A tale of two social networking sites: How the use of Facebook and Renren influences Chinese consumers' attitudes toward product packages with different cultural symbols

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Abstract

Culture influences people's information processing and attitude formation. This study examined the effects of using social networking sites from a cultural perspective, based on the culture learning model in the acculturation literature. A total of 251 Chinese individuals residing in the U.S. participated in the experiment. They were randomly assigned to one of four product package conditions with different cultural symbols (either American cultural symbols or Chinese cultural symbols, or both, or neither). Their usage intensity of two social networking sites, U.S.-based Facebook and China-based Renren ("the Facebook of China"), was measured. It was found that participants' usage intensity of Facebook and Renren reflected their cultural orientation, language proficiency, and length of stay in the U.S. It was also discovered that more intensive Renren usage led to more favorable attitudes toward packages carrying Chinese cultural symbols. However, participants' willingness to pay for the products with different packages was not affected by their usage intensity of social networking sites, due to the country-of-origin effect.

1. Introduction

The trend of people being connected with each other online via social networking sites seems to continue as the total number of registered users of Facebook has already topped one billion (Ortutay, 2012). Many prior studies have discussed why such sites gain rapid popularity and how they affect the way people present self-identity and manage relationships (Wilson, Gosling, & Graham, 2012). The current study aims to explore the effects of social networking site usage from a new angle—the culture learning perspective. Specifically, social networking sites are considered as cultural products, and they are expected to shape users' cultural orientation. As suggested by Lamoreaux and Morling (2012), cultural products refer to tangible representations of cultures such as advertising, television, texts, and laws. These tangible products are created by people based on conceptions of cultural consensus, and they in turn affect people's cultural preference. Because the essence of social networking sites is to help users connect and share user-generated content (Boyd & Ellison, 2007), in the current research they are regarded as special cases of cultural products that reinforce certain cultural values.

To understand the relationship between social networking sites and culture, this study tested the effects of social networking site usage within an acculturation context. According to the culture learning model in the acculturation literature (Masgoret & Ward, 2006; Ward, 2004; Ward, Bochner, & Furnham, 2001), newcomers to a host society such as sojourners and immigrants need to master culture-related skills to survive. Mass media consumption has been proven to be a reliable avenue for the acquisition of such skills (Chen, 2010; Graves, 1967; Masgoret & Ward, 2006; Somani, 2010). The current research focuses on how people adopt certain social networking sites for culture learning, whether it is to learn the mainstream culture in the host society or to maintain their ethnic culture. The use of two compatible social networking sites, U.S.-based Facebook and China-based Renren ("the Facebook of China"), was examined among a sample of Chinese individuals residing in the U.S., and how the usage subsequently affected their attitudes toward product packages with different cultural symbols was also tested. The contribution of this study to the literature will be discussed at the end of the article.

2. Literature review

2.1. Acculturation and culture learning model

Acculturation has long been an important line of research in cultural psychology (Berry, 1997). When individuals enter a new host society, they face a different cultural context from their original environment. By making such "continuous first-hand contact" with
the new culture, these newcomers acculturate into the host society (Redfield, Linton, & Herskovits, 1936, p. 149). In early studies, acculturation used to be described as a linear, one-dimensional, and unidirectional process, assuming that newcomers eventually and inevitably would be assimilated to the mainstream culture in the host society (Deng & Walker, 2007). Recent research, however, recognizes that acculturation “does not necessarily require individuals to disclaim their cultural values or disown their ethnic identities” (Duan & Vu, 2000, p. 226). Thus, the acculturation process may be better understood from a bidirectional perspective, suggesting that individuals may cope with both their original culture and the mainstream culture in the host society simultaneously (e.g., Arends-Tóth & Van de Vijver, 2007; Berry, 1980; Deng & Walker, 2007).

One of the most frequently adopted methods to examine the acculturation process is the culture learning approach (Ward et al., 2001). According to Masgoret and Ward (2006), the culture learning approach is based on the belief that cross-cultural conflicts arise because cultural novices have difficulties in managing daily social encounters. Therefore, newcomers to the host society need to learn culture-relevant skills to survive and thrive in the new environment (Ward, 2004). Personal (e.g., motivation, expectation, and personality) as well as situational (e.g., previous experience, length of residence, intercultural contact, and cultural distance) factors are expected to affect individuals’ culture learning (Masgoret & Ward, 2006). Prior studies have illustrated that general knowledge of the new culture and length of residence in the host society influence acculturation (Searle & Ward, 1990). Cultural distance—referred to perceived similarities and differences between newcomers’ original culture and the mainstream culture in the host society—also impacts the acculturation process (Ward, 2004).

