

## **Do Immigration and Social Media Facilitate or Inhibit Cognitive Acculturation? The Role of Dialectical Thinking in Dual-Focused Cultural Stimuli Evaluation**

### Abstract

Social media and immigration both influence individuals' acculturation experiences. By focusing on acculturation in Chinese individuals (migrant versus social media users) through two studies, this research examines the moderating role of different types of acculturation experiences on the relationship between dialectical thinking – the tendency to tolerate contradictions and evaluate dual-focused cultural stimuli. We demonstrate that low-dialectical Chinese, who acculturated as a result of immigration, exhibit better attitudes towards the dual cultural stimuli than their high-dialectical Chinese counterparts. Individuals who acculturated as a result of social media (technology-based communication) show no differences in their attitudes towards dual cultural stimuli on the basis of dialecticism. Furthermore, consistent with Cultural Frame Switching theory, one's dialectical thinking can be primed through the language used in the stimuli, with Chinese individuals who acculturated as a result of immigration reporting higher dialecticism and lower evaluations of dual cultural stimuli. The switching effects of dialectical thinking were not evidenced within the social media-based acculturation group. We contribute to the literature by showing that immigration facilitates cognitive acculturation, whereas social media prohibits cognitive acculturation. Our results further imply that Chinese dialectical thinking negatively influences attitudes towards the joint presentation of dual cultural stimuli. Therefore, when

dual cultural stimuli are presented, dialectical thinking should be de-activated by using Western cultural symbols (e.g., English language).

Keywords: immigration-based acculturation; cognitive acculturation; social media-based acculturation; dialectical thinking

## **1. Introduction**

Globalisation and the growth of social media have exposed many people to two or more cultures. As a result, an increasing number of people from East Asia are experiencing Western culture, either through immigration experiences or interactions with social media platforms. Further, there has been an increase in the usage of cultural stimuli that contain a joint presentation of both East and West cultural icons, designed to appeal to individuals who have experienced more than one culture (Chiu, Mallorie, Keh, & Law, 2009). For example, see Starbucks' Coffee Moon Cake or Pizza Hut's Fried Rice products and, in the same physical space, a KFC restaurant operating in a traditional Chinese building. Starbucks also has a coffeehouse that was designed to reflect classical Chinese architectural themes seen in the Master of the Nets Garden in Suzhou. Individuals will inevitably encounter different, sometimes divergent and conflicting cultural values embedded in the marketplace. Cognitive acculturation allows individuals to integrate or potentially blend discordant cultural norms and values experienced through immigration or interactions with social media (Tadmor, Tetlock, & Peng, 2009). To be more specific, Chinese people are well-known for being dialectical thinkers, which captures individuals' cognitive tolerance for conflicts, inconsistencies, and ambiguities when experiencing different cultures (Spencer-Rodgers, Boucher, Mori, Wang, & Peng, 2009). In contrast, Western dialectical thinking has largely assumed that individuals are uncomfortable with conflicts and incongruity and that they have a desire to synthesise and integrate contradictory information (Peng & Nisbett, 1999; Thompson et al., 1995). Contradictory to intuitive thinking, one's cognitive tolerance does not necessarily lead to attitudinal preferences towards cultural stimuli that emphasise both the interdependent Eastern-self and the independent Western-self (henceforth, "dual-focused stimuli") among all East Asians (Lau-Gesk, 2003). The current literature lacks an understanding of the underlying mechanism that drives attitudinal differences in the evaluation of dual-focused

cultural stimuli. More importantly, modern social media outlets provide an excellent platform for people to interact and communicate, actions that often involve both Eastern and Western cultural icons and values. With the vast presence of the joint presentation of these two cultures, our research aims to understand if one's cognitive tolerance of conflicts captured by dialectical thinking is the driver of attitudinal difference in dual-focused cultural stimuli evaluation.

As mentioned above, the East and West differ significantly in their cognitive tolerance for conflicts and ambiguity (Peng & Nisbett, 1999), and cognitive acculturation is likely to occur as the result of adaptation. Such cognitive adaptations may be reinforced when dealing with cultural conflicts and discrepancies. Immigration and technological development in social media not only exert economic, political, and societal changes, but they also affect individuals' thinking styles and psychological well-being (Cleveland, Laroche, Pons, & Kastoun, 2009; Mackay & Gillespie, 1992; Peñaloza, 1994). Given the significant cultural differences in cognition between the East and the West, there is lack of research examining the impacts of immigration and social media on one's cognitive acculturation; in other words, the influences of immigration experience or intensive interaction by Chinese individuals with Western cultural symbols through social media on one's dialectical thinking remain unknown. To fill this research gap and to contribute to the extant literature, this research provides a theoretical framework that identifies the role of dialectical thinking as an individual difference variable in determining the attitudes towards dual-focused cultural stimuli of East Asians who acculturate as the result of immigration or interactions with social media. Joint presentation from both East and West cultural icons tend to activate the associated cultural thinking style that may then guide behaviours, attributions, and evaluations, and hence reflect individuals' acculturation experiences (Hong, Morris, Chiu, & Benet-Martinez, 2000; Chiu, Mallorie, Keh, & Law, 2009). Dual-focused cultural stimuli

tend to heighten the perceived incompatibility of the two cultures (Chiu et al., 2009). Such stimuli are particularly relevant in this research, and they are expected to trigger the activation of dialectical thinking associated with East Asian culture.

