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Cultural Threats in Culturally Mixed Encounters Hamper Creative Performance for Individuals With Lower Openness to Experience

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Abstract

Past research has examined *independently* how openness to experience, as a personality trait, and the situational threat triggered by a foreign cultural encounter affect the emergence of creative benefits from a culture-mixing experience. The present research provides the first evidence for the interactive effect of openness to experience and cultural threat following culturally mixed encounters on creative performance. In Study 1, under heightened perceptions of cultural threat, exposing to the mixing of Chinese and American cultures (vs. a non-mixed situation) made close-minded Chinese participants to perform more poorly in a creative generation task. In Study 2, inducing cultural threat by having a foreign cultural icon spatially intrude a sacred space of the local culture caused Chinese participants with lower levels of openness to perform less creatively when the foreign icon was deemed highly symbolic of the foreign culture. These patterns of effects did not emerge among open-minded participants. These findings suggest that trait openness acts as a buffer against foreign cultural threat to sustain the creative benefits of culture mixing.

Keywords

culture mixing, openness to experience, cultural threat, creativity

With globalization, it is commonplace to find an overlapping of cultures in contemporary global cities. In this context, one of the challenges in multicultural psychology is to provide a nuanced understanding of how people respond to the simultaneous exposure to two or more cultures (Leung, Chiu, & Hong, 2010). Exposure to multiple cultures allows “experiential compression of time and space” (Giddens, 1985; Robertson, 1992). This compression characterizes the phenomenon of *culture mixing*, or the experience of local and foreign cultures at the same time and in the same space. The juxtaposition of two or more cultures simultaneously activates different

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cultural representations and renders culture a prominent mental construct for making sense of the environment, giving rise to exclusionary or integrative reactions toward foreign cultures (Leung, Qiu, & Chiu, 2014). Culture-mixed stimuli can be threatening, as when a foreign culture enters a sacred space of the local culture, potentially contaminating the authenticity of the local culture. However, we argue that not all people are susceptible to interpret culture mixing in terms of salient cultural threats. Specifically, we propose that, in the face of a cultural threat, open-minded individuals may see culture mixing as an opportunity to instigate novel fusion of ideas and to expand their creative bandwidth. Our research is the first to investigate the interactive effect between openness to experience, as an individual trait, and perceived foreign cultural threat following a culturally mixed experience on people's creative performance.

Dual Responses to Culture Mixing

According to the dual model capturing the psychological responses toward globalization (Chiu, Gries, Torelli, & Cheng, 2011), individuals generally display exclusionary or integrative reactions in their encounter of culture mixing. When displaying exclusionary reactions, individuals isolate themselves from or reject the influence of foreign culture. Some of them are even aggressive toward the people or other targets related to the foreign culture. Mainly triggered by the fear that the foreign culture will contaminate the integrity or vitality of the local culture, exclusionary responses tend to be reflexive and emotion-laden. When displaying integrative reactions, individuals are receptive to the influence of foreign culture and some even make attempts to synthesize local and foreign cultures. Mainly triggered by a cultural learning mind-set, integrative responses tend to be goal-oriented, deliberative, and effortful. Various personal and contextual factors were identified to trigger these exclusionary and integrative responses (see Leung et al., 2014, for a review).

Foreign Cultural Threat Triggers Exclusionary Responses

One major factor that promotes exclusionary reactions to culture mixing is perceiving a cultural threat. This is likely to occur when: (a) explicitly highlighting how the inflow of foreign cultural symbols into the local culture threatens the essence and vitality of the local culture, or (b) implicitly inducing threat to the local culture by having a highly symbolic foreign cultural symbol intrude the sacred space of the local culture (Leung et al., 2014). We argue that exclusionary reactions toward the foreign culture triggered by this threat would dampen the potential creative benefit of culture mixing.

To illustrate, in one study, Yang and colleagues (this issue) showed American participants a portrait of Mao Zedong superimposed on (vs. placed side-by-side with) a picture of the Statue of Liberty; in another study, he showed a printed map indicating a mosque to be built near (vs. away from) the Ground Zero in New York. For those participants who construed Mao as a representative Chinese cultural icon or the Ground Zero as a sacred space for Americans, they displayed exclusionary reactions toward the foreign culture. These studies consistently showed that in a culture-mixing situation, presenting the foreign culture as a threat that intrudes the local cultural space could evoke exclusionary responses toward the foreign culture. In turn, this rejection of foreign cultures should dampen the broadening of cultural knowledge that has been found to foster creativity (Leung, Maddux, Galinsky, & Chiu, 2008).

Openness to Experience Triggers Integrative Responses

One major factor fostering integrative reactions to culture mixing is people's disposition to be open to new experiences and to entertain unfamiliar and alternative points of view (Costa &

McCrae, 1992; McCrae & Costa, 1997). Individuals high in openness are prepared to approach foreign cultures with a learning mind-set (Leung & Chiu, 2010). Notably, when local and foreign cultures are juxtaposed, people are likely to face contradictions and ambiguities, as well as to experience the pressure to go beyond established cognitive structures and social norms. These effortful cognitive processes are likely to bother those who are close-minded.

