A transformative taste of home: Home culture primes foster expatriates' adjustment through bolstering relational security ☆

Jeanne Ho-Ying Fu [a,*], Michael W. Morris [b], Ying Yi Hong [c]

[a] City University of Hong Kong, Department of Management, Kowloon, Hong Kong
[b] Columbia University, Columbia Business School, New York, NY 10027, USA
[c] Nanyang Technological University, Nanyang Business School, Singapore

ARTICLE INFO

ABSTRACT

Past research encourages expatriates to immerse themselves in the host culture, avoiding reminders of their home culture. We counter that, for expatriates still struggling to adjust, home culture stimuli might prime a sense of relational security, emboldening them to reach out to locals and hence boost cultural adjustment. In Study 1, American exchange students in Hong Kong felt more adjusted to Hong Kong after incidental exposure to iconic American practices (vs. Chinese or neutral), an effect partially mediated by relational security and not by other exchange student concerns. Study 2 surveyed exchange students from Hong Kong at three points in time: before, during and after a study abroad term. The intervention of writing about home culture (vs. host culture) symbols during their trip helped adjustment for those with pre-trip insecurities about interacting with locals but not those lacking these insecurities. The boost in adjustment from the home culture primes had a lasting impact, visible in the post-trip evaluations of the study abroad experience by students in the initially insecure group.

From Proust's *Remembrance of Things Past* to Pixar's *Ratatouille*, plots pivot and characters change after a taste of home—foods can evoke a flood of memories, thoughts and feelings that embolden an alienated person to reach out to others. The current research investigates this possibility with regard to expatriates, many of who suffer feelings of insecurity and alienation toward their host culture (Yeh & Inose, 2003). Could food or other stimuli associated with the home culture help the adjustment of exchange students and other fledgling expatriates? Past cultural researchers have maintained that acculturation requires immersion and even unlearning of home-culture associations (Gudykunst & Kim, 1997, p.337–339). But this advice may overlook the emotional dynamics of expatriate adjustment. If home culture reminders (primes) alleviate feelings of insecurity and alienation, then a taste of home might empower a struggling expatriate, emboldening them to reach out and ultimately engage more deeply with the host culture.

Research focus on expatriate emotions has declined over time. Classic depictions of adjustment to a new culture highlighted the role of emotions (Adler, 1975; Church, 1982). Expats begin with an excited honeymoon phase and then enter the phase of "culture shock," the "anxiety that results from losing all our familiar signs and symbols" (Oberg, 1960, p.177), before eventually arriving to a more settled phase of engagement with the local culture. Adler (1975) described culture shock as a downward spiral of insecurity about interacting with locals, defensive withdrawal, and crippling alienation. Although "culture shock" remains a popular term, rigorous tests revealed that not all expats experience these phases or do so in this order (Bhaskar-Shrinivas, Harrison, Luk, & Shaffer, 2005). Research on expatriate emotions focused instead on stress as a byproduct of negative acculturation interactions (Berry, 1997).

Much recent research centers on expatriate adjustment, defined as "psychological comfort with various aspects of a new setting" (p. 298, Black & Gregersen, 1991). Research on managers and students abroad finds that adjustment decreases with cultural distance between home and host countries (Van Vianen, De Pater, Kristof-Brown, & Johnson, 2004), but increases with greater cross-cultural training, organizational support and family adjustment (Black & Gregersen, 1991; Black & Stephens, 1989; see Gelfand, Erez, & Aycan, 2007 for a review) and with personality traits such as extraversion and tolerance for ambiguity (Ward, Leong, & Low, 2004). While this correlational evidence suggests ways to select and support expats, it provides little insight into the psychological processes through which expats transition from insecurity and alienation to comfort and engagement.

The current research brings new conceptual and methodological tools to understand expatriate insecurity and adjustment, drawing on

the cultural psychology and attachment theory. Culture priming research finds that exposure to symbols of one's home culture triggers associated memories, feelings and concepts (Hong, Morris, Chiu, & Benet-Martinez, 2000). Attachment research finds that anxiety toward outgroups is reduced by primes of one's close relationships (Mikulincer & Shaver, 2001). Putting these ideas together, we reach the counterintuitive conclusion that expats' adjustment to the host culture could be helped by primes of the home culture.