Language ability is another key indicator of acculturation since it significantly affects the effectiveness of intercultural communication (Masgoret & Ward, 2006; Ward, 2004). Moreover, social interaction with members of the host society is a reliable avenue for acquiring culture learning skills (Masgoret & Ward, 2006). Searle and Ward (1990) showed that the psychological well-being of Malaysian and Singaporean students in New Zealand was related to their satisfaction with the relationships with New Zealanders.

In addition to direct contact with members of the host society, indirect contact such as exposure to the host society mass media content (e.g., newspapers, magazines, television, and Internet) also contributes to culture learning (Chen, 2010; Graves, 1967; Masgoret & Ward, 2006). Consumption of these media not only helps newcomers polish their language skills but also enhance their ability to interpret the new cultural environment (Masgoret & Ward, 2006). For example, in Somani’s (2010) research, it was shown that Indian immigrants to the U.S. learned how to act “American” by watching American television. Instead of focusing on traditional mass media such as newspapers and television, the current study investigates the relationship between social networking site usage and acculturation.

2.2. Social networking sites

According to Boyd and Ellison (2007, p. 211), social networking sites refer to “Web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system.” Depending on their specific features and user base, social networking sites can be classified into various categories. For example, they can be used to connect people in a work-related context (e.g., LinkedIn), in college (e.g., the original goal of Facebook), or in a romantic-relationship seeking scenario (e.g., the original goal of Friendster) (Ellison, Steinfield, & Lampe, 2007). Over the past few years, many studies have examined why the general public adopts social networking sites and uses them routinely (see Wilson et al., 2012 for a review). To meet new friends and to maintain relationships with old friends were found to be primary motivators (Raacke & Bonds-Raacke, 2008). Entertainment, information, and convenience were among other reasons of usage (Kim, Sohn, & Choi, 2011; Lin & Lu, 2011). Prior studies have also discussed the impact of social networking site usage on social capital, well-being, social adjustment, and other outcomes. It was revealed that social networking site usage had a positive impact on social capital, and was associated with psychological well-being, self-esteem, life satisfaction, social trust, civic engagement, and political participation (Ellison et al., 2007; Valenzuela, Park, & Kee, 2009; Valkenburg, Peter, & Schouten, 2006). Social networking sites also help decrease conflict in the parent-child relationship when a parent and his/her child become “friends” online (Kanter, Affifi, & Robbins, 2012).

Recently, scholars have started to examine the use of social networking sites from cultural perspectives. Some of these studies were focused on how users with different cultural backgrounds used social networking sites differently. For example, Kim et al. (2011) examined the disparities of motives for using social network sites among college students in the U.S. and Korea. It was found that major motives—including friends, social support, entertainment, information, and convenience—were similar between the two student groups, but the weights placed on those motives were different. Korean students put more weight on obtaining social support from existing social relationships, while American students placed a greater emphasis on seeking entertainment. It was also shown that American students tended to have larger networks online than did Korean students. In another study, Chu and Choi (2010) demonstrated that Chinese users gained a higher level of bridging and bonding social capital, maintained a greater ratio of strong ties, and reported a higher degree of perceived trust on social networking sites than American users. Other studies further discussed how users perceived social networking sites in different languages as different cultural platforms. For instance, Qiu, Lin, & Leung’s (2013) research showed that Chinese users perceived Renren to be more collectivism-oriented than Facebook, thus they were more likely to behave in accordance with the collectivist culture on Renren.

