Citation for published version


DOI

https://doi.org/10.1002/jocb.48

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The role of identity integration in enhancing creativity among mixed-race individuals

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Abstract

Identity integration among bicultural individuals refers to the perception that their two cultural identities are compatible. Previous research has shown that identity integration is likely to lead to enhanced creativity. However, this research was conducted among first and second generation immigrants, but not among mixed-race individuals. The current research examined identity integration and creativity among mixed-race individuals. We also explored the role of integrated identity experiences at home. We found that identity integration was related to increases in creativity; and this was partly mediated via integrated identity experiences at home. Our findings suggest that positive bicultural experiences at home may create a context for the individual to integrate their biracial identities; and this is ultimately beneficial for creativity.

Keywords: Identity, Creativity, Race, Mixed-Race, Integration
Creativity makes a valuable contribution to social and business life. Although there is no universally accepted definition of creativity, it is typically defined as the ability to bring into being ideas, concepts and objects that are both novel and useful (e.g. Amabile, 1996; Czikszentmihalyi, 1996; Maddux & Galinsky, 2009). To most people creativity may appear to result from divine inspiration or serendipity. However, research has shown that both personality and contextual factors may be related to creativity. Researchers have found that intelligence, cognitive flexibility and tolerance of ambiguity are personality factors that enhance creativity (Feist, 1998; MacKinnon, 1978; Simonton, 2003). Contextual factors that enhance creativity include distant future focus rather than near future focus (Foster, Freidman & Liberman, 2004), intrinsic rather than extrinsic motivation (Amabile, 1996), positive or neutral affective states (Fong, 2006), and a counterfactual mindset (Galinsky & Moscowitz, 2000).

There are several theoretical approaches to the study of creativity, most notably the sociocultural approach by Sawyer and colleagues (e.g. Sawyer, 2012). In this paper, we utilized a recent scientific approach to the study of creativity developed within psychology; i.e. the creative-cognition approach (Amabile, 1996; Finke, Ward & Smith, 1992; Tadmor, Galinsky & Maddux, 2012; Wan & Chou, 2002). This approach is based on the notion that creative processes are not very different from the cognitive processes involved in everyday activity (Finkle et al., 1992). This approach views creativity as a process through which people retrieve and recombine their previous knowledge in new ways (Finkle et al., 1992). Thus, the creative-cognition approach assumes that individuals who can access and integrate a wide diversity of knowledge systems will experience enhanced levels of creativity (Amabile, 1996; Leung, Maddux, Galinsky & Chui, 2008).
A potential way to develop access to a variety of knowledge systems is through multicultural experiences (Cheng, Sanchez-Burkes & Lee, 2008; Leung et al, 2008; Maddux & Galinsky, 2009). Such experiences expose individuals to different cultures; allowing them to learn new ideas and also to encounter values that may be different from their original cultural values (Leung et al., 2008). However, it is important to note that it is not just the mere exposure to divergent cultural perspectives that is beneficial for creativity. It is also important that individuals integrate their various cultural experiences with their own cultural identity (Cheng et al., 2008; Maddux & Galinsky, 2009).

Consistent with this argument, research has shown that creativity is enhanced the most among those individuals who adapt and learn from the new cultures they are exposed to in the foreign countries they live in (Maddux & Galinsky, 2009; Maddux, Adam & Galinsky, 2010). In particular, functional learning about the underlying meanings of various cultural behaviors appears to enhance creativity (Maddux et al., 2010).

Bicultural individuals can be defined as people living in one country who were born in another country (Cheng et al., 2008). It can also be second or third generation immigrants who still maintain some connection with their ancestral cultural background (Cheng et al., 2008). Such individuals can have different levels of identification with their two cultures (Roccas & Brewer, 2002). Identification refers to an individual’s knowledge of the social groups they belong to and the value they place on these group memberships (Tajfel & Turner, 1986). To the extent that they acknowledge their dual identities, bicultural individuals are likely to have access to different cultural knowledge systems (Hong, Morris, Chui & Benet-Martinez, 2000); and this might be related to enhanced levels of creativity. However, such benefits are not necessarily inevitable.
Individuals with dual social identities face the challenge of managing the potential conflicts between their identities (Roccas & Brewer, 2002). If an individual perceives their bicultural identities as being in conflict or as separate non-integrated aspects of the self, creativity may not be enhanced.