One consequence of inciting integrative reactions (or inhibiting exclusionary reactions) is that individuals would potentially become more creative. The experience of culture mixing juxtaposes different cultural frames of mind, broadens the cultural knowledge base, and destabilizes normative ways of sense-making and problem solving (Chiu, Leung, & Hong, 2010; Leung et al., 2008). These creativity-implicating processes, as the *creative cognition approach* theorizes, promote individuals' capacity to break down existing conceptual boundaries and to expand their generative and creative thoughts (Crisp & Turner, 2011; Ward, Smith, & Vaid, 1997). Cumulative research consistently supports enduring creative advantages following culture-mixing encounters (e.g., Leung & Chiu, 2008, 2010; Leung et al., 2008; Maddux, Adam, & Galinsky, 2010; Maddux, Bivolaru, Hafenbrack, Tadmor, & Galinsky, 2014; Maddux & Galinsky, 2009; Tadmor, Hong, Chao, Wiruchnipawan, & Wang, 2012). Varying from living overseas, to the experience of having close friends from foreign countries, to undergoing experimental priming that jointly activates different cultural representations, experiencing a mix of cultures can potentially facilitate both creative processes and outcomes.

Leung and Chiu (2010) investigated the role of openness to experience in harnessing the creative benefits of culture mixing. They examined the interactive effect of people's amount of intercultural exposure and their openness to experience on creative generations, measured by the abilities to generate novel uses of a garbage bag in an Unusual Uses Test, and the retrieval of exemplars of "occupation" in an Exemplar Generation Task. They found that individuals with richer intercultural experiences were more creative in coming up with novel uses of a garbage bag both in terms of number (fluency) and strategy (flexibility) and in generating more normatively inaccessible occupation exemplars (e.g., dialect coach), but only if they were high in openness to experience.

Openness to Experience Buffers Perceived Threat

We argue that the extent to which individuals are high or low in openness to experience will moderate their creative performance in response to potential threats triggered by culture mixing. Past research suggests that openness to experience can attenuate perceptions of threat. One study contrasted the role of the dark personality triad of narcissism, Machiavellianism, and psychopathy with other Big Five personality factors for explaining prejudice. This study showed that openness to experience negatively predicted attitudes of intergroup threat even beyond predictions by the dark personality triad, such that more open individuals tended to perceive immigrants as less threatening and dangerous (Hodson, Hogg, & MacInnis, 2009). Consistently, Flynn (2005) found that individuals higher in openness to experience more readily abandoned negative stereotypes about outgroup members in response to alternative evidence, whereas those lower in openness maintained their adherence to negative outgroup stereotypes. The role of openness to experience in buffering from threat perceptions extends beyond intercultural or intergroup contexts. Openness to experience has also been found to influence threat appraisal during performance tasks. In one study (Schneider, Rench, Lyons, & Riffle, 2012), prior to undergoing a mental arithmetic task, participants appraised how threatening and demanding the upcoming task would be and indicated their state affect. Results showed that openness predicted higher positive affect, lower negative affect, and lower

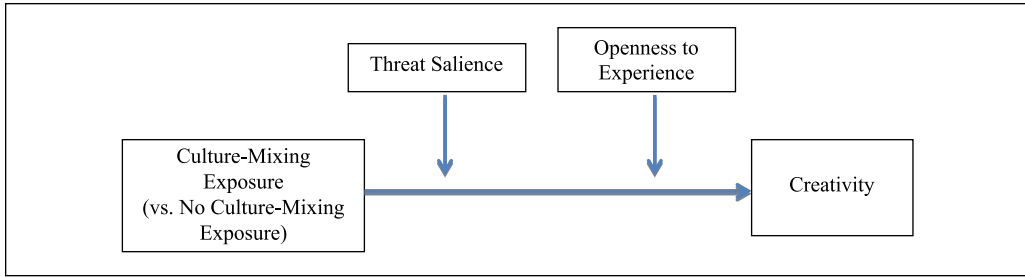


Figure 1. Three-way interaction model of culture-mixing exposure, threat salience, and openness to experience on creativity tested in Study 1.

perceived threat. Further analyses revealed that lower threat appraisals mediated the relationship between openness and increased positive affect.

Perry and Sibley (2013) provided more direct evidence about the link between openness to experience and perceived threat. Consistent with the anchoring and adjustment heuristic proposed by Tversky and Kahneman (1974), they confirmed the prediction that lower openness to experience is associated with an increased sensitivity to information signaling threat and danger from outgroup members—as these signals are readily available information in the social environment (see also Sibley & Duckitt, 2013). Theorizing from a motivated social cognition perspective, the researchers suggested that less open individuals tend to adopt a motivated cognitive style to satisfy their elevated need to manage threat and uncertainty, and such cognitive style makes them more amenable to stereotype-consistent information that offers existential closure (see also Roets & Van Hiel, 2011). Importantly, in their second study, Perry and Sibley identified the intellect aspect of openness to experience as primarily responsible for directing low openness individuals’ attention to threat. Because the intellect aspect of openness underlines individual differences in displaying cognitive flexibility and a genuine interest in novel or counter-normative ideas, which are important cognitive mechanisms that support creative functioning, we argue that openness to experience will moderate the effects of threat on creativity. Cognitive inflexibility and over-reliance on normative ideas, as manifestations of a lower level of intellect openness, should lead less open-minded individuals to become more susceptible to threat and to hamper their creative performance.