As argued by Chu and Choi (2010), social networking site usage may be culturally shaped. Different social networking sites tend to foster and encourage distinctive cultural value systems by facilitating information exchange among users (Qiu et al., 2013). The current study aims to test the effects of social networking site usage from an acculturation perspective by focusing on two sites: Facebook and Renren. Facebook has more than one billion registered users and it is the most widely used social networking site in the U.S. (Ortutay, 2012). By comparison, Renren is “the Facebook of China” and it has a total of 162 million registered users (Mozur, 2012). The functionality of these two sites is highly compatible, but they don’t directly compete against each other since Facebook is inaccessible in China (Mozur, 2012). However, Chinese individuals residing in the U.S. have equal access to both sites. Their usage of these two sites is therefore expected to reflect their cultural orientation. Specifically, Facebook may be considered as the host society media since it is widely used by American people, while Renren may be regarded as the home society media as it is primarily used by Chinese individuals. Based on the culture learning model, more usage of the host society media is associated with a better understanding of the mainstream culture in the host society, stronger host society language skills, and longer residence as well. Since the use of social networking sites is measured with a scale of usage intensity in this study (Ellison et al., 2007), it is thus hypothesized:
H1. Facebook usage intensity will be positively correlated with (a) orientation toward the American culture, (b) English language proficiency, and (c) length of stay in the U.S.

In contrast, more usage of the home country media is related to more maintenance of the original ethnic culture, stronger ethnic language skills, and also a shorter period of stay in the host society. Thus, the second hypothesis is proposed as follows:

H2. Renren usage intensity will be positively correlated with (a) orientation toward the Chinese culture, (b) Chinese language proficiency, but negatively correlated with (c) length of stay in the U.S.

2.3. Cultural identity and information processing

Culture has a systematic influence on people’s information processing and attitude formation (e.g., Markus & Kitayama, 1991). A conventional approach to test the effects of culture on human behavior is to compare people with different ethnicities (Kang & Kim, 1998), through broad groupings of individuals “on the basis of both race and culture of origin” (Phinney, 1996, p. 919). People within the same ethnic group are believed to share a common history, tradition, and sense of peoplehood distinguished from others (Banks, 1981), and they are likely to have similar shopping orientations such as utilizing same information source and purchasing at the same type of stores (Delener & Neelankavil, 1996). Many prior advertising and marketing studies have particularly discussed the relationship between ethnicity and consumer behavior (e.g., Holland & Gentry, 1999; Ogden, Ogden, & Schau, 2004). It was argued that ethnicity might be a significant determinant of consumption patterns (Hirschman, 1981). For example, Caucasian consumers in the U.S. were found to have less appreciation of global brands than African American and Hispanic consumers (Dimofte, Johansson, & Bagozzi, 2010). For another example, French- and English-speaking Canadians showed significant differences in a wide array of consumer behavior such as food and beverage consumption, furniture expenditure, and automobile ownership, due to cultural differences instead of income or social class (Schaninger, Bourgeois, & Buss, 1985).

Considering the possibility that individuals with same ethnicity may accentuate into the mainstream culture in the host society to different degrees, prior studies have also tested the effects of acculturation on individuals’ decision-making (e.g., Wu, 2011). People’s identification with the mainstream culture and their ethnic culture, either strong or weak, tends to impact their attitudes and behaviors. For instance, strongly identified Hispanic individuals tend to seek Hispanic vendors, be influenced by people they know, and be more receptive to media messages that explicitly target Hispanics, compared to those who are weakly identified with the Hispanic culture (Donthu & Cherian, 1994). Strongly identified Hispanics were also found to have more brand loyalty, and they preferred prestige brands and products advertised specifically to their ethnic group (Deshpande, Hoyer, & Donthu, 1986). Furthermore, Green (1999) illustrated that strongly identified African Americans tended to have positive evaluations of ads that featured African-Americans in positions of dominance, whereas weakly identified African Americans were more likely to prefer ads with Whites in positions of dominance.

As shown in several prior studies (e.g., Aaker, Benet-Martínez, & Caroñera, 2001; Chattaraman, Rudd, & Lennon, 2009; Li, Tsai, & Soruco, 2012), cultural meanings can be delivered via the symbolic and expressive attributes of products and brands, and people tend to prefer those that are perceived consistent with their cultural identity. As an example, it was found that Hispanic individuals who had strong orientation toward the Hispanic culture preferred brands with Hispanic cultural meanings, while those who were strongly identified with the mainstream American culture preferred brands with American cultural meanings (Li et al., 2012). Since the use of Facebook and Renren is expected to reflect the cultural orientation of Chinese individuals in the U.S., it is thus likely to indicate how those people perceive products with different cultural meanings as well. To test this proposition, classic cultural symbols associated with the American culture and the Chinese culture (e.g., the Statue of Liberty and Confucius) were incorporated in product packages in this study as the experimental stimuli. Packaging plays a key role in product success (Simms & Trott, 2010). When people are exposed to a particular product package, they are anticipated to use visual information on the package (e.g., logos and symbols) as “peripheral cues” to help them make decisions (Petty & Cacioppo, 1986). Thus, it is hypothesized that people who use Facebook more intensively will generate a more favorable attitude toward product packages with American cultural symbols, and people who use Renren more intensively will hold a more favorable attitude toward product packages with Chinese cultural symbols.