Benet-Martinez and Haritatos (2005) developed an individual difference measure of identity integration. Examples item are: “I feel part of a combined culture” and “I feel like someone moving between two cultures”. In this measure, individuals who score high in identity integration perceive their two cultural identities as compatible. In research among first and second generation Asian-American immigrants, Cheng et al. (2008) found that identity integration predicted creativity. They found that Asian-Americans who were high in identity integration showed enhanced creativity when coming up with ideas for new dishes. However, this was only the case when the available ingredients were both Asian and American.

In a recent series of studies, Tadmor et al. (2012) examined the role of biculturalism in enhancing creativity and also professional success. In this research, professional success was assessed via promotion rates and an individual’s professional reputation among their peers. Tadmor et al. (2012) found that for individuals living abroad, high levels of identification with both their home and host cultures led to increases in creative performance, promotion rates and professional reputations. They also found that integrative complexity, which is defined as the capacity to acknowledge and integrate competing perspectives on a topic, mediated the relationship between biculturalism and creative performance. As such, all the research evidence we have reviewed so far supports the argument that mere exposure to various cultures may not
enhance creativity. Rather, creativity appears to be enhanced by the individual’s efforts at adapting, integrating and learning from their bicultural or multicultural experiences.

The Current Research

Creativity and identity integration are yet to be researched among mixed-race individuals. Research has focused mostly on identity integration among first and second generation immigrants (e.g. Cheng et al., 2008). Although both groups could be argued to have similarities with regards to possessing bicultural identities, being mixed-race poses unique challenges as individuals attempt to cope with how their identities are perceived in broader societal, historical and political contexts (Rockquemore & Laszloffy, 2003), and also how to present themselves in these social contexts (Renn, 2003; Brunsma, 2005). For example, individuals who are black and white mixed-race, face challenges related to not only integrating two cultures but also resolving the meaning of two identities that have historically been in political conflict.

Furthermore, society tends to have essentialist views of race (Morton, Hornsey & Postmes, 2009). Essentialism refers to the belief that there is some invisible essence that defines a particular racial group and is shared by all members of that social category (cf. Rothbart & Taylor, 1992). Such beliefs are often connected with the view that race is biologically determined (Keller, 2009). This view of race as biological may have an effect on mixed race individuals by giving them the feeling that both their identities are an essential part of who they are as people (Storrs, 1999). Successfully resolving the significant challenges of integrating mixed racial identities is likely to produce highly creative individuals. As such, we expected a significant relationship between identity integration and enhanced creativity among mixed-race individuals.
We also examine the role of identity integration in the context of the home environment. Our focus was on the extent to which the individual is exposed to cultures related to both racial identities within their home environment. This issue has also not been directly examined in research. However, it is arguable that integrated cultural experiences within the home environment partly contribute to an individual’s sense of having an integrated identity. As such, the relationship between identity integration and creativity could be partly accounted for by culturally integrated home experiences. We expected to find that home integration partially mediated the relationship between identity integration and creativity among mixed race individuals.

Method

Participants

The participants were 100 mixed-race individuals who completed the survey online. The majority of the participants were university students who were recruited via the Research Participation Scheme and advertising on the university campus. Our recruitment method made it clear that we were looking for bicultural individuals for our research. Participants who took part via the Research Participation Scheme did so in exchange for course credit. Participants were from 14 different mixed-race combinations, with the majority of participants (43 out of the sample) being mixed Black and White and 22 participants being mixed Chinese and White. The remainder of the sample was as follows: 15 Indian and White, 4 White and Mauritian, 3 White and Thai, 3 White and Malaysian, 2 White and Filipino, 2 = Indian and Black, 2 = Chinese and Indian, 1 = Persian and Arab, 1 = White and Vietnamese, 1 = Black and Filipino, and 1 = White and Mexican. Due to our exclusive focus on race in this study, we did not collect data on age.
and gender. However, we estimate that all participants were over 18 years old and over 60% were female. This estimation is based on the demographic characteristics of the university population from which our sample was drawn.

**Materials and Procedure**

Participants completed the questionnaire online. The data collection session took approximately 10-15 minutes. In order to foster good quality responses from participants, we presented them with an information sheet before they completed our study materials. Participants were reminded that their participation was voluntary and, if they wished, they could withdraw from the study at any time. They were also informed that their data would be kept strictly confidential. To maintain their anonymity and remove any personal details which could identify them, participants were asked to generate reference numbers that they could use in the future to enquire about the study or ask for their data to be removed from our research. Given that our research topic was not highly sensitive, and the fact that we collected data via our Research Participation Scheme and also provided participants with strong guarantees of anonymity, we are confident of quality of data we collected for this study. Indeed, studies have shown that socially desirable responding is less of a concern in online studies compared to paper and pencil research (e.g. Joinson, 1999; for a meta-analysis see Richman, Kiesler, Weisband, and Drasgow, 1999).