Experiences of cultural discrepancies enable some dialectical Chinese individuals to acculturate cognitively in order to align with the Western culture and/or global environment to resolve conflicts, ambiguities, and inconsistencies (Peng & Nisbett, 1999; Spencer-Rodgers et al., 2009), but others may not. Meanwhile, the impacts of dialectical thinking on attitudes towards dual-focused cultural stimuli are moderated by different acculturation experiences. Dialectical thinking as an important Chinese cultural mental frame can be activated by cultural symbols (e.g., language) or other ambiguous and inconsistent stimuli embedded in the environment (e.g., shared products). This research has highlighted that marketing practitioners need to recognise the importance of dialectical thinking in predicting East Asian consumers' attitudes towards dual-focused cultural stimuli embedded in advertising appeals. Advertising appeals matching the target's degree of dialecticism are expected to generate positive evaluations. Lastly, advertisers should avoid the activation of dialectical thinking when dual cultural stimuli are presented by writing appeals in English rather than Chinese.

The paper is organised as follows: First, it provides a theoretical background and literature review that introduce key variables such as dialectical thinking, immigration-based acculturation, and social media-based acculturation. Second, the framework in relation to Study 1 and 2 as well as the methodology for each study are developed. Third, the paper provides an overall discussion on the findings from both studies. Finally, the theoretical implications and future research are discussed.

## **2. Theoretical background and hypotheses**

### *2.1 Dialectical thinking in the self domain*

The presence of Eastern and Western cultural iconic symbols in the globalised environment will activate one's cultural mental mindset, hence enlarging the cultural differences between the East and West (Chiu et al., 2009). Cultural conflicts are experienced when cultural value differences between the East and West arise from diverse solutions that various social groups have devised for dealing with problems (e.g., Berry, 2005; Chen et al., 2008). The Chinese have had an enduring reputation for being dialectical thinkers, perceiving that reality is dynamic and changeable, is full of contradictions, and that everything in reality is connected; hence, there is no need to resolve such inconsistencies and contradictions (Peng & Nisbett, 1999; Spencer-Rodgers et al., 2009). In contrast, Westerners emphasise stability and consistency. The inconsistency or conflict between two cultures could create uncomfortable tensions, which in turn encourage Westerners to recognise the cultural discrepancies and move on to resolve them (Festinger, 1957). Dialectical thinking has explained East–West differences in the domains of self-perception (Boucher, 2010; Boucher & O'Dowd, 2011; Chiou & Mercado, 2016; Spencer-Rodgers et al., 2009), cognitive processes (Nisbett, Peng, Choi, & Norenzayan, 2001), psychological well-being (Spencer-Rodgers, Peng, Wang, & Hou, 2004), creativity and ethnicity (Paletz & Peng, 2009), and attitudes and evaluations (Spencer-Rodgers, Williams, & Peng, 2010). To illustrate, Westerners present a more consistent and stable pattern of self-concept across situations, whereas East Asians possess a more variable and contextualised self-view (e.g., English & Chen, 2007; Choi & Choi, 2002). As dialectical thinking is best measured within specific domains (Spencer-Rodgers et al., 2010), our research focuses on dialectical thinking in the self domain. In a globalised environment, East Asians are prompted to adjust their thinking style to restore alignment with the environment once conflicts are experienced (Festinger, 1957). Hence, dialectical thinking has become central to understanding the cognitive acculturation when the Eastern interdependent self and Western independent self are presented in cultural stimuli.

## *2.2 Acculturation groups:immigration vs. social media*

Immigration-based and social media-based are two forms of acculturation (Benet-Martínez & Haritatos, 2005; Chen et al., 2016) to non-local and foreign cultures. Cognitive immigration-based and social media-based acculturation may differ, however. The existing literature on acculturation suggests that individuals are able to develop dual cultural identities through either immigration or through interaction with social media (Chen, Benet-Martínez, & Harris Bond, 2008). People experiencing immigration-based acculturation (e.g., immigrants, sojourners, asylum seekers, international students, and seasonal farm workers; Berry, 2005) physically relocate to the host culture. In such cases, the influences of both social media and immigration increase intercultural contact and encourage acculturation (Li & Tsai, 2015; Qiu, Lin, & Leung, 2013). Cultural icons tend to activate the associated cultural frame that may then guide behaviors, attributions, and evaluations (Hong, Morris, Chiu, & Bond, 2000). On the other hand, social media-based acculturation provides enormous opportunities to allow those young people who remain in their home country to feel and experience cultural differences. Social media facilitates information exchange, allows photo and video sharing and posting, and reduces the distance between nations through accelerated communication and interactions. Social media has become a basic and important communication infrastructure in the modern technological world, and provides a learning platform for young people to understand Western cultural practices, values, and language. The prevalence of social media as a facilitator for social interaction and engagement yields profound benefits for customer–organisation, customer–brand, and customer–customer identification and engagement (e.g., Boyd & Ellison, 2010; Dhar & Chang, 2009; Ellison, 2007; Homburg, Wieseke, & Hoyer, 2009). Whilst immigration-based acculturation has been the focus of the extant studies (Berry, Kim, Power, Young, & Bujaki, 1989; Berry, Phinney, Sam, & Vedder, 2006; Hechanova, Beehr, & Christiansen, 2003), the prevalent use of social media has, so far,

produced paradoxical (e.g., Mick & Fournier, 1998) and unclear outcomes (e.g. Cappellini & Yen, 2016).