Icons and security

Iconic cultural images and artifacts have been called "magnets of meaning" because they are potent triggers of thoughts and feelings (Hong et al., 2000). Exposure to icons of one's native culture evoke related schemas, feelings and memories, calling up this cultural content to the fore of one's mind (Fu, Chiu, Morris, & Young, 2007; Fu, Morris, Lee, Chao, Chiu and Hong, 2007). For Sino-Anglo bicultural individuals, exposure to Chinese versus Western icons draws out their Chinese versus Western habits of self-construal (interdependent vs. independent) (Ng & Lai, 2009; Sui, Zhu, & Chiu, 2007), subjective well-being (relationship-based vs. self-focus) (Tam, Lau, & Jiang, 2012) and emotional experience (Perunovic, Heller, & Rafaeli, 2007). Verkuyten and Pouliasi (2006) ound similar cultural priming effects on Greek–Dutch biculturals' perception on themselves and their significant others. To summarize, primes of home activate memories and representations of close relationships. Hence we predict that expats exposed to home culture primes would experience a sense of connectedness and relational security.

Attachment research links relational security with behavior toward outgroups. Mikulincer and Shaver (2001, 2007) primed relational security in Israeli students (by exposing them to attachment figures or associated words) and observed reduced prejudice toward minority groups, such as Arab Israelis. Likewise, they found dispositional secure attachment style to be associated with lower prejudice levels than insecure attachment style. This suggests that feelings and thoughts of relational security allay the anxiety of intergroup interaction, just as a secure relational base empowers a toddler to explore (Bowlby, 1969). Mikulincer and Shaver (2007) argued that attachment bases vary depending on contexts. Relationships to romantic partners, leaders or even groups may serve as secure bases in different life situations.

Many expats move from an environment with secure relationships, affiliations, and social routines to a foreign setting where they have few or no connections, and where making connections seems difficult. Lacking familiar bases of support, they can feel insecure and anxious, which impede their ability to connect with locals. If home culture primes allay this crippling insecurity by restoring their sense of social connectedness, this should help their host culture adjustment (Yeh & Inose, 2003). Consistent with this idea, Hong, Fang, Yang, and Phua (2013) found that Indonesians studying in Singapore with higher levels of implicit home-culture attachment reported higher level of adjustment to the *host* culture. To summarize, we propose that home culture primes could provide sense of relational security and boost adjustment in the host culture.

Pilot study: apple pie vs. mango pudding

A pilot study was conducted as a preliminary test of the key prediction that exposing fledgling expatriates to home culture primes would heighten their sense of relational security.[1] Twenty-seven American exchange students (age: $M = 21.93$, $SD = 3.65$; 48.1% male) recently arrived in Hong Kong ($M = 2.82$ months, $SD = 1.03$) participated in this study. They were told that the session comprised two separate studies. In an ostensible "marketing study," they were presented either

---

a tray of American desserts (apple pie, cheese cake, and carrot cake) or Chinese desserts (mango pudding, sesame dumplings, and red bean pastry). These desserts were chosen based on nominations as favorite desserts when abroad by US and Hong Kong students in pretests. Participants tasted the three desserts, evaluated them and chose their favorite. Participants were then led to a different cubicle for a 'survey study.' Participants rated themselves on several scales related to exchange student experience, including feelings of relational security (e.g. 'I am very comfortable being close to Hong Kong people'). *T*-test results showed that relational security was higher after tasting American desserts ($M = 4.48$, $SE = .22$) than Chinese desserts ($M = 3.85$, $SE = .24$) at a marginally significant level, $t(25) = 1.94$, $p = .06$, CI [−.04, 1.30]. This pilot experiment showed preliminary support to our proposal that home culture primes have a distinct effect on exchange students' feeling of relational security.