Study 1

Method

The participants were 209 Chinese students (105 males, 104 females; $M_{age} = 20.04$, $SD_{age} = 1.209$) from a university in China, who were paid 20 Yuan (~US\$3.30) for completing the study. The study consisted of a Culture-Mixing Exposure (culture-mixing vs. no culture-mixing) \times Cultural Threat Salience (high vs. low) between-participants design, with openness to experience as a measured continuous individual difference variable. Participants were told at the beginning of the experimental session that the study consisted of several unrelated tasks. They were first exposed to the cultural-mixing exposure manipulation in a “memory task,” followed by the cultural threat salience manipulation in a “reading comprehension” task. Next, they completed the creativity task, and filled in the Openness to Experience subscale.

Culture-mixing exposure manipulation. To manipulate exposure to culture mixing, we had participants perform a “memory” task in which they viewed some pictures in a 15-minute Powerpoint

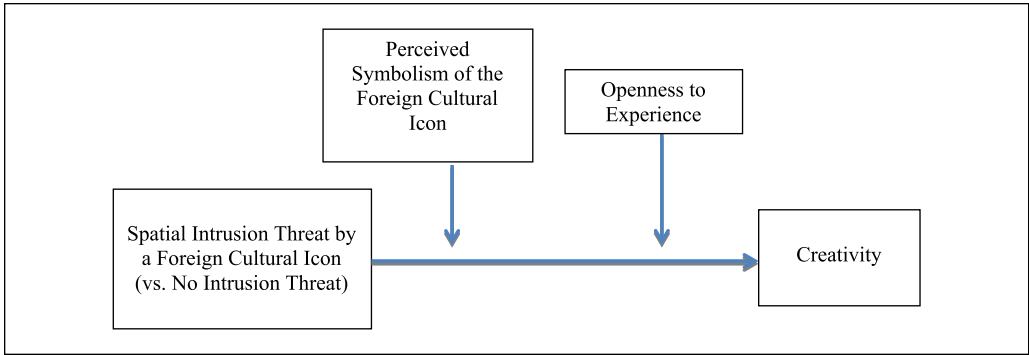


Figure 2. Three-way interaction model of foreign intrusion threat, perceived symbolism, and openness to experience on creativity tested in Study 2.

slideshow and memorized the pictures for a subsequent task. In the culture-mixing exposure condition (with random assignment), participants saw on each slide one picture depicting an iconic Chinese cultural symbol (e.g., the statue of the Buddha) *and* one depicting an iconic American cultural symbol (e.g., the statue of Abraham Lincoln) for the same category (e.g., landmark; see Figure 3). The two icons were placed next to each other in the same slide. In the control (no culture-mixing exposure) condition, participants saw on each slide a single picture depicting either one Chinese (i.e., Chinese culture exposure condition) *or* one American (i.e., American culture exposure condition) cultural icon presented at the center of the screen—same icons used in the culture-mixing exposure condition. These icons have been used in previous research (Y. Y. Cheng, 2010) with the same participant population to manipulate culture-mixing experience.

Cultural threat salience manipulation. Under the cover story of a reading comprehension task, participants in the high threat salience condition (with random assignment) read an article describing how the inflow of Western culture has caused erosion of the essence and vitality of Chinese culture. In the low threat salience condition, participants read about how Western and Chinese cultures co-exist harmoniously in modern China. These materials have previously been used to manipulate cultural threat salience with the same participant population (Y. Y. Cheng, 2010). We engaged the participants in this task by asking them to summarize the key points of the article.

Creativity task. We measured participants’ creative performance by an analogy generation task developed by Leung and Chiu (2010). Participants demonstrated their out-of-the-box thinking by constructing three analogies of happiness and describing the connections between happiness and the analogies. An example from a participant was “*Happiness is like a flu.*” Two coders, blind to the research hypothesis and the participants’ experimental condition, coded the creativity of each analogy with a 7-point scale (1 = *not at all creative* to 7 = *extremely creative*; average inter-rater reliability = 0.81). We took the mean ratings of the two raters across the three analogies to form a creativity index.

Openness to Experience Scale. We measured Openness to Experience with the 12-item Openness subscale in the NEO-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992). The subscale was translated into Chinese with standard back translation procedures ($\alpha = .46$). Participants indicated their extent of agreement with statements such as “I often try new and foreign foods” on a 5-point scale (1 = *strongly disagree* to 5 = *strongly agree*).



Figure 3. Materials for culture-mixing exposure manipulation: (a) no culture-mixing exposure condition and (b) culture-mixing exposure condition, Study 1.