### *2.3 Dialectical thinking as an individual difference variable within the immigration-based acculturation group*

Not all immigration-based acculturated individuals are alike in the cognitive acculturation process. We argue that people may differ in their degrees of dialecticism in the self domain within the immigration-based acculturation group. In other words, some remain as high-dialectical thinkers, while others may become less dialectical through the intensive interaction with the mainstream culture. Those individuals who perceive the two cultures as conflicting are more likely to experience cultural conflicts in values, linguistics, and cognition with the joint presentation of both cultures (Chiu et al., 2009). It is often challenging to manage the conflicting demands of the East and West cultures in which these immigration-based acculturated individuals live. In other words, they may remain as high-dialectical thinkers and be highly sensitive to the discrepancies between ethnic culture and mainstream culture and therefore see these discrepancies as a source of internal conflict. While they may also adapt to cultural contexts, it may be mainly due to situational demands that some of the features are incongruent with their own culture (e.g., working abroad to earn a living or studying overseas to attain a university degree) (Chen et al., 2016). In contrast, others may perceive ethnic culture and mainstream culture as compatible and harmonious rather than oppositional or conflicting (Benet- Martínez & Haritatos, 2005). The self-concept inconsistency that is captured by the dialectical self can be modified through the process of selecting the consistent Western cultural elements to acculturate. Contact with mainstream cultural members leads to a better understanding of their perspectives; this in turn promotes more positive relationships with mainstream cultural members (Aberson & Haag, 2007; Johnson & Johnson, 2000; Kelley & Meyers, 1995; Quintana, Castaneda-English, & Ybarra,



1999). A greater degree of interaction with mainstream culture (Berry, 2005) may lead to a greater cognitive acculturation, resulting in some immigration-based acculturated individuals becoming low dialectical individuals—resolving the cultural inconsistencies, ambiguities, and conflicts captured by one’s dialectical thinking (Spencer-Rodgers et al., 2009; Spencer-Rodgers et al., 2010).

Individual variations in social-cognitive (e.g., personality) variables such as openness may also influence the degree of interactions between mainstream culture and ethnic culture (Benet-Martínez & Haritatos, 2005). For instance, open-minded immigration-based East Asians are more amenable to new cultural values and experience less stress in cultural contexts. They tend to enjoy working with mainstream cultural members who may possess ways of thinking and behaviours that are contradictory to their ethnic culture. This group may also frequently navigate between two cultural orientations within the same context (LaFromboise, Coleman, & Gerton, 1993); the interdependent self and the independent self are blended and interact with each other. These East Asians generally feel comfortable with cultural stimuli that emphasise both cultural selves. More importantly, immigration-based acculturation tends to stimulate a deeper information elaboration process, resulting in deeper cognitive adaptation and the integration of conflicting cultural elements when individuals are motivated (Van Knippenberg, De Dreu, & Homan, 2004). Constant and repeated engagement with cultural differences, inconsistencies, and conflicts tends to bring long-term effects to one’s thinking (Crisp & Turner, 2011). Thus, it is claimed that members of immigration-based acculturation groups differ in their degrees of dialecticism: some remain as high-dialectical thinkers, while others may become low-dialectical thinkers.

As high-dialectical thinkers, those Chinese who experience immigration-based acculturation are expected to see both the upsides and downsides of cultural experiences, and their tendency to “find the bad in the good” may impact on their attitudes towards dual-

focused cultural stimuli that contain dual cultural-related self-concepts. The cultural self comprises both positive and negative experiences: opposites can coexist within an entity, and the Chinese can be “good” and “bad” at the same time (Boucher, Peng, Shi, & Wang, 2009). The dialectical cultural orientation on acculturative experiences may evoke discomfort and anxiety and affect attitudes negatively. More importantly, it can be psychologically taxing for high-dialectical individuals to constantly adapt behaviours to meet situational demands. On the other hand, low-dialectical individuals tend to behave in a way similar to Westerners when responding to dual-focused cultural stimuli, finding a single “correct” solution to resolve the cultural discrepancies (Spencer-Rodgers et al., 2010) and thus generate a favourable evaluation as a result of a satisfactory solution. Therefore, low-dialectical individuals would be more attracted by dual-focused cultural stimuli, as they are capable of finding a solution to the cultural conflicts. Hence, we propose the following hypothesis.

*H1(a): Within the immigration-based acculturation group, low- (vs. high-) dialectical Chinese will be more (vs. less) attracted by dual-focused cultural stimuli.*

#### *2.4 Dialectical thinking as an individual difference variable within the social media-based acculturation group*

Unlike immigration-based acculturation, people can also develop dual cultural identities as the result of interactions with social media facilitated by globalisation (Chen et al., 2008; Phinney & Devich-Navarro, 1997; Zhang, 2009). Individuals acculturate to values, thinking styles, and behaviours of other cultures by their interactions with people and various groups on social media platforms (Gibson, 2001; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Technology advancement allows individuals to use various social media to connect to the global culture. For example, WeChat (Wei Xin in Chinese) provides an innovative way to interact and communicate with friends through text and voice messaging, photo/video sharing, contact information exchange, and location sharing. With the help of technological

development, many young Chinese (aged 18-35) have acculturated to the global culture, which is led by Western countries and characterised by the individualism value (Arnett, 2002; Hong et al., 2000; Zhang, 2010).

People may not differ in their degrees of dialecticism as the result of acculturation through interactions with social media. The development of global identity is a proactive process where social media-based acculturated Chinese tend to behave in congruence with both individualistic and collectivistic culture. Zhang's (2009) study provides support to the proactive process where both Eastern interdependent and Western independent self-construal can be primed by collectivistic and individualistic cues. Individuals experiencing social media-based acculturation voluntarily select elements of cultural practices and social institutions from both local and global cultures that are congruent with their own values, beliefs, and thinking styles (Chen et al., 2008; Chen et al., 2016; Morris, Mok, & Mor, 2011; Zhang, 2010). Unlike immigration-based acculturation, the voluntary process that the social media-based group has experienced may be detrimental to cognitive acculturation, given the large cultural distance between the East and West. Moreover, dialectical thinkers tend to perceive global culture as dynamic and constantly changing. Different cultural groups and values (e.g., independent self and interdependent self) are interrelated, inseparable from the whole global village. Following this vein, competing cultural values can coexist without synthesizing. There are limited opportunities for social media-based acculturated Chinese to modify their degrees of dialecticism, which is captured by the tendency to resolve the potential conflicting cultural values, practices, and behaviours (Paletz & Peng, 2009; Peng & Nisbett, 1999). Hence, the variations in the degrees of dialecticism within the social media acculturation group are not expected to be evident when their Western independent self-construals are developed voluntarily.