Current research

We hypothesized that home culture primes would allay expatriates' insecurities and thereby foster adjustment to the host country. We tested this proposal in two experimental studies with American and Chinese exchange students. In Study 1, American students undergoing exchange programs in Hong Kong participated in the research. We examined the effects of exposure to iconic cultural practices (home, host or neutral) on cultural adjustment and tested relational security against other possible mediators. Study 2 studied exchange students from Hong Kong who studied abroad in a variety of other countries. It tested whether student with initial insecurities about interacting with locals benefited from exposure to home culture (versus host culture) primes in terms of their resulting feelings of cultural adjustment and their longer term meaningful engagement in the study abroad experience.

Apart from our proposed mechanism of relational security, we also tested for other plausible alternative mechanisms. An effect of home culture primes could run through reduced negative affect, such as depressive feeling (Seale & Ward, 1990). Alternatively, home culture primes may remind exchange students of their learning orientation for their foreign stay — pushing them to reach out to host locals (Palthe, 2004) or remind them that they are representing their country, cuing obligations to act as ambassadors (Chiu, C. Y., personal communication). These alternatives are plausible, but we expect that the effect of home culture primes will run through mechanism of allaying relational insecurity.

Study 1: baseball vs. tai chi

Design

We propose that home culture primes evoke the feeling of relational security and for fledgling expats making a challenging cultural adjustment, this would heighten their sense of cultural adjustment. Study 1 formally tested the following specific hypotheses. First, home culture primes would increase expats' relational security. Second, home culture primes would increase expats' perceived cultural adjustment. Third, the effect of home culture primes on cultural adjustment would be mediated by their relational security. We exposed participants to sentences of varying cultural significance (home, host or neutral) and then measured their responses to the possible mediators (relational security, international harmony, personal growth, and depression) and cultural adjustment.

Method

Participants

Participants in this study were 87 US exchange students (Age: $M = 21.5$, $SD = 2.77$; 49.4% male; 44.8% Caucasian, 35.6%

Chinese[2], 8% Latino, 3.4% African, 8.2% others) who had been studying in two universities in Hong Kong for no more than one year ($M = 3.72$ months, $SD = 1.82$). They were recruited via email and web posts, gave consent, received US$10 cash or cash vouchers for their participation and were debriefed. Priming studies generally require an N of 20 per cell (Morris & Mok, 2011; Sui et al., 2007; Wong & Hong, 2005; Zhang, Morris, Cheng, & Yap, 2013; Zou, Morris, Benet-Martinez, 2008), so we sought this size in our main studies. Data collection was stopped after sending out recruitments to reach our target sample size. There is no ongoing data collection.

Procedures and materials

Cultural priming. Participants arrived at the lab individually and were told that the session consisted of two studies. In the first part, presented as a 'Memory Study', participants performed a sentence unscrambling and construction task adapted from Banaji, Hardin, and Rothman (1993), randomly assigned to either the home (American) culture (e.g. "My favorite game is baseball", "The NBA league has started"), host (Chinese) culture (e.g. "She did Tai Chi yesterday", "They are practicing the lion dance") or culturally neutral (e.g. "She is wearing a white skirt", "He locked the four windows and left") conditions. The cultural representativeness of sentences was established in pretests. Among the eight sentences, four varied experimentally and four were fillers (e.g. "The telephone is ringing", "The pedestrian crossed the street"). In each sentence, there was an extra word and participants had to identify this extra word. After unscrambling all sentences, participants were instructed to memorize the sentences they constructed. They then did a filler task to allow time for the memory test. Subsequently, in the memory test, the participants recalled the sentences they constructed previously and then corrected their own recalled sentences against an answer key. These procedures were designed to reinforce the home (American) culture versus host (Chinese) culture and neutral priming.