H3. There will be an interaction effect between Facebook usage intensity and American cultural symbols on attitude toward the package. People who use Facebook more intensively will have a more favorable attitude toward the packages with American cultural symbols.

H4. There will be an interaction effect between Renren usage intensity and Chinese cultural symbols on attitude toward the package. People who use Renren more intensively will have a more favorable attitude toward the packages with Chinese cultural symbols.

2.4. Country-of-origin effect

As hypothesized above, product packages with Chinese cultural symbols will generate a more favorable attitudinal outcome from individuals who use Renren more intensively. However, products packaged in such a way may be evaluated less with regard to their economic value in comparison to those with American cultural symbols, due to the country-of-origin effect.

In general, the country-of-origin effect refers to consumers’ utilization of products’ country-of-origin information to interpret their quality (Han & Terpstra, 1988), and this judgment-formation process tends to be stereotyped (Hadjimarcou & Hu, 1999). Schooler (1965) was among the first to examine the country-of-origin effect, and suggested that consumers might generate biased judgments toward products originated from less-developed countries. Many experimental studies have been conducted later and all provided empirical evidence to support the notion that country-of-origin influences consumers’ overall evaluation and value perception of products, as well as their willingness to pay and purchase intention (Samiee, 1994). Under certain circumstances, the effect of country-of-origin is even stronger than that of the product’s brand name (Han & Terpstra, 1988).

There exists a hierarchy of country-of-origin effect among various countries (Wang & Lamb, 1983). Products from developing countries tend to be evaluated as being inferior to those from more industrialized countries (Han & Terpstra, 1988; Schooler, 1965). For example, in Wang and Lamb’s (1983) research, it was shown that American consumers were more willing to purchase products from highly economically developed countries with a European, Australian, or New Zealand culture. In Drozdenko and Jensen’s (2009) study, consumers’ willingness to pay was tested with the same products but with different country-of-origins. It was found
that they were willing to pay significantly more for made-in-USA products than those made in China. To apply this rationale to the current study, when people are exposed to product packages with American cultural symbols, the effect of made-in-USA is likely to be activated, thus they will be willing to pay more for those products. On the contrary, when people are exposed to product packages with Chinese cultural symbols, their willingness to pay will be lower due to the activation of made-in-China effect.

**H5.** The packages with American cultural symbols will generate a higher level of willingness to pay than those without them.

**H6.** The packages with Chinese cultural symbols will generate a lower level of willingness to pay than those without them.

### 3. Method

#### 3.1. Study overview

The experiment in this study was a $2 \times 2 \times 2 \times 2$ design. The two manipulated factors were American and Chinese cultural symbols on the product package. The other two factors were participants’ Facebook and Renren usage intensity, both of which were measured.

#### 3.2. Experimental stimuli

Based on the two manipulated factors in the experiment, four different types of product package were needed as the experimental stimuli: (1) an American cultural package with American cultural symbols only, (2) a Chinese cultural package with Chinese cultural symbols only, (3) a bicultural package with both American and Chinese cultural symbols, and (4) a non-cultural package with neither American nor Chinese symbols. For this purpose, six versions of a chocolate package were created by a student designer for the experiment. All the symbols included in the package design were based on suggestions of the literature (Chattaraman, Lennon, & Rudd, 2010; Fung, 2010; Hong, Morris, Chiu, & Benet-Martínez, 2000; Ng & Lai, 2009; Wong & Hong, 2005). As seen in Fig. 1, Package A incorporated Capitol Hill and the Statue of Liberty, featuring the American culture. Package B included the Temple of Heaven and Confucius, reflecting the Chinese culture. Packages C and D were created to represent a bicultural approach by incorporating an American cultural symbol and a Chinese cultural symbol (Capitol Hill and the Temple of Heaven, or the Statue of Liberty and Confucius). Finally, neither American nor Chinese cultural symbols were available in package E and package F. Instead, symbols representing a third-party culture—Hispanic culture (Cinco de Mayo festival scene and Che Guevara) and geometric figures (rectangle and circle) without any specific cultural meaning were included respectively. To avoid any confounding effect (e.g., language of brand name, product description, and explicit country-of-origin information), no other information was included on the packages except for the abovementioned symbols.