After consenting to the study, participants were asked if they were mixed race and what their two racial identities were. After this, participants completed a six-item adapted version of Bicultural Identity Scale (BIIS-1; Benet-Martinez & Haritatos, 2005). This was adapted to allow a larger variety of mixed races. For example, instead of “I feel Asian-American” we used “I feel mixed race” ($\alpha = .85$). The six statements were as
follows: “I keep my two identities separate”, “I feel part of a combined cultural identity”,
“I feel trapped between my two cultures”, “I feel mixed race”, “I am conflicted between
my two cultures’ ways of doing this”, and “I feel like someone moving between two
cultures”. Participants then completed a three-item measure of how integrated their
cultural experiences were at home. This measure was based on Leung and Chiu’s (2010)
Multicultural Experiences Survey (MES), but was adapted to specifically examine
cultural experiences at home. The three items were: “It is obvious that there are two
different cultures in my home”, “I consider my home as multicultural”, and “My parents
(or caregivers) frequently talk about their different cultures”. \( \alpha = .82 \). For both
measures of identity integration participants rated their agreement with each statement on
a five-point Likert scale (1 = *Strongly Disagree* to 5 = *Strongly Agree*).

Participants then completed our measures of creativity. For these measures,
participants were not directly instructed to be creative. They were just asked to complete
the tasks using standard instructions. Furthermore, there were no time restrictions on the
completing the measures. We used three different measures of creativity to ensure that
our findings could not be attributed to the characteristics of one particular indicator of
creativity (see also Maddux & Galinsky, 2009). The first measure of creativity was the
Remotes Associate Test (RAT; Mednick, 1963), in which participants are asked to come
up with an additional word which is associated with a triad of words. Participants then
completed the Unusual Uses Test during which they had to come up with as many
creative uses for a bin bag as possible (Guildford, 1959). The final test for creativity was
an Exemplar Generation Task during which participants had to list 20 examples of the
various occupations (Barsalou, 1985). Once participants had finished the creativity tests they were thanked and debriefed.

Results

Two independent coders rated each participant’s responses for the Unusual Uses and Exemplar Generation test with regards to their creativity on a seven-point Likert scale (1 = Low Creativity to 7 = High Creativity). The independent coders were not trained but used their own intuition and judgment. Inter-rater reliability was good, $r=.85$, $p<.001$ and $r=.80$, $p<.001$ for the Unusual Uses and Exemplar Generation tests respectively. Participants’ creativity scores were computed by averaging the ratings of the two coders. We also computed fluency scores for each participant by counting the number of uses and occupations listed for each creativity test. The creativity scores for the RAT were computed using the number of correct responses for each participant.

Principal components analysis was performed on our two measures of identity integration. In this analysis, we extracted two factors that had Eigenvalues above 1.00. These two factors accounted for 63.91% of the variance in our measures. Varimax rotation revealed that our two factors were consistent with our proposed measures of identity integration versus home integration (factors loadings = .61 to .90; see Table 1). Further analysis revealed that our identity integration and home integration measures were significantly correlated, $r=.56$, $p<.001$.

We then conducted correlational analyses to examine the relationships among our measures. This analysis revealed significant relationships between identity integration and all our indicators of creativity, with correlations ranging from $r = .23$ to $r = .60$ (see Table 2). These findings indicate that the higher an individual’s level of identity
integration, the higher their creativity scores. Correlational analyses also revealed that home integration was not related to the two fluency scores for the Unusual Uses and Exemplar Generation tests. However, significant relationships with home integration were obtained for the RAT, and the creativity ratings of the Unusual Uses and Exemplar Generation tests.