Results

We first confirmed that there were no differences in creative performance between the two no culture-mixing exposure conditions (Chinese only or American only). The three-way interaction that involved the *no* culture-mixing exposure conditions, cultural threat salience, and openness to experience on creativity was not significant, $F(1, 95) = 2.69, p = .10, \eta_p^2 = .03$. Also, no other main or two-way interaction effect associated with the Chinese versus American culture exposure variable was significant ($F < 1.18, ns.$). Therefore, we collapsed the Chinese and American culture exposure conditions to represent the no culture-mixing control condition, and fitted the creativity index to a General Linear Model (GLM) with Culture-Mixing Exposure (culture-mixing vs. no culture-mixing), Cultural Threat Salience (high vs. low), Openness to Experience (mean centered), and their corresponding two-way and three-way interactions as predictors.

The hypothesized three-way interaction was significant, $F(1, 192) = 4.59, p = .03, \eta_p^2 = .02$, and no other effects were significant, $F_s < 2.16, p_s > .14$. To interpret this interaction, we conducted simple slope analyses to test the differential effects of culture-mixing versus no culture-mixing condition on creativity under high threat saliency and low threat saliency at low (1 *SD* below mean) and high (1 *SD* above mean) levels of openness. As hypothesized, analyses revealed that among low openness participants, rendering cultural threat salient lowered creativity under culture-mixing (vs. no culture-mixing) exposure, $b = -.87, SE = .38, t(94) = -2.26, p = .03$ (see lower panel of Figure 4). In contrast, among high openness participants, rendering cultural threat salient did not significantly change their creativity between the culture-mixing and no culture-mixing control conditions, $b = .56, SE = .38, t(94) = 1.50, p = .14$. Under low salience of cultural threat, the effect of culture mixing on creativity was insignificant for both low, $b = .10, SE = .40, t(98) = .25, p = .81$, and high, $b = -.17, SE = .40, t(98) = -.42, p = .67$, openness participants (see upper panel of Figure 4).

As an alternative way to interpret the three-way interaction, analyses revealed that the creative performance of low openness participants who experienced high (vs. low) cultural threat was significantly impaired under the culture-mixing condition, $b = -.69, SE = .35, t(93) = -1.96, p = .05$, but this was not the case for high openness participants, $b = .28, SE = .34, t(93) = .83, p = .41$. Under the no culture-mixing condition, salience of cultural threat did not have a significant impact on creativity among low, $b = .29, SE = .43, t(99) = .66, p = .51$, and high openness participants, $b = -.45, SE = .43, t(99) = -1.03, p = .30$.

Discussion

Study 1 supported our hypothesis. We showed that participants with lower levels of openness performed the most poorly on the creativity task when coupling cultural threat and culture mixing compared to cultural threat without culture mixing or culture mixing with low cultural threat. In contrast, participants with relatively high levels of openness performed similarly creatively regardless of levels of culture mixing and/or cultural threat.

At first glance, the current finding did not seem to replicate that of Leung and Chiu (2010) that open-minded (vs. close-minded) individuals who experience culture mixing without threat are more creative. Notably, the design in this study differs from that of Leung and Chiu in several ways. Unlike Leung and Chiu (2010), subsequent to undergoing the culture-mixing exposure manipulation (vs. not), participants in the present study also read an article that induced high or low foreign cultural threat. It is plausible that the low-threat article, by emphasizing how Western and Chinese cultures could harmoniously co-exist, minimized the difference in performance benefits between the open-minded and close-minded participants. Thus, the low-threat article might have also brought about creative advantages to less open participants by highlighting or reminding them of the compatibility between local and foreign cultures, thus resulting in a creativity level comparable to that of their more open counterparts. In addition, in Leung and Chiu's (2010) study, participants' extensiveness of multicultural experience was measured with the Multicultural Experience Survey (MES). In the current study, we manipulated culture mixing through the slideshow presentation of American and Chinese cultural stimuli simultaneously. The MES might have captured individuals' culture-mixing experience better than the temporary situational activation of culture-mixing encounters. Although we offer a plausible explanation for the lack of differences in creative performance between individuals high and low in openness to experience exposed to culture mixing, we also acknowledge that the sample size in our study might not provide enough power to test for this more subtle effect.

Study 2

In Study 2, we used a different manipulation to render cultural threat salient. Past studies (Yang et al., this issue) showed that superimposing the logo of a foreign iconic brand (the Golden Arch of McDonald's) on a picture of an iconic landmark of one's culture increases the salience of a cultural intrusion threat. This experience of cultural threat is particularly intense among individuals who perceived the foreign icon to be highly symbolic of the foreign cultural values and ideals. To establish generality of Study 1's results, we manipulated cultural threat more subtly via spatial intrusion of a foreign icon on a sacred local space (instead of via explicit manifestations of cultural threat), and measured the perceived symbolism of the foreign cultural icon to infer perceptions of threat (i.e., higher threat when the foreign symbol is perceived to be highly symbolic). By keeping constant the culture-mixing experience (i.e., via intrusion) where all participants were simultaneously exposed to representative icons of two different cultures, we can isolate the unique interactive effect of cultural threat and openness to experience in driving the creativity effects. We also included non-intrusive conditions (i.e., side-by-side presentation of the foreign and local icons) as additional baseline comparisons.