Furthermore, the acculturation literature may provide further evidence that individuals experiencing social media-based acculturation do not differ in their degrees of dialecticism. The retention of one's local culture is often the prerequisite of identifying with the global culture mediated by technology, including social media (Chen et al., 2016). In other words, individuals who experience social media-based acculturation often defend their local culture. For example, the usage of social media often reinforces the formation of groups, as in-group members often use social media for entertainment, socialization, and information gathering. The global identity formation process for social media-based acculturated Chinese is to attain globalisation experiences and maximise gains from intercultural interaction and also to minimise the potential losses to their local cultural identities (Chen et al., 2016). Such a defensive approach to technology may lead to poor adaptation in cognition and leave little room for variations in individual dialecticism existing within the social media-based acculturation group. More importantly, social media-based acculturating individuals as an ethnic majority in their host country are less motivated than immigration-based acculturating individuals as an ethnic minority living in the Western culture to adapt to the new social environment in order to function adequately on a daily basis (Crisp & Turner, 2011). Cultural diversity is more personally relevant to ethnic minority members when entering a new host culture to make sense of their place in the new society, as compared with the ethnic majority group (Benet- Martínez & Haritatos, 2005). They may not necessarily value cultural diversity and difference, and thus they are less likely to resolve the cultural conflicts. Individuals who experience social media-based acculturation may interact with the Western culture on a superficial level (e.g., tasting foods, visiting attractions), and may socialise mainly with people from the same ethnic group. Additionally, there is lack of motivation and opportunities for Chinese within the social media acculturation group to develop such cognitive tendency to resolve the conflicts they encounter. Thus, dialectical thinking will not

influence their attitudes towards dual cultural stimuli. The following hypothesis is therefore proposed:

*H1(b): Within the social media-based acculturation group, low- (vs. high-) dialectical Chinese will respond in a similar way to dual-focused cultural stimuli.*

## *2.5 Cultural frame switching effects on dialectical thinking*

Acculturation allows individuals to switch cultural frames to accommodate situational demands (Benet-Martinez et al., 2002; Hong et al., 2000; Luna & Peracchio, 2005).

According to Cultural Frame Switching theory, individuals may adjust their cultural frames in response to cultural stimuli in their environment (e.g., Haritatos & Benet-Martínez, 2002; Hong et al., 2000; Luna, Ringberg, & Peracchio, 2008). The self-concepts of East Asian biculturals have been found to shift towards independence or interdependence in response to individualistic versus collectivistic advertisements (Zhang, 2009). More importantly, some evidence in the psychology literature demonstrates the language-priming effects on dialectical thinking using European Americans and Chinese bilinguals. Boucher and O'Dowd's (2011) exploratory study found that Chinese bilinguals differed in their thinking depending on the language they used: Those answering in Chinese showed greater tolerance of contradiction, changed behavior over time, and context, and they showed less self-concept consistency compared to those answering in English. Chen, Benet-Martínez, and Ng (2014) reported that Chinese-English bilinguals exhibited higher dialectical thinking and demonstrated more variations in personality and behavior. Consistent with Cultural Frame Switching theory, we propose that dialectical thinking is highly accessible when cued by environmental stimuli. Consistent with the existing literature, language will be used as the cultural cue to activate Chinese cultural-associated dialectical thinking (e.g., Boucher & O'Dowd, 2011). As discussed above, cognitive acculturation is not evidenced within the

social media-based acculturation group, and people will not differ in their degrees of dialecticism when acculturated through the rapid development of social media. Therefore, the switching effects of dialectical thinking exist within the immigration-based acculturation group only. Therefore:

*H2: Within the immigration-based acculturation group, individuals will report a higher degree of dialecticism when they read cultural stimuli in Chinese than when they read cultural stimuli in English.*

*H3: Within the social media-based group, individuals will report a similar degree of dialecticism when reading cultural stimuli in English and Chinese.*

It seems reasonable to believe that cultural stimuli written in the native language are more persuasive; however, this may not always be the case for some acculturated Chinese who are fluent in more than one language. Chinese language is a typical cultural symbol that can activate one's dialectical thinking. For dialectical thinkers, both good and bad can coexist simultaneously within an entity (Boucher, Peng, Shi, & Wang, 2009). When dialectical thinking is activated, the tendency to find the bad cultural experiences in the good cultural experiences may negatively influence how individuals perceive dual cultural stimuli. High-dialectical thinkers seem to have less desire for synthesis and integration, as they acknowledge both the favourable and unfavourable attributes of the cultural self. This self-concept inconsistency may, in turn, evoke discomfort and anxiety and lead to a low attitude towards cultural stimuli that contain dual cultural selves. This leads to the aim of Study 2, which is to examine the impacts of language on dialectical thinking and how language influences the evaluation of dual-focused cultural stimuli. Therefore, we propose that individuals will respond negatively to dual-focused cultural stimuli written in Chinese.