Value endorsement and depressive feeling. Next, the participant was brought to another cubicle for a 'second' study. The participant filled out the Rokeach Value Survey (RVS) (Rokeach, 1973), from which measures of potential mediating mechanisms were constructed. These mediators were measured through value endorsements. Value prioritizations capture temporary states of value salience that are affected by primes of iconic cultural images (Fu, Chiu, Morris and Young, 2007) and self-construal modes (Gardner, Gabriel, & Lee, 1999). Participants rated how important the listed values were to them personally (1 = 'Extremely unimportant' to 6 = 'Extremely important'). Braithwaite and Law (1985) found that Rokeach's terminal values fell into several factors, including: (1) 'secure and satisfying interpersonal relationships' (mature love, true friendship), (2) 'personal growth and inner harmony' (self-respect, wisdom and inner harmony), and (3) 'international harmony and equality' (a world of peace, a world of beauty, and equality). To check for relevance of these three factors in our research, we ran a confirmatory factor analysis (CFA) on these 8 items (mature love, true friendship, self-respect, wisdom, inner harmony, a world of peace, a world of beauty and equality) using ratings from our American sample and (to gain sufficient N for the CFA) 148 local Hong Kong Chinese students from the same two universities (61.5% female, $M_{age} = 21.9$, $SD_{age} = 2.07$), who had gone through the

same procedures until after this value endorsement task. As American exchange students in Hong Kong are a small population, these local students were used to supplement the sample size for a CFA. The local sample paralleled the exchange student sample in that it came from the same universities. Local students have a great deal of exposure to Western culture, given that they learn English from a young age and given their territory's Western institutions, a legacy of 100 years of British rule. We also statistically tested for measurement invariance across these two samples by two tests. First, we compared a CFA baseline model ($\chi^2 = 55.58$, $df = 37$) and a CFA model constraining the factor loadings ($\chi^2 = 63.01$, $df = 42$) both specifying country of origin. Chi-square difference suggested that the factor structures of the two samples were invariant (χ^2 difference $= 7.43$, $df = 5$, ns) (Cheung & Rensvold, 1999). We also conducted separate CFA for each sample and resulted factor loadings were comparable across the two samples (see Table 1). The above findings suggested measurement invariance across the two samples. We then performed a CFA with all data pooled together. Fit indices of this CFA ($\chi^2 = 18.96$, $df = 17$, $p = .33$; RMSEA $= .02$, NNFI $= .99$; CFI $= .99$; SRMR $= .04$; AGFI $= .96$) and factor loadings suggested good factor structures (Table 1). The ratings of all prescribed values were then averaged to create a composite score for each corresponding factor, which we term relational security, personal growth, and international harmony.

Participants then responded to depressive feeling (Zung, 1965) (8 items; $\alpha = .78$; 'I feel down-hearted and blue', 'I feel hopeful about the future' (reverse-coded); 1 = 'A little of the time' to 4 = 'Most of the time').

Cultural adjustment. Finally, participants filled out the cultural adjustment scale by Black and Stephens (1989) (14 items; $\alpha = .87$; 'To what extent you feel adjusted to housing conditions', 'socializing with host nationals', 'performance standards and expectation'; 1 = 'Not adjusted at all' to 7 = 'Completely adjusted').

Results

Two contrasts (D1 = home vs. host and neutral combined, .667, −.333, −.333; D2 = host vs. neutral, 0, .5, −.5) were created to test our hypotheses (Hayes & Preacher, 2014). We first tested the home priming effect on our target mediator — relational security. Contrast tests showed that relational security was significantly higher after home (American) culture primes ($M_{home} = 5.55$, $SE_{home} = .11$) than after the other two conditions combined, $b = .31$, $t(84) = 2.33$, $p = .02$, CI [.05, .58] while the difference between host (Chinese) culture primes ($M_{host} = 5.29$, $SE_{host} = .11$) and neutral primes ($M_{neutral} = 5.18$, $SE_{neutral} = .11$) was non-significant, $b = .12$, $t(84) = 0.73$, ns, CI [−.20, .43] (see Table 2). We ran the same contrast tests on other potential mediators — personal growth, international harmony and depressive feeling. Results showed that priming conditions did not produce

---

[2] In the pilot study and Study 1, there were a considerable number of ethnic Chinese in the sample. Ethnic Chinese might experience less insecurity living in Hong Kong than non-Chinese. To explore whether ethnicity would moderate the priming effects, we first coded ethnicity of each participant into either Chinese American or non-Chinese American (Caucasian, African and Latino, Indian, Vietnamese, Filipino, and Middle Eastern) and then ran all analyses again adding the main effect of ethnicity and the ethnicity X prime interaction effect. In both studies, ethnicity did not interact with prime condition on all the mediators and DVs.