Method

The participants were 91 Chinese students (41 males, 50 females; $M_{\text{age}} = 19.71$, $SD_{\text{age}} = 2.277$) from a university in China. They received 20 Yuan (~US\$3.30) for completing the study.

Study 2 manipulated intrusion into an iconic cultural space by a foreign icon (intrusion or side-by-side presentation) as a between-participants factor, and measured perceived cultural

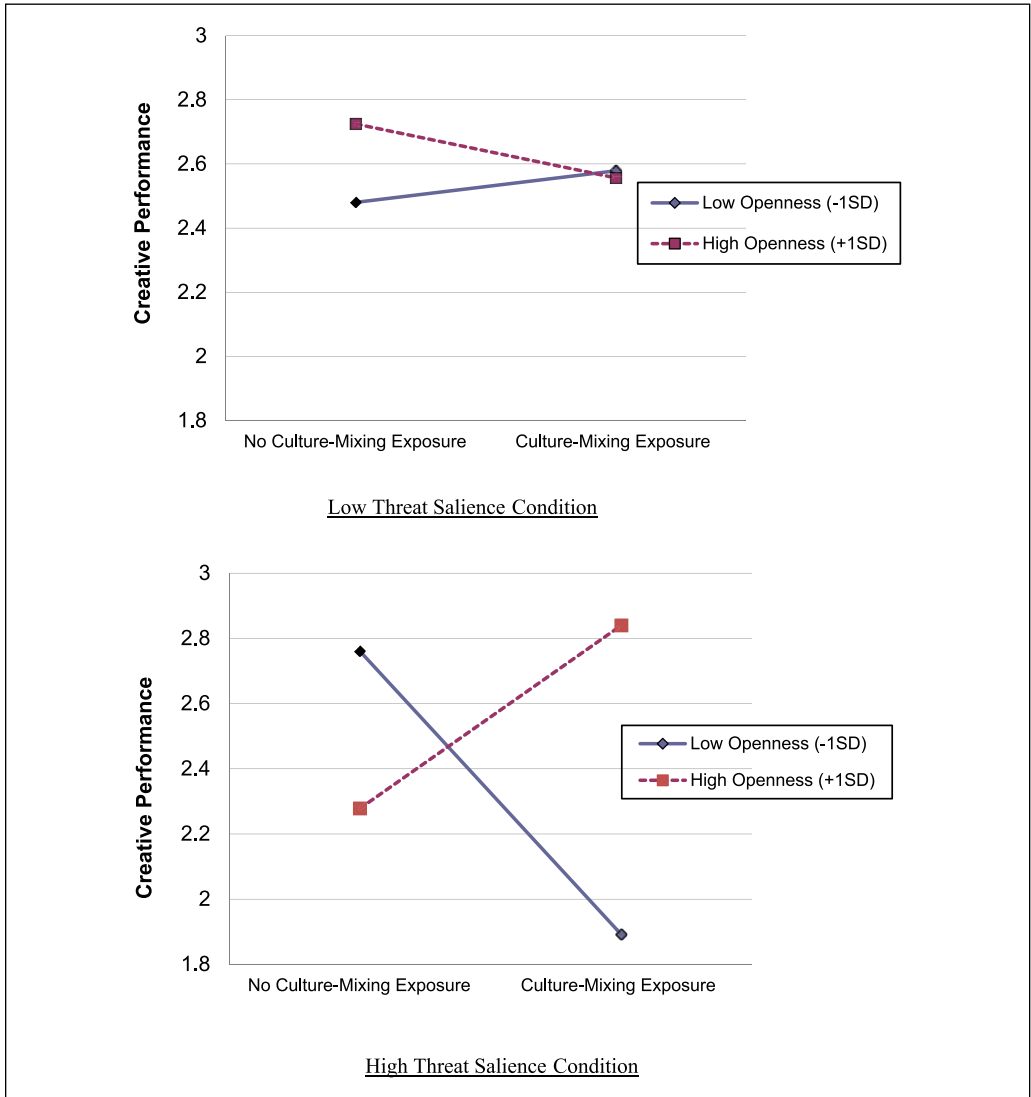


Figure 4. The effects of openness to experience and culture-mixing exposure conditions on creative performance under low and high threat salience conditions, Study I.

symbolism of the foreign icon and openness to experience as continuous individual differences. Participants were told that the study consisted of two unrelated tasks about consumer opinions (where they received the cultural intrusion manipulation) and individual differences (where they completed the creativity task and the Openness to Experience subscale).

Cultural intrusion manipulation. In the “consumer opinion” study, participants viewed a print advertisement announcing the opening of a new McDonald’s restaurant (a foreign icon) in the Great Wall (an iconic Chinese landmark; see Online Appendix). They were randomly assigned to view a print ad showing that McDonald’s logo was superimposed on the picture of the Great Wall (spatial intrusion condition) or the logo was placed outside the Great Wall (control condition).

We also asked participants to indicate their perception of the extent to which McDonald's represents American culture on a scale ranging from 1 (*not at all*) to 7 (*extremely*). We anticipated that spatial intrusion depicted in the advertisement would evoke perceived foreign cultural threat when the participants viewed McDonald's to be highly symbolic of American culture (Chiu et al., 2011). In other words, foreign cultural threat is operationalized as intrusion of a highly symbolic foreign cultural symbol in a sacred local space (i.e., high perception of cultural symbolism under spatial intrusion condition).