Multiple regression analyses were then performed to test for mediation. These tests were performed for three measures for which Baron and Kenny’s (1986) conditions for mediation were present (i.e. the RAT and the creativity ratings of the Unusual Uses and Exemplar Generation tests). A significant relationship between identity integration and the RAT was obtained, $\beta = .60, t = 7.36, p<.01$. This relationship was significantly reduced when home integration was included in the equation, $\beta = .33, t = 3.85, p<.01$; whereas the effect of home integration on the creativity remained stronger and significant, $\beta = .48, t = 5.64, p<.01$. This partial mediation effect was significant, $Z = 4.31, p<.01$. Similar findings were obtained for the Unusual Uses test and the Exemplar Generation test. For both, a significant relationship between identity integration and creativity was obtained, $\beta = .41, t = 4.37, p<.01$ and $\beta = .40, t = 4.29, p<.01$ respectively. These relationships were significantly reduced when home integration was included in the equation, $\beta = .21, t = 2.00, p<.05$ and $\beta = .22, t = 2.05, p<.05$ respectively; whereas the effect of home integration on the creativity remained stronger and significant, $\beta = .34, t = 3.22, p<.01$ and $\beta = .32, t = 2.93, p<.01$ respectively. These mediation effects were significant, $Z = 2.89, p<.01$ and $Z = 2.68, p<.01$ respectively. These findings suggest that integrated experiences at home may partially account for the relationship between identity integration and creativity (see Table 3).
Discussion

Our findings add to the growing body of research that shows the cognitive benefits of multicultural experiences and bicultural integration. Our study illustrates the benefits of identity integration among mixed-race individuals in the context of creativity. We show that, to the extent that individuals have integrated their two racial identities, they are more likely show enhanced creativity. This was demonstrated using three different measures of creativity assessing convergent and divergent thinking. Our current findings make a significant contribution to research exploring the role of social identities, cultural experiences and creativity. The current study is the first to demonstrate a relationship between identity integration and creativity among mixed-race individuals.

Previous research focused on first and second generation immigrants (e.g. Cheng et al., 2008). Our findings seem to indicate that the effort that is required to integrate two racial identities successfully may result in improved cognitive functioning and, therefore, enhanced creativity among mixed-race individuals.

Our research makes an important contribution to the debates around bicultural identities and their benefits to society. As Tadmor et al. (2012) note, there are social pressures on bicultural people to assimilate to their host culture’s identity and give up aspects of their other culture. However, the growing body of research, to which we make a contribution with this paper, suggests that this assimilationist approach might be less beneficial. It appears to be the case that people are fully capable of strongly identifying with more than one culture (cf. Roccas & Brewer, 2002). Furthermore, when people successfully integrate their identities this produces benefits with regards cognitive functioning, creativity and professional success (cf. Tadmor et al., 2012).
We propose that the effort required in integrating two separate racial identities results in cognitive flexibility, which in turn results in an increase in creativity. More specifically, recent research by Tadmor et al. (2012) demonstrated that successful identity integration among bicultural individuals, improves the cognitive process of *integrative complexity*. Integrative complexity is the capacity to acknowledge competing perspectives on an issue and integrate these perspectives. As such, future researchers may want to examine whether identity integration is strongly related to creativity among individuals whose mixed race combinations involve groups that have historically been in conflict or large cultural distances between them. The assumption would be that integrating these identities would be more difficult and, therefore, successful integration is likely to result in higher levels of integrative complexity and increases in creativity.

In line with previous researchers, we further propose that individuals with integrated racial identities have access to more diverse knowledge systems in comparison to individuals who are low in identity integration. The partially mediating role of home integration further serves to illustrate the benefit of being exposed to more than one culture. It appears to be the case that positive multicultural experiences at home may create a context that assists the individual in their efforts to integrate their biracial identities; and that this is ultimately beneficial for creativity. However, further research is needed to directly explore this question. This research could use measures of the accessibility of various knowledge domains, and other measures of cognitive flexibility.

Another interesting research question concerns whether there are differences in the difficulty of identity integration between mixed-race people and individuals who are of a single race, but are bicultural. We propose that identity integration is more
Identity Integration and Creativity

challenging for mixed-race individuals, than it is for single-race biculturals. This is because of the essentialist perceptions of race that still permeate contemporary society (Morton et al., 2009). Indeed, such essentialist views may be particular strong for mixed-race folks who are partly of African descent, given the historical context. These effects could also be moderated by cultural context (e.g. Jamaica vs. Brazil vs. USA). Our propositions are still open questions that need to be examined directly by researchers. Future researchers should also explore the benefits of identity integration in other domains including health and well-being. Researchers may also examine creativity among individuals whose identity constitutes more than just two racial identities.