*H4: Within the immigration-based group, individuals will respond less favourably to dual-focused cultural stimuli written in Chinese than to those written in English.*

### **3. Study 1**

The objective of Study 1 was to test if acculturation group moderates the effect of dialectical thinking on dual-focused cultural stimuli evaluation. Specifically, we expect that lower dialectical thinking is associated with more favourable attitudes towards dual-focused cultural stimuli when experienced by the immigration-based acculturation group, as compared to the social media-based acculturation group. Further, to reconcile our expected results with those found in the literature on dialectical thinking, we manipulated the product type (shared-use products vs. personal-use products). In order to ensure the activation of dialectical thinking in the self domain, Study 1 utilised both shared-use and personal-use products in the stimuli. Consistent with Zhang (2010), shared products provide more opportunities to demonstrate East and West cultural differences in self-concepts; it is then up to consumers' cognitive tendencies in the domain of conflict tolerance to decide which cultural stimuli they find persuasive. In contrast, personal-use products may prohibit the manifestation of cultural differences in their interdependent–independent selves. Such differences are more convincing if the cultural stimuli emphasise the independent self as opposed to the interdependent self (Zhang, 2010). Therefore, the attitudinal differences towards dual-focused cultural stimuli based on dialectical thinking should no longer exist in the personal-use product condition. The concept of dialectical thinking developed from the principles of Chinese dialectical epistemology, and China is well-known for its dialectical culture (Peng & Nisbett, 1999). The UK is widely recognised as the representative of a typical Western culture. Hence, participants from the UK and China were recruited.

#### *3.1 Study 1 method*

Study 1 comprised 79 undergraduate final-year students from a large southern university in Guangdong Province in China and 80 Chinese undergraduate final year students from a large

northern university in the UK. All participants were female and in the age group 20–30 ( $M_{\text{age}}=23$  years, age range: 20–26 years) to control for the possible impact of age and gender. Gender is not expected to play a significant role in determining the types of cultural stimuli that people favour (Lau-Gesk, 2003; Zhang, 2009). Furthermore, Zhang's (2010) research suggested that young Chinese in China aged 18–35 with high levels of education are acculturated when compared with older people, even though they have not physically relocated themselves to Western society (e.g., the UK). In particular, they switch between Eastern interdependent self-construal and Western independent self-construal, according to collectivist versus individualistic advertisements. This type of acculturation is driven by the development of social media. Thus, in order to match the age group and education level of the social media acculturation group, university students in the age group of 18–35 were targeted in both China and the UK.

### *3.2 Study 1 procedure and instruments*

Prior to the main experiment, to ensure the product type to be used, a separate group of Chinese students ( $N=20$ ) from a large UK university responded to Zhang and Shavitt's (2003) product type measurement (5-point Likert scale). The level of product involvement was also checked using the Zaichkowsky (1994) product involvement measurement, and all responses were recorded on 7-point likert scale. More importantly, an additional 20 Chinese undergraduate final-year students from a large UK university were recruited to confirm whether the cultural stimuli were perceived to be both interdependently and independently focused. Each participant read seven shared products' stimuli and seven personal-use products' stimuli, as used in the main study. In line with Zhang's (2009) work, eight items were included in each advertisement to confirm that the cultural stimuli were both interdependently and independently focused; that is, the cultural stimuli were focused on the



group as well as the individual. Participants used a 6-point Likert scale to indicate the degree to which each statement matched their impressions, ranging from 1 (not at all) to 6 (a lot).

In the main study, all participants were told that a marketing agency was testing some advertising copy for their products on social media. Each participant randomly received a booklet containing dual-focused cultural stimuli, either for seven shared products (car, stereo, TV, camera, washing machine, fridge, and frozen food) or for seven personal-use products (chewing gum, perfume, underwear, running shoes, toothbrush, facial cream, and jeans). The products used in the study were adopted from Zhang (2010) and Han and Shavitt (1994). This research follows Lau-Gesk's (2003) work to create dual-focused cultural stimuli: for instance, one of the shared-use product advertisements read: "Too busy to cook a delicious meal for your family? Choose Mountain High. It saves you time so you and your family can spend more quality time together [interdependently focused] and you can get back to more important things soon [independently focused]." One of the personal-use product advertisements read: "Treat yourself to a breath-freshening experience [independently focused] and share the breath-freshening experience [interdependently focused]." Next, participants responded to 4-item scale representing an overall evaluation of dual-focused cultural stimuli on a 7-point likert scale (Chang, 2006; Lau-Gesk, 2003). Dialectical thinking was measured by the 32-item dialectical-self scale, ranging from 1 (strongly disagree) to 7 (strongly agree) (Spencer-Rodgers et al., 2010). In addition, Singelis' (1994) 7-point Likert style self-construal scale and Luna and Peracchio's (2001) 5-point Likert style language proficiency scale were included to confirm the respondents' acculturation. Only participants who reported equally proficient in both English and Chinese and who had equally well-developed interdependent and independent self-construal were selected. Lastly, participants were asked to provide demographic data (i.e., age, gender, and length of stay).

### *3.3 Study 1 findings*

As shown in Table 1, T-tests confirmed the product group as either shared-use products (M=3.20) or personal-use products (M=2.02). Additionally, there were no significant differences in the level of involvement for personal-use products (M=4.54) and shared-use products (M=4.81). Furthermore, paired t-tests confirmed that all 14 cultural stimuli were perceived as both interdependently (M=5.06) and independently focused (M=5.04), and 24 items from Singelis' (1994) self-construal scale were combined to give an interdependent-self score and an independent-self score. Table 1 shows no differences between the scores for the immigration-based group and the social media-based group. The two groups also reported equally high proficiency in Chinese and English. Therefore, the participants in Study 1 were indeed acculturated. No length-of-stay differences emerged among the independent and dependent measures, so this demographic factor was not analysed further.

Table 1 here.