#### 3.3. Pilot test

To determine which versions of the package were suitable for the experiment (they should not significantly differ on their visual attractiveness of design and participants should be able to identify the cultural meaning associated with each of them correctly), a pilot test was conducted with 15 self-identified bilingual Chinese undergraduate and graduate students (60% male; Mean age: 21.53 years) who spoke both Chinese and English. They were recruited at a southern university in the U.S. on a voluntary basis, and none of them participated in the main experiment. Each

![Fig. 1. Experimental stimuli.](image-url)
3.4. Pilot test results

A one-way ANOVA test was conducted with perceived visual attractiveness of each package (from A to F) as the repeated measure. The overall model was significant, $F(5, 70) = 2.58, p < .05$. A post-hoc analysis was performed to detect where the significant differences existed. It was found that package C ($M = 3.10$) was perceived significantly less visually attractive than all other packages (package A: $M = 4.58$; package B: $M = 4.20$; package D: $M = 4.02$; package E: $M = 4.45$) except for package F ($M = 3.82$) (all ps < .05).

Thus, package C was dropped from the main experiment. Moreover, participants correctly identified the cultural meaning associated with each package in most cases (84%), but some of them misinterpreted package E as representing the American culture. Hence, package E was also removed from the main experiment.

3.5. Main experiment

A total of 251 self-identified bilingual Chinese individuals participated in the main experiment on a voluntary basis. They were either recruited on the campus at the same university as in the pilot test or at a local Chinese church in the community area nearby the university. The majority of them were college students who were born in mainland China (51% female; Mean age: 23.1 years). On average, they had stayed in the U.S. for 2.9 years (see participants' profiles in Table 1).

Two questionnaire versions were prepared for the experiment, one in English and the other in Chinese. The translation procedure between the two versions was similar to that in the pilot test, and participants chose the version that they preferred to answer during the study. Each participant was randomly assigned to one of four package conditions: American cultural package (A), Chinese cultural package (B), bicultural package (D), and non-cultural package (F). It was confirmed that the four conditions did not significantly differ with regard to participants' gender, age, and occupation (see Table 2).

During the experiment, each participant was given a paper-and-pencil questionnaire to answer. They were first asked to report their Facebook usage intensity via eight items such as “Facebook is part of my everyday activity” (Ellison et al., 2007). Since six items were measured on a 5-point Likert scale and the other two items were multiple-choice questions (six and nine choices respectively), all the items were thus converted to the standardized percentage format before they were averaged for further data analysis ($\bar{x} = .88$). Similarly, participants were also asked to report their usage intensity of Renren with the same measure ($\bar{x} = .89$). Their orientation toward the American culture and the Chinese culture was each measured with a set of 10 statements (Ryder, Alden, & Paulhus, 2000), such as “I often behave in ways that are typical of American (Chinese) culture” on a 5-point Likert scale (American culture orientation: $\bar{x} = .85$; Chinese culture orientation: $\bar{x} = .89$). Then, they were presented with the assigned product package and asked to report their attitude toward it on four pairs of adjectives (good/bad, like/dislike, pleasant/unpleasant, and favorable/unfavorable) with 7 representing good, like, pleasant, and favorable/ unfavorable, respectively (adapted from MacKenzie & Lutz, 1989, $\bar{x} = .95$). They were also requested to report their willingness to pay for the chocolate in the package with an open-ended question “How much would you expect to pay for this chocolate if you were to buy it” (Van Doorn & Verhoeft, 2011). A control variable, perceived importance of product package to self, was also measured. Specifically, participants rated how important product package meant to them with the question “In general, how important is the package of a product to you?” on a 7-point scale with 7 being very important. In addition, they reported self-perceived proficiency of English and Chinese. English and Chinese language proficiency was each measured with four statements (Li &