One of the limitations of the current research is in our use of cross-sectional methods. When such methods are used, causal relationships between variables cannot be inferred. As such, future researchers should conduct experiments and longitudinal studies to try and replicate our findings. Furthermore, when cross-sectional studies are conducted it is common to consider the third variable problem. In the current research, we did not measure any other variables besides our key variables of interest. We also did not collect demographic data such as age and gender. It is important to note that our decision to exclude these variables may not be a significant problem for our research. This is because previous studies have found significant effects of multiculturalism and identity integration on creativity, after controlling for variables such age, gender, openness to experience, extroversion, perspective taking and tolerance of ambiguity (e.g. Maddux & Galisnky, 2009; Tadmor et al., 2012). As such, we have strong reasons to believe that our results would not be affected by these variables. Nevertheless, future
research should include some of these variables as covariates when examining the relationship between mixed-race identity integration and creative performance.

Despite some of the above limitations, the current research constitutes an important first step by illustrating the importance of identity integration among mixed-race individuals, with regards to creativity. This unique group has previously been neglected by researchers examining bicultural identities and creativity. In this regard, this study make an important contribution by showing that identity integration also enhances creativity among mixed-race individuals.
References


<table>
<thead>
<tr>
<th>Statement</th>
<th>Factor 1</th>
<th>Factor 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>I keep my two identities separate.</td>
<td>.81</td>
<td></td>
</tr>
<tr>
<td>I feel part of a combined cultural identity.</td>
<td>.62</td>
<td></td>
</tr>
<tr>
<td>I feel trapped between my two cultures.</td>
<td>.76</td>
<td></td>
</tr>
<tr>
<td>I feel mixed race.</td>
<td>.63</td>
<td></td>
</tr>
<tr>
<td>I am conflicted between my two cultures’ ways of doing things.</td>
<td>.80</td>
<td></td>
</tr>
<tr>
<td>I feel like someone moving between two cultures.</td>
<td>.68</td>
<td></td>
</tr>
<tr>
<td>It is obvious that there are two different cultures in my home.</td>
<td></td>
<td>.90</td>
</tr>
<tr>
<td>I consider my home multicultural.</td>
<td></td>
<td>.78</td>
</tr>
<tr>
<td>My parents (or caregivers) frequently talk about their different cultures.</td>
<td></td>
<td>.78</td>
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</table>
Table 2

*Means, standard deviations and correlations for identity integration, home integration and creativity*

<table>
<thead>
<tr>
<th></th>
<th>Identity Integration</th>
<th>Home Integration</th>
<th>Remote Association</th>
<th>Unusual Uses (Fluency)</th>
<th>Unusual Uses (Originality)</th>
<th>Exemplar Generation (Fluency)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Identity Integration</strong></td>
<td>3.81 (.93)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Home Integration</strong></td>
<td>3.11 (1.22)</td>
<td>.56**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Remote Association</strong></td>
<td>6.54 (4.32)</td>
<td>.60**</td>
<td>.66**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U-U (Fluency)</strong></td>
<td>4.52 (2.92)</td>
<td>.23*</td>
<td>.11</td>
<td>.11</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>U-U (Originality)</strong></td>
<td>2.37 (.90)</td>
<td>.40**</td>
<td>.46**</td>
<td>.50**</td>
<td>.44**</td>
<td></td>
</tr>
<tr>
<td><strong>E-G (Fluency)</strong></td>
<td>18.30 (2.69)</td>
<td>.25*</td>
<td>.09</td>
<td>.08</td>
<td>.37**</td>
<td>.24*</td>
</tr>
</tbody>
</table>
| **E-G (Originality)**   | 3.54 (.46)           | .40**           | .44**             | .48**                  | .32**                     | .64**                       | .36**

*Note. * = p<.05; ** = p<.01*
Table 3

*Hierarchical multiple regression for identity integration, home integration and creativity*

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Remote Association</th>
<th>Unusual Uses</th>
<th>Exemplar Generation</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>$\Delta R^2$</td>
<td>$\beta$</td>
<td>$\Delta R^2$</td>
</tr>
<tr>
<td>Step 1:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity Integration</td>
<td>.36**</td>
<td>.60**</td>
<td>.16**</td>
</tr>
<tr>
<td>Step 2:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity Integration</td>
<td>.16**</td>
<td>.33**</td>
<td>.08**</td>
</tr>
<tr>
<td>Home Integration</td>
<td>.48**</td>
<td>.34**</td>
<td>.32**</td>
</tr>
<tr>
<td>Total $R^2$</td>
<td>.52**</td>
<td>.24**</td>
<td>.23**</td>
</tr>
<tr>
<td>$n$</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

*Note. * $= p<.05$; ** $= p<.01$*