We used linear regression to examine the moderating role of acculturation group (immigration-based vs. social media-based) in the effect of dialectical thinking on attitudes towards dual-focused cultural stimuli. Dialectical thinking, product type, acculturation group, and their interactions are independent variables, and attitudes towards dual-focused cultural stimuli is the dependent variable. The results revealed that the regression model was significant ( $F(6, 152) = 7.52, p < 0.01$ ). Further, and as expected, only the interaction between dialectical thinking, immigration-based acculturation group, and shared products was significant, indicating that dialectical thinking negatively influences one's attitudes towards dual-focused cultural stimuli within the immigration-based acculturation group in the shared products condition ( $\beta = -0.43, t = -6.08, p < 0.01$ ). However, as we predicted, dialectical thinking did not predict the attitudinal differences in the dual-focused cultural stimuli evaluation for those who experienced the social media-based acculturation group ( $\beta =$

0.05,  $t=0.74$ ,  $p = 0.46$ ). Most importantly, as we expected, the relationship was not significant in the personal-use products condition regardless of their acculturation group with ( $\beta = 0.13$ ,  $t = 1.84$ ,  $p = 0.07$ ) and ( $\beta = 0.12$ ,  $t = 1.72$ ,  $p = 0.09$ ) for the immigration-based and social media-based groups, respectively.

To understand the nature of the interaction effect, we separately analysed the interaction between dialectical thinking and acculturation group (immigration-based vs. social media-based) in the shared products condition. The results revealed a significant two-way interaction between dialectical thinking and acculturation group ( $\beta = -0.52$ ,  $t = -5.28$ ,  $p < 0.01$ ). Consistent with our prediction, lower dialectical thinkers showed more favourable attitudes towards dual-focused cultural stimuli; however, the relationship between dialectical thinking and attitude towards dual-focused cultural stimuli was not significant within those who experienced social media-based acculturation ( $\beta = 0.05$ ,  $t = 0.5$ ,  $p = 0.62$ ). Thus, H1(a) and H1(b) are both supported.

### *3.4 Study 1 discussion*

Study 1 examined how different acculturation groups moderate the effect of dialectical thinking on dual-focused cultural stimuli evaluation. Consistent with the dynamic constructivist theory of culture, when individuals are exposed to shared products advertisement stimuli, their dialectical thinking is activated and guides their subsequent behaviours (Chiu et al., 2011). The findings supported our predictions: dialectical thinking negatively influences the overall evaluation of dual-focused cultural stimuli within the immigration-based acculturation group when dialectical thinking becomes salient in the shared product condition. To illustrate, when shared products were promoted, low-dialectical Chinese tended to favour dual-focused cultural stimuli that emphasise dual cultural selves; whereas, high-dialectical Chinese reacted less favourably to such cultural stimuli. In contrast,

dialectical thinking is not an individual difference variable within the social media-based acculturation group. In other words, they responded in a similar way to dual-focused cultural stimuli regardless of the degree of dialecticism in their thinking. Although dialectical thinking has been used to elucidate East–West cultural differences (Spencer-Rodger et al., 2004), our findings suggest that dialectical thinking is also an individual difference variable among those who acculturated through immigration experience but not among those who acculturated through interactions with social media.

#### **4. Study 2**

Cultural Frame Switching studies have shown that cultural differences in cognitive content and processes are better understood as being malleable rather than fixed (e.g., Luna et al., 2008; Hong et al., 2000). In acculturation literature, individualistic cultural cues evoke cognitive processes consistent with the Western thinking style, such as a focus on figures and objects instead of interrelationships; whereas, collectivistic cultural cues may activate cognitive processes that are congruent with the East Asian thinking style, such as emphasis on interrelationships and field dependence (Oyserman & Lee, 2008). Dialectical thinking is widely recognised as an important element of the Chinese cultural frame (e.g., Spencer-Rodgers et al., 2009; Peng & Nisbett, 1999); thus, it is important to understand the switching effects of dialectical thinking in the evaluation of dual-focused cultural stimuli. Specifically, Chinese culture strongly determines the degree of dialecticism, but it may shift in response to cultural cues embedded in the environment. Seeing, hearing, or using a particular language might increase the cognitive accessibility of the associated cultural thinking style. This leads to the aim of Study 2, which examined whether dialectical thinking can be activated by Chinese language used in the stimuli. Language was used in Study 2 to represent cultural cues, as it tends to activate its associated cultural mindset (Benet-Martinez et al., 2002; Hong et al., 2000; Luna & Peracchio, 2005) and, hence, influence subsequent attitudes towards

cultural stimuli. With a strong emphasis on immigration-based acculturation experience by the extant psychology and sociology literature, Chen et al. (2014) pointed out the importance of those who experience acculturation as a result of interacting with social media. Thus, Study 2 aimed to identify the switching effects within both the immigration-based and social media-based acculturation groups. In this way, the findings are expected to provide extra support to the findings of Study 1, as such that switching effects are predicted to present when dialectical thinking is an individual difference variable.

#### *4.1 Study 2 method*

The objective of Study 2 was to examine the switching effects of dialectical thinking within both acculturation groups. Study 2 thus used a similar design as that in Study 1, with product advertisements presented in either English or Chinese. Participants were recruited at a large northern university in the UK (N=82) to represent the immigration-based acculturation group. Of these, 45 completed the questionnaire in English, and 37 completed it in Chinese. Participants were recruited from a large southern university in China (N=82) to represent the social media-based acculturation group. Of these, 36 completed the questionnaire in English and 46 completed it in Chinese. The questionnaire was first constructed in English, then translated to Chinese by a Chinese–British immigrant, and finally translated back to English in order to minimise the loss of any meaning through the translation process (Brislin, 1976).