<table>
<thead>
<tr>
<th>Experimental condition</th>
<th>Participants' gender</th>
<th>Participants' mean age</th>
<th>Participants' occupation</th>
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</thead>
<tbody>
<tr>
<td>American cultural package</td>
<td>50.0% female</td>
<td>23.9</td>
<td>81.0% student</td>
</tr>
<tr>
<td>Chinese cultural package</td>
<td>53.1% female</td>
<td>23.6</td>
<td>92.2% student</td>
</tr>
<tr>
<td>Bicultural package</td>
<td>52.4% female</td>
<td>22.6</td>
<td>90.5% student</td>
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<tr>
<td>Non-cultural package</td>
<td>48.5% female</td>
<td>22.1</td>
<td>89.4% student</td>
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Note: A Chi-square test confirmed that there was no significant gender distribution difference across experimental conditions, $\chi^2 (3, N = 251) = .35, p = .95$. An one-way ANOVA test confirmed that participants' age did not differ significantly across experimental conditions, $F(3, 244) = .73, p = .53$. Another Chi-square test confirmed that there was no significant occupation distribution difference across experimental conditions, $\chi^2 (3, N = 251) = 4.31, p = .23$.  

Table 1

Participants' demographic information.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Percent</th>
<th>Min.</th>
<th>Max.</th>
<th>M</th>
<th>SD</th>
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<td>Female</td>
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<tr>
<td>Male</td>
<td>49.0</td>
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<td>Working professional</td>
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<tr>
<td>Housewife/Retired/Unemployed</td>
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<table>
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<td>College degree (expected)</td>
<td>93.6</td>
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<tr>
<td>Others</td>
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<table>
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<td>16</td>
<td>16</td>
<td>75</td>
<td>23.1</td>
<td>7.3</td>
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<tr>
<td>Years of stay in U.S.</td>
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<td>39</td>
<td>2.9</td>
<td>4.8</td>
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</tr>
</tbody>
</table>

Table 2

Participants' gender, age, and occupation information in all experimental conditions.
Kalyanaraman, 2012), such as “I feel comfortable reading things written in English (Chinese)” on a 7-point Likert scale (English language proficiency: \( x = .93 \); Chinese language proficiency: \( x = .95 \). Finally, participants’ demographic information including their age, gender, occupation, education background, birth location, and length of stay in the U.S. was collected.

4. Results

4.1. Paired t-tests

A paired t-test was conducted to examine participants’ Chinese and English language proficiency. As expected, their self-rated proficiency in Chinese (\( M = 6.35 \)) was significantly higher than that in English (\( M = 4.65 \)), \( t(250) = 18.19, p < .001 \). Another paired t-test showed that participants’ usage intensity of Renren (\( M = .56 \)) was significantly higher than that of Facebook (\( M = .44 \)), \( t(250) = 6.88, p < .001 \). Finally, it was revealed that participants’ orientation toward the Chinese culture (\( M = 3.98 \)) was significantly stronger than their orientation toward the American culture (\( M = 3.27 \)), \( t(248) = 14.49, p < .001 \). Given that the vast majority of participants were born in mainland China and they had stayed in the U.S. for less than three years on average, all these t-test results were within anticipations.

4.2. Correlation analyses

To test the first two hypotheses, correlation analyses were performed. Participants’ Facebook usage intensity was found to be positively correlated with their orientation toward the American culture (\( r = .35, p < .001 \)) and their English language proficiency (\( r = .22, p < .001 \)). It was marginally correlated with the length of stay in the U.S. (\( r = .11, p = .09 \)). In contrast, participants’ Renren usage intensity was positively correlated with their orientation toward the Chinese culture (\( r = .25, p < .001 \)) and their Chinese language proficiency (\( r = .16, p < .05 \)), but negatively correlated with their length of stay in the U.S. (\( r = -.32, p < .001 \)). Thus, H1 was partially supported and H2 was fully supported.

