang, L. (2010). Dialecticism and the co-occurrence of positive and negative emotions across cultures. *Journal of Cross-Cultural Psychology*, 41, 109–115.
- Stahl, G. K., Miller, E. L., & Tung, R. L. (2002). Toward a boundaryless career: A closer look at the expatriate career concept and the perceived implications of an international assignment. *Journal of World Business*, 37, 216–227.
- Streufert, S., & Nogami, G. Y. (1989). Cognitive style and complexity: Implications for I/O psychology. In C. L. Cooper & I. Robinson (Eds.), *International review of industrial and organizational psychology* (pp. 43–93). Chichester, England: John Wiley.
- Suedfeld, P., Tetlock, P. E., & Streufert, S. (1992). Conceptual/integrative complexity. In C. P. Smith, J. W. Atkinson, D. C.

McClelland, & J. Veroff (Eds.), *Motivation and personality: Handbook of thematic content analysis* (pp. 393–400). New York, NY: Cambridge University Press.

- Tadmor, C. T., Galinsky, A. D., & Maddux, W. W. (2012). Getting the most out of living abroad: Biculturalism and integrative complexity as key drivers of creative and professional success. *Journal of Personality and Social Psychology*, 103, 520–542.
- Tadmor, C. T., Hong, Y.-Y., Chao, M. M., Wiruchnipawan, F., & Wang, W. (2012). Multicultural experiences reduce intergroup bias through epistemic unfreezing. *Journal of Personality and Social Psychology*, 103, 750–772.
- Tadmor, C. T., & Tetlock, P. E. (2006). Biculturalism: A model of the effects of second-culture exposure on acculturation and integrative complexity. *Journal of Cross-Cultural Psychology*, 37, 173–190.
- Tadmor, C. T., Tetlock, P. E., & Peng, K. (2009). Acculturation strategies and integrative complexity: The cognitive implications of biculturalism. *Journal of Cross-Cultural Psychology*, 40, 105–139.
- Tetlock, P. E., Peterson, R. S., & Berry, J. M. (1993). Flattering and unflattering personality portraits of integratively simple and complex managers. *Journal of Personality and Social Psychology*, 64, 500–511.

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