Creativity task. We measured creative performance with the same analogy generation task used in Study 1. Again, we had two independent coders evaluate the creativity of the analogies (average inter-rater reliability = .80).

Openness to Experience Scale. The participants filled out the same Chinese version of the Openness to Experience subscale used in Study 1 ($\alpha = .63$).

Results

We fitted the creativity index to a GLM with Cultural Threat (spatial intrusion vs. control), Perceived Cultural Symbolism (mean centered), Openness to Experience (mean centered), and their corresponding two-way and three-way interactions as predictors. Results showed that the hypothesized three-way interaction was significant, $F(1, 83) = 4.75, p = .03, \eta_p^2 = .05$. The only other significant effect was the interaction of Perceived Cultural Symbolism and Openness ($F(1, 83) = 4.27, p = .04, \eta_p^2 = .05$); we interpreted this two-way interaction in light of the three-way interaction.

To unpack the three-way interaction, we conducted simple slope analyses to test the differential effects between low (1 *SD* below mean) and high (1 *SD* above mean) levels of perceived cultural symbolism under cultural intrusion threat versus no threat at low (1 *SD* below mean) and high (1 *SD* above mean) levels of openness. As hypothesized, in the cultural intrusion condition, lower openness was accompanied by poorer creative performance among participants with a greater tendency to perceive McDonald's to be an American cultural symbol than those with a lesser tendency to perceive so, $b = -.77, SE = .25, t(41) = -3.02, p = .003$ (see lower panel of Figure 2). Cultural intrusion did not significantly change high openness participants' creativity regardless of their perceived levels of cultural symbolism of McDonald's, $b = .38, SE = .25, t(41) = 1.51, p = .13$. In contrast, in the no intrusion baseline condition, there was no significant relationship between perceiving McDonald's as an American icon and creativity for both low, $b = -.05, SE = .25, t(42) = -.21, p = .83$, and high, $b = -.15, SE = .32, t(42) = -.48, p = .63$, openness individuals (see upper panel of Figure 2).

To understand the three-way interaction in another way, analyses revealed that among participants who perceived McDonald's to be a stronger American cultural symbol, lower openness was associated with lower creativity in the intrusion condition ($b = 2.67, SE = .99, t(41) = 2.68, p = .01$), but openness was unrelated to creativity in the no intrusion condition ($b = -.87, SE = .83, t(42) = -1.06, p = .30$). For those who showed a lesser tendency to attribute foreign cultural symbolism to McDonald's, openness was not significantly associated with creativity in the inclusion, $b = -1.61, SE = .90, t(41) = -1.80, p = .08$, and the no inclusion conditions, $b = -.76, SE = .97, t(41) = -.78, p = .44$.

Discussion

In Study 2, we found that participants with lower levels of openness performed most poorly on the creativity task when they perceived McDonald's to be a more (vs. less) representative symbol

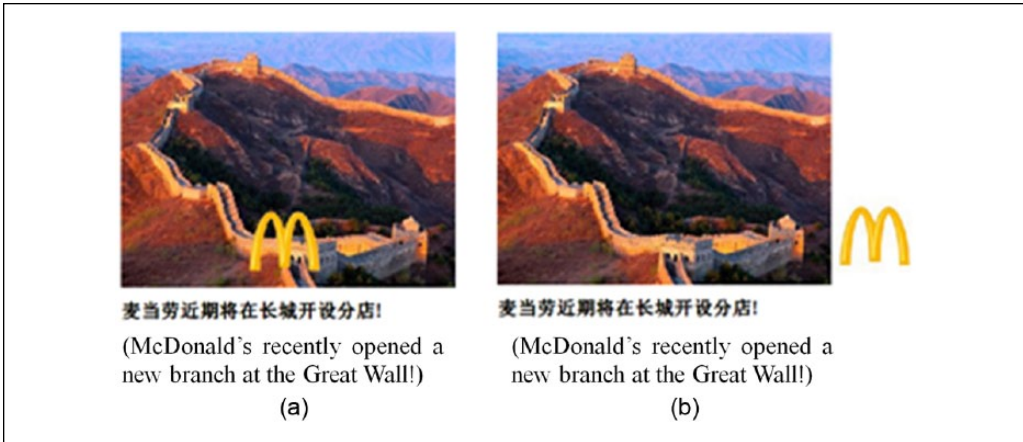


Figure 5. Materials for cultural intrusion threat manipulation: (a) spatial intrusion condition and (b) control condition, Study 2.

of American culture and were shown the McDonald's logo spatially intruding (vs. not) into a culturally sacred landmark. In contrast, participants with relatively high levels of openness performed equally creatively regardless of the extent to which McDonald's was seen as a symbol of the American culture and/or intruding a sacred local space. Consistent with Study 1's finding, higher levels of openness to experience mitigate exclusionary reactions and help individuals retain the creative benefits following culture mixing.