4.3. ANCOVA tests

To test H3 and H4, a \( 2 \times 2 \times 2 \times 2 \) ANCOVA test was conducted. First, participants were divided into two groups based on a median split of their Facebook usage intensity (more intensive Facebook users vs. less intensive Facebook users). It was shown that the first group used Facebook significantly more intensively (\( M = .59 \)) than the second group (\( M = .30 \)), \( t(249) = 21.61, p < .001 \). Similarly, they were divided into another two groups based on a median split of their Renren usage intensity (more intensive Renren users vs. less intensive Renren users). It was confirmed that the first group used Renren significantly more intensively (\( M = .74 \)) than the second group (\( M = .38 \)), \( t(249) = 22.93, p < .001 \). An ANCOVA test was then conducted with four fixed factors (Facebook usage: more intensive vs. less intensive; Renren usage: more intensive vs. less intensive; American cultural symbols on the package: available vs. unavailable; Chinese cultural symbols on the package: available vs. unavailable) and three covariates (perceived importance of product package to self; English language proficiency; Chinese language proficiency). The dependent variable was attitude toward the package. Significant covariance effects were found on perceived importance of product package to self (\( p < .05 \)) and English language proficiency (\( p < .01 \)). With regard to the effects of the four factors, the test result revealed a significant two-way interaction effect between Renren usage intensity and Chinese cultural symbols on the package, \( F(1, 225) = 7.81, p < .01 \). As illustrated in Fig. 2, participants who used Renren more intensively appeared to have a more favorable attitude toward the package when Chinese cultural symbols were available (\( M = 3.50 \)) as opposed to unavailable (\( M = 3.25 \)), but participants who used Renren less intensively tended to hold a more favorable attitude toward the package without Chinese cultural symbols (\( M = 3.75 \)) than the package with those symbols (\( M = 2.90 \)). A post-hoc analysis was conducted to examine whether those pairwise differences were significant. It was found that participants who used Renren less intensively had a significantly more favorable attitude toward the package without Chinese cultural symbols than the package with them (\( p < .01 \)). It was also discovered that participants who used Renren more intensively held a significantly more favorable attitude toward the package than those who used Renren less intensively when Chinese cultural symbols were available on the package (\( p < .05 \)). No other significant main effect or interaction effect was discovered. Thus, H4 was supported, but H3 was not.

Another \( 2 \times 2 \times 2 \times 2 \) ANCOVA test was performed with the same four factors and three covariates, but with willingness to pay being the dependent variable. English language proficiency again had a significant covariance effect (\( p < .05 \)). Moreover, a significant two-way interaction effect was found between American
cultural symbols on the package and Chinese cultural symbols on the package, $F(1, 208) = 4.88, p < .05$. As shown in Fig. 3, different package approaches appeared to generate different levels of willingness to pay (American cultural package: $M = 3.48$; Chinese cultural package: $M = 3.20$; bicultural package: $M = 5.38$; non-cultural package: $M = 3.89$). A post-hoc analysis was conducted to detect where the significant difference existed. It was found that the willingness to pay for the package with both American and Chinese cultural symbols was significantly higher than that for the package with Chinese cultural symbols only ($p < .05$). No other significant main effect or interaction effect was discovered. Thus, $H_5$ was partially supported but $H_6$ was not.

5. Discussion

5.1. Theoretical implications

Social networking sites, particularly Facebook, have attracted a wide range of research interest across various disciplines over the past few years. As reviewed by Wilson et al. (2012), many prior studies were descriptive in nature, showing why people use social networking sites and what specific activities they perform on those sites. However, the effects of long-term social networking site usage on consumers’ attitudes and behaviors have not been adequately addressed. To enrich the literature, the current research employs a cultural perspective to examine the effects of using social networking sites on ethnic consumers. Specifically, to what extent Chinese individuals in the U.S. used Facebook and its Chinese counterpart, Renren, was investigated. It was further demonstrated that the use of Facebook versus Renren reflected people’s cultural orientation, and it also affected their attitudes toward product packages associated with specific cultural meanings.

According to the culture learning model, newcomers to a host society need to grasp culture-related skills to reduce and conquer difficulties associated with intercultural communication (Masgoret & Ward, 2006; Ward, 2004; Ward et al., 2001). Past research has illustrated that both direct contact such as social interaction with members in the host society and indirect contact such as exposure to the host society mass media content are effective ways for newcomers to improve those skills (Chen, 2010; Graves, 1967; Masgoret & Ward, 2006). The current research suggests that the adoption of social networking sites is another important avenue to enhance culture learning. Theoretically speaking, social networking sites have somewhat blurred the line between direct contact and indirect contact. Via platforms such as Facebook, newcomers not only interact directly with members in the host society (e.g., initiate a dialogue), but also process the content produced by them without direct social interaction (e.g., read others’ posts). No matter whether people are involved in more direct or indirect contact, their selected usage of certain social networking sites tends to be consistent with their cultural orientation and other personal characteristics such as language proficiency. Thus, the importance of these new media should be highlighted in future acculturation models.