#### *4.2 Study 2 procedure and instruments*

A cover letter explained that a marketing agency was testing advertising copy for its products on social media, and a questionnaire similar to that used in Study 1 was then administered. Building on the Study 1 findings, personal-use products were eliminated in Study 2. However, participants were presented with stimuli for the same seven shared-use products as in Study 1. An example of an ad appeal in English read: “Introducing the all-new Bluebird,

the automobile that distinguishes you from your peers. Go ahead and separate yourself from the rest of the pack [individually focused]. More than anything, you care about your family and their safety. We do, too. The all-new Bluebird, peace of mind from a car you and your family can depend on and trust [interpersonally focused]” (adopted from Zhang, 2009). In contrast, an example of the ad appeal for the same product in Chinese read: “全新设计的蓝鸟汽车。让你与众不同，使你脱颖而出！您非常关心家人与他们的安全。我们同样关心。蓝鸟汽车值得您和您的家人的依靠与信赖”。

The overall evaluation of dual-focused stimuli was assessed in the same way as in Study 1, with four items that were combined to represent the overall evaluation on a 7-point Likert scale (Chang, 2006; Lau-Gesk, 2003). Dialecticism was measured by the 32-item dialectical-self scale, ranging from 1 (strongly disagree) to 7 (strongly agree) (Spencer-Rodgers et al., 2010). Singelis' (1994) 7-point Likert style self-construal scale and Luna and Peracchio's (2001) 5-point Likert style language proficiency scale were included as a manipulation check. Finally, participants were asked to provide demographic data. After completing the booklet, participants were briefed and thanked. They each received a small gift (a key ring worth \$1) for their participation.

#### *4.3 Study 2 findings*

As in Study 1, the acculturating characteristics of participants were checked by using the interdependent-self and the independent-self scores and language proficiency scores in Chinese and English. Study 2 participants in the UK received an interdependent-self score of  $M=4.69$  and an independent-self score of  $M=4.38$ , with a non-significant difference. Participants in the UK also reported an equally high level of proficiency in Chinese ( $M=4.33$ ) and in English ( $M=4.09$ ). The interdependent-self and independent-self scores for

participants in China were  $M=4.58$  and  $M=4.42$ , respectively, and no significant difference was found. Participants in China reported similar levels of Chinese ( $M=4.26$ ) and English ( $M=4.10$ ) proficiency. Consistent with Lau-Gesk (2003) and Zhang (2010), the participants recruited for Study 2 could indeed be considered acculturated.

H2 proposes that language primes the degree of dialecticism within the immigration-based group, and H4 states that dual-focused cultural stimuli written in English are better evaluated than those written in Chinese. A one-way MANOVA was performed, with attitudes and dialecticism as the dependent variables and language as the independent variable. There were significant language differences on the combined dependent variables,  $F(2, 79) = 5.28$ ,  $p=0.007$ ; Wilks' Lambda = 0.89. When the results for dialectical thinking and attitudes were considered separately, simple analysis results showed that the Chinese participants who experienced immigration-based acculturation reported a higher degree of dialecticism ( $M=4.15$ ) when processing cultural stimuli that were written in Chinese and a lower degree of dialecticism when cultural stimuli were written in English ( $M = 3.94$ ),  $F(1, 80) = 5.34$ ,  $p=0.02$ , as shown in Table 2. More importantly, the cultural stimuli written in English ( $M=4.47$ ) were evaluated significantly more favourably than those written in Chinese ( $M=4.03$ ),  $F(1,80) = 5.22$ ,  $p=0.03$ , as shown in Table 3. Hence, H2 and H4 are confirmed.

Within the social media-based acculturation group, a one-way MANOVA with cultural stimuli evaluation and dialecticism as the dependent variables and language as the independent variable did not reveal any significant results,  $p>0.05$ . Social media-based acculturating Chinese reported a similar level of attitude when dual-focused cultural stimuli were written in English ( $M=4.38$ ) and Chinese ( $M=4.47$ ), as shown in Table 3, and reported a similar level of dialecticism in English ( $M=3.99$ ) and Chinese ( $M=4.10$ ), as shown in Table 2. Thus, H3 is supported. This result is also qualified by an anticipated two-way interaction, 2 (language: English vs. Chinese)  $\times$  2 (acculturation group: immigration-based vs. social

media-based) ANOVA,  $F(1, 160) = 4.21, p < 0.05$ . Language choice influences attitudes towards dual-focused cultural stimuli within the immigration-based acculturation group only; however, such significant effects were not found within the social media-based acculturation group.

Table 2 here.

Table 3 here.

#### *4.4 Study 2 discussion*

Consistent with our hypothesised relationship between language and dialectical thinking, the findings of Study 2 illustrate the language priming effects on dialectical thinking among those who acculturated as a result of immigration. In particular, they reported a higher degree of dialecticism when reading the cultural stimuli in Chinese than in English. We also found that dual-focused cultural stimuli were evaluated higher when presented in English than when presented in Chinese. No significant results were found within the social media acculturation group. Such findings provide additional support for Study 1, and the language priming effects were evident only within the immigration-based group, as dialectical thinking differentiates one individual from the others within this group.

### **5. Overall discussion**

The speed of geographic mobility and the rapid development of social media in China have facilitated intercultural contact and exposed many Chinese to two or more cultures. This research investigated how Chinese individuals respond to dual-focused cultural stimuli that contain dual cultural selves (Study 1). The results showed that the Chinese individuals' dialectical thinking—the moderating variable identified in the literature—explains the underlying mechanism driving attitudinal differences towards dual-focused cultural stimuli, in particular among Chinese who experience immigration-based acculturation. Chinese



individuals who experience acculturation through social media tend to respond in a similar way regardless of their degree of dialecticism. Study 2 further explored the switching effect of dialectical thinking, and the findings demonstrated the language priming effects on one's degree of dialecticism within the immigration-based acculturation group. Immigration-based acculturated Chinese evaluate dual-focused cultural stimuli when written in English much better than when the stimuli are written in Chinese. In other words, when designing stimuli for Chinese who experience immigration-based acculturation, the appeal is higher if the stimuli are written in English rather than in Chinese; however, the findings further prove that dialectical thinking is not a significant predicting variable among those who acculturate through social media, since the switching effects of dialectical thinking were not evidenced within the group.