General Discussion

The current research provides the first direct experimental evidence of the interactive effect between situationally induced cultural threat and openness to experience on individual creativity. Results from two studies demonstrate that under heightened perceptions of cultural threat, exposing to the mixing of Chinese and American cultures (vs. a non-mixed situation), made close-minded Chinese participants to perform more poorly in a creative generation task. These effects were absent among open-minded participants, who were shielded against the creativity-hampering effects triggered by the joint effect of cultural threat and culture-mixing exposure. We provided evidence for these effects using alternative operationalizations of cultural threat (explicit references to culture threat in Study 1, or cultural intrusion of a highly symbolic foreign icon into a sacred local space in Study 2). Together, findings in the two studies suggest that openness to experience buffers against the emergence of exclusionary responses to culture mixing in the face of salient cultural threats.

The present findings suggest that culture-mixing experiences that simultaneously juxtapose local and foreign cultures are an important cognitive condition for promoting conceptual expansion among more open-minded individuals (see also Cheng, Leung, & Wu, 2011). This finding affirms a counter-intuitive insight that experiencing cultural threat in a culturally mixed encounter might not always lead to exclusionary responses. Rather, juxtaposing disparate local and foreign cultures in a culturally mixed environment, even in the face of an impending cultural threat, may not compromise creative benefits among those individuals who are receptive to new experiences. This theoretical insight is particularly important for understanding the kind of multicultural setting that is desirable for harnessing creativity among different types of individuals. A multicultural setting that co-presents both local and foreign cultures, even in a threatening way, can be conducive to creativity among open-minded participants, but not so much among close-minded ones.

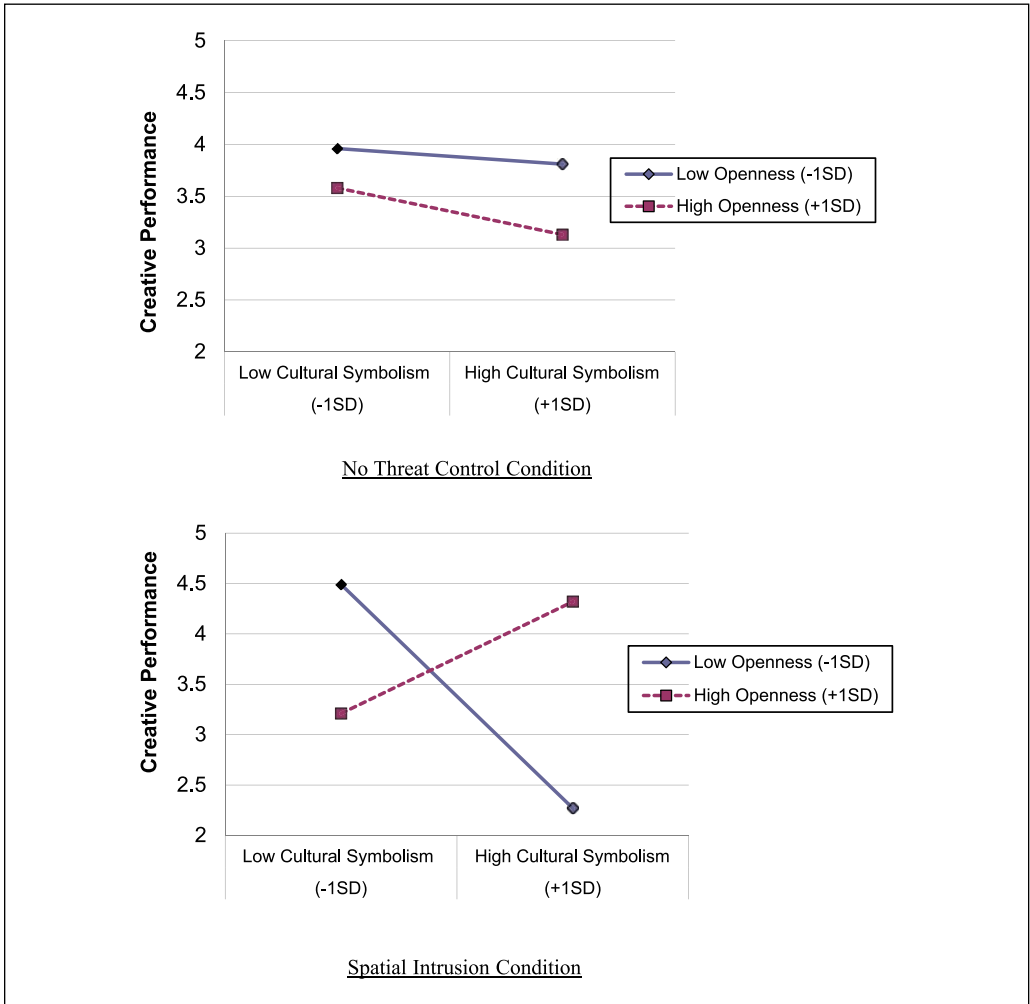


Figure 6. The effects of openness to experience and perceived cultural symbolism of the spatial intruder on creative performance under no threat and spatial intrusion conditions, Study 2.