As argued by Lamoreaux and Morling (2012), people are shaped by their participation in the meanings and norms of specific cultural contexts. In turn, they reinforce, recreate, and maintain those contexts. It is suggested in this study that social networking sites constitute such a cultural context where users generate and share content. By facilitating information flow among users, social networking sites encourage and reinforce certain cultural values (Qiu et al., 2013). These sites are therefore a form of manifestation of their users’ cultural inclinations. Based on the findings of this study, Renren appeared to be a platform fostering the Chinese culture exclusively, and it significantly affected how people evaluated cultural messages—that more intensive Renren users tended to favor messages with strong Chinese cultural meanings than less intensive users. In contrast, Facebook did not have such an effect on people’s attitude formation, probably due to the fact that it is more inclusive in culture cultivation and reinforcement. According to Ortutay (2012), 81% of Facebook users live outside the U.S. and Canada, and most of them are from Brazil, India, Indonesia, and Mexico. Since Facebook’s user base is so diversified, it is likely that a variety of cultural value systems are established on the Facebook platform. Thus, more intensive Facebook usage does not necessarily lead to a more favorable attitude toward messages with explicit American cultural meanings, as shown in this study.

The current research also makes a unique contribution to the advertising and marketing literature by illustrating the relationship between social networking site usage and consumer behavior. As argued by Aaker et al. (2001), cultural meanings reside in the abstract quality of products that provides a symbolic and value-expressive function to consumers. When symbolic and expressive attributes of products evoke desired cultural meanings in consumers’ minds, those products will be perceived as culturally relevant ( Chattaraman et al., 2010). This study showed that the culture match between consumers and products tended to generate a more favorable attitudinal outcome. However, with regard to consumers’ willingness to pay, the effect of country-of-origin might overshadow that of the culture match. For example, individuals who are strongly identified with the Chinese culture may prefer product packages with explicit Chinese cultural meanings, but they are not necessarily willing to pay more for those products.

5.2. Limitations and future research

The current research touched upon a research area that has rarely been examined in the literature. A few limitations of this study need to be addressed and more future studies in this research direction are called for. First of all, the average length of residence in the U.S. of participants in this study appeared to be relatively short (less than three years). Theoretically speaking, those participants might be considered at their early stage of acculturation. Whether the study results would be altered if participants had stayed in the U.S. for a longer period is unknown. Future research may therefore examine individuals’ use of social networking sites at different stages of their acculturation into the American society.

Secondly, according to the reactance theory (Brehm, 1966), when people feel that the range of alternatives is eliminated by a certain rule, reactance tends to occur and they are likely to adopt a view or attitude that is contrary to what the rule intends. Given the fact that Facebook is inaccessible in China, it may be expected that Chinese individuals will adopt Facebook intensively after they arrive in the U.S. However, the current study showed that Renren was more popular among the participants and Facebook was in fact used less intensively in general. Future research is needed to investigate how people perceive Facebook and what motivates them to adopt this platform, within the context that Facebook was not available to them to use previously.

Another counter-intuitive finding in this study was that the product package with both American and Chinese cultural symbols generated the highest level of willingness to pay. This finding raises an interesting question: How would people evaluate a product if it were associated with two or more countries-of-origin? During the experiment in this study, no explicit country-of-origin information was released to the participants, thus they might have used cultural symbols on the product package as a reference to make their judgments. It was possible that the package with both American and Chinese cultural symbols activated a twisted coun-
try-of-origin effect (e.g., the concept of “designed in the U.S. but made in China”). Such a package seems to satisfy the needs of people with dual cultural identities (e.g., Chinese individuals residing in the U.S.). More studies are needed to provide a clearer conclusion to explain this phenomenon from both country-of-origin and cultural identity perspectives. Finally, this study showed that users with different levels of Facebook and Renren usage intensity tended to have different cultural preference. Future research needs to examine the underlying mechanism of this preference-generation process. Specifically, social networking sites equip users with multiple tools to interact with others. What particular tasks on social networking sites help individuals develop a new cultural tendency or maintain their original cultural orientation deserves further discussion in future studies.

References