### *5.1 Theoretical contributions*

This research is important for three reasons. First, social media may inhibit cognitive acculturation, which is evident within the immigration-based group only. Although the growth of social media has exposed many young Chinese to two or more cultures, our results demonstrate that social media interactions have limited impact on cognitive acculturation. Dialectical thinking differentiates not only East from West (Chen, Benet-Martínez, Wu, Lam, & Bond, 2013), but also those Chinese who experience immigration-based acculturation from those who experience social media-based acculturation. Therefore, identifying with a second culture will not guarantee full acculturation in the thinking domain (Chen et al., 2013). Chinese consumers who are actively resolving the cultural conflicts and finding solutions to do so may have opportunities to reduce the contradictions, ambiguities, and inconsistencies that are captured by dialecticism. This leaves room for dialectical thinking to represent a significant individual difference variable within the immigration-based acculturation group. Others may socialise mainly with their own in-group ethnic peers, such as talking with them

in Chinese, going to Chinese supermarkets, and dining in “China Town” or Chinese restaurants. Unlike the immigration-based group, individuals experiencing social media-based acculturation are able to actively choose who they want to acculturate with and ignore those that they dislike or feel uncomfortable with. Advancement in technology may create a comfortable environment for individuals to interact with those who have similar lifestyles, professions, political views, and religiosities. Hence, social media provides little opportunities for individuals to acculturate deeply in their thinking style.

Second, Chinese dialectical thinking explains the attitudinal difference towards the joint presentation of dual cultural stimuli. According to Chiu et al. (2009), the joint presentation of East and West cultures might enlarge the incompatibility and conflicts of the two cultures, activating one’s dialectical thinking. East Asian philosophy embraces contradiction, and dialectical folk beliefs acknowledge ambivalence (Peng & Nisbett, 1999). Tolerance does not necessarily lead to preference. Contrary to our intuitive thinking, Chinese experiencing immigration-based acculturation with higher levels of dialecticism tend to see both the upsides and the downsides of their acculturation experiences, without the need to reconcile apparent inconsistencies and cultural conflicts. Consistent with the existing literature on dialectical thinking (Chen et al., 2014; Ip & Bond, 1995; Kwan, Bond, & Singelis, 1997), good is counterbalanced by evil, happiness is offset by sadness, and individual benefits manifested in ad appeals are tempered by group benefits. Moreover, the cognitive tendency of high-dialectical East Asians to “find the bad in the good” and perceive that Chinese people can be “good” and “bad” at the same time may lower their judgment of and attitudes towards the dual-focused cultural stimuli (Boucher et al., 2009; Peng & Nisbett, 1999; Spencer-Rodgers et al., 2004). The findings may seem to provide inconsistent results on the evaluation of contradictions (e.g., Williams & Aaker, 2002); however, dialecticism may vary across different domains (e.g., mixed emotions, social categorization, and self-

concepts), and we studied the dialectical self in a cultural context. One's degree of dialecticism in self-concepts can change as the result of immigration and also be subject to the cultural cues.

Third, this research provides additional support to the existing literature (Boucher, 2010; Chen et al., 2014; Hong et al., 2000) that the role of language triggers the activation of dialectical thinking, but only among those who experience immigration-based acculturation. Although China is generally recognised as a collectivistic country (Triandis, 1995), Chinese society has seen a notable increase in its contact with global culture, which is dominated by individualistic Western countries, as facilitated by rapid development in technology, especially social media (Arnett, 2002; Hong et al., 2000). Younger Chinese adults (proxy for Generation X) have more opportunities than individuals in other age groups to absorb Western culture and become bicultural individuals (Zhang, 2010).

### *5.2 Practical implications*

The language that cultural stimuli should use is of concern for academics and practitioners. Intuitively, it may be posited that individuals would favour communications that are written in their first language. However, this may not always be the case for those who experience immigration-based acculturation. This research provides evidence that the design of communications (e.g., ad appeal) should avoid the activation of dialectical thinking. Consistent with cultural-priming studies (e.g., Hong et al., 2000; Lau-Gesk, 2003), business managers should customise their communications to East Asian customers' degrees of dialecticism. As discussed above, one way of avoiding the activation of dialectical thinking is to write communications in English rather than in Chinese.

### *5.3 Limitations and future directions*

This research focused on the cognitive acculturation among those who experience either immigration-based or social media-based acculturation. Dialectical thinking is a typical East

Asian (e.g., Chinese) cognitive characteristic, and therefore the findings may not be applicable to other cultural groups (e.g., Russian-Americans, Hispanic-Americans). Additionally, this research used dual-focused cultural stimuli to manifest the joint presentation of both East and West cultural symbols, and future research could examine whether the influences of dialectical thinking are significant in other domains than culturally associated self-concepts where conflicting and ambiguous information (e.g., different lifestyles, political views, or religiosities) are apparent. Another direction for future research is to examine the role of age in predicting attitudes towards dual-focused cultural stimuli, as it may prove interesting to identify whether older adults are better than younger adults at enduring the tension of conflicts (Williams & Aaker, 2002). Finally, Westerners themselves may become more global as a result of the influences of globalisation facilitated by the development of social media, which brings increasing exposure to East Asian culture through social media, including networking sites, movies, travel, the use of the internet, and interaction with other ethnic groups. Thus, a worthwhile avenue for future research is to investigate whether young Western consumers share some of the acculturating characteristics that we have examined among Chinese individuals.