Studying culture mixing by looking into the interaction between situationally induced cultural threat and people’s openness to experience resonates with the well-documented Person \times Situation interactionism perspective (Mischel & Shoda, 1995). Personal predispositions acquire their psychological meanings *in* a context (Leung & Cohen, 2010). For example, when dining in a restaurant, an open-minded individual might derive a psychological meaning within the context by ordering an exotic dish to satisfy her adventurous desire. However, the relationship between the presented context and the trait disposition is not always straightforward, and they may not align. In the present research, the misalignment attests to putting high openness individuals in a situation with cultural threat. It is reasonable to argue that even to high openness individuals, the induction of cultural threat supposedly still incites exclusionary tendency, rather than an appreciative or welcoming attitude toward the threat. Our findings suggest that trait openness could override unfavorable conditions presented by the cultural threat, cool down exclusionary reactions, and still sustain the creative benefits of culture mixing. Recognizing the interplay between trait and context has important implications for understanding intercultural relations, as individuals do not merely display their dispositional tendencies in a vacuum, but in psychologically

meaningful situations during their contacts with people from different cultural backgrounds. In this light, the present research studies culture mixing by putting individuals *in* a context.

The current findings offer several avenues for inspiring future research. First, one might ask whether the type of country that poses foreign cultural threat matters. In the current studies, the United States posed cultural threat to China, and it is widely conceived that the two countries are on par with each other in their economic and political powers. Would the participants react the same if our experimental design presents China to be threatened by a less powerful, but still culturally-contrastive, nation? Although this question awaits empirical corroboration, as we deduce from prior research, we expect individuals to be more likely to acknowledge the presence of cultural threat if the foreign culture is to a certain extent self-relevant or familiar to them. In one research, Cheng and her colleagues (2011) showed that participants were more likely to harness creative advantages upon simultaneous exposure to local and foreign cultures as opposed to exposure to two unfamiliar foreign cultures. Therefore, it is reasonable to argue that if people are familiar with the foreign nation or recognize meaningful, self-relevant juxtapositions between the foreign and home cultures, they will perceive foreign intrusion threat as more real and thus will reap less creative benefits when experiencing the mix of local and foreign cultures.

Second, as the first empirical attempt to examine the moderating role of openness to experience in mitigating the threatening effect on creativity during culture mixing, the current research is silent on the psychological underpinnings that drive the effect. We hope the current findings can instigate future studies to shed light on the proximal psychological mechanisms that promote or shut down the creative benefits for open-minded and close-minded individuals, respectively. We argue that the epistemic need for cognitive closure is a highly relevant motivational state that accounts for the moderating role of openness to experience on creativity. In a recent study, Perry and Sibley (2013) demonstrated that openness to experience is a personality disposition that biases individuals toward lower cognitive closure, such that they become less susceptible to the seize-and-freeze principle of anchoring on stereotype-consistent or threat-relevant information. Indeed, another research by Morris, Mok, and Mor (2011) argued along the same line that exposure to a culturally mixed situation that presented both Western and Chinese cultures would evoke need for cognitive closure among Hong Kong Chinese students with low foreign cultural identification, but not those with high foreign cultural identification. To the extent that open-minded individuals are more receptive to identifying with foreign cultural values and practices than their close-minded counterparts, our results would be consistent with the reasoning that under culture mixing people with higher openness are motivated toward a lower closure state that facilitates cognitive elaboration of foreign cultures and incorporation of a broader cultural schema. Thus, culture mixing confers them higher creative gains. Future research can also test the effect of situationally inducing a lower closure motive on temporarily heightening people's openness tendency and their subsequent creative performance during a culture-mixing encounter.

Finally, the present findings suggest that it would be fruitful for future research to explore the kind of cultural outlook or identity open-minded individuals assume. For example, open-minded individuals might aspire to take on a cosmopolitan identity that appreciates cultural diversity and embraces the manifestations of cultures in their many forms (Beck, 2006; Hannerz, 1990; Leung, Koh, & Tam, 2015; Szerszynski & Urry, 2006). In this light, high openness participants in Study 1 might shun the impending threat posed by the foreign culture and view the threat as invalid. Relatedly, open-minded participants in Study 2 might not perceive the symbolic foreign cultural icon being superimposed on the sacred boundary of the local culture as an act of cultural intrusion, but simply an instance of culture mixing. In consequence, the article and print advertisement that supposedly heightened foreign cultural threat might not be offensive to them and might not hurt their creative performance. The current studies mainly manipulated the mere presence of threat, but did not directly measure participants' actual perception of threat. It is also reasonable

to argue that the types of threat experimentally induced in the present studies were not very sizable ones. It remains an interesting research question to investigate whether openness to experience could buffer against cultural threats of varying degrees, including more sizable threats such as those that involve explicit expressions of intercultural hatred and discrimination.

To conclude, as the first empirical attempt to bridge the opposing effects of openness to experience and cultural threat to study the culture mixing–creativity link, the current research presents evidence on the role of openness to experience in buffering the creativity-hampering effect of foreign cultural threat during culturally mixed encounters. Our investigation sets the stage for further inquiring about this emerging topic and conducting more research that can illuminate on the psychological processes triggered by exposure to culture mixing.

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