Table 1
Factor loadings of confirmatory factor analysis of value items in Study 1.

	Factor		
Item	Relational security	Personal growth	International harmony
True friendship	.58 (.61, .50)	–	–
Mature love	.44 (.73, .34)	–	–
Inner harmony	–	.65 (.65, .57)	–
Self-respect	–	.44 (.52, .39)	–
Wisdom	–	.13 (.29, .17)	–
A world of peace	–	–	.71 (.97, .68)
Equality	–	–	.42 (.40, .42)
A world of beauty	–	–	.41 (.35, .40)

Note: numbers without parentheses indicate factor loadings from American and Hong Kong Chinese participants pooled together. Numbers in parentheses indicate factor loadings of American sample only, and Hong Kong Chinese sample only, respectively.

Table 2
Means and standard error (SE) as a function of prime condition in Study 1.

	Mean (SE)			$F(2, 84)$	p	η^2	D1: b (SE)	D2: b (SE)
DV	Home	Host	Neutral					
Relational security	5.55 (.11)	5.29 (.11)	5.18 (.11)	2.96	.057	.07	.31** (.12)	.12 (.17)
Personal growth	5.41 (.10)	5.32 (.10)	5.19 (.10)	1.27	.286	.03	.16 (.12)	.13 (.15)
International harmony	4.90 (.13)	4.89 (.13)	4.83 (.14)	0.07	.934	.00	.04 (.16)	.05 (.19)
Depressive feeling	1.75 (.10)	2.01 (.10)	2.15 (.11)	3.92	.024	.09	−.33** (.12)	−.14 (.16)
Cultural adjustment	5.47 (.15)	4.80 (.15)	5.05 (.15)	5.25	.007	.11	.55** (.18)	−.25 (.21)

Note: D1 = contrast between home (American) culture and other conditions (host culture and neutral combined); D2 = contrast between host (Chinese) and neutral condition; b stands for unstandardized coefficient and SE stands for standard error.

significant effect on other potential mediators except for depressive feeling. Depressive feeling was lower after home culture (American) primes than the other two conditions combined, $b = -.33$, $t(84) = -2.63$, $p = .01$, CI [$-.58, -.08$] while the difference between host culture primes and neutral primes was non-significant, $b = -.14$, $t(84) = -.96$, ns, CI [$-.43, .15$] (see Table 2).

Next, we explored the effect of home culture primes on the dependent variable − cultural adjustment. Results showed that cultural adjustment rating was significantly higher after home culture (American) primes ($M_{home} = 5.47$, $SE_{home} = .15$) than the other conditions combined, $b = .55$, $t(84) = 3.01$, $p = .004$, CI [.19, .91] while the difference between host culture (Chinese) primes ($M_{host} = 4.80$, $SE_{host} = .15$) and neutral primes ($M_{neutral} = 5.05$, $SE_{neutral} = .15$) was non-significant, $b = -.25$, $t(84) = -1.18$, ns, CI [$-.68, .17$].

Next, we ran a regression regressing cultural adjustment on relational security. Relational security was positively correlated with cultural adjustment, $b = .45$, $t(85) = 3.15$, $p = .002$. We also ran separate regressions for other potential mediators. Only depressive feeling showed a significant effect on cultural adjustment, $b = -.31$, $t(85) = -1.96$, $p = .05$. Effects of personal growth, $b = .27$, $t(85) = 1.58$, $p = .12$. and international harmony, $b = .18$, $t(85) = 1.42$, $p = .16$ were non-significant.

To test the mediating effect of relational security, we estimated the indirect effect using bootstrapping method (10,000 samples) (Hayes & Preacher, 2014) with the two contrasts as independent variables, relational security as mediator, and cultural adjustment as dependent variable. Results showed that relational security strongly related to cultural adjustment, $b = .38$, $t(83) = 2.75$, $p = .01$. Although D1 contrast remained significant, $b = .43$, $t(83) = 2.52$, $p = .01$, bias-corrected bootstrapped confidence interval (95%) suggested that there was a significant indirect effect between the home priming effect (D1 contrast) and cultural adjustment via relational security, indirect effect = .12, CI[.02, .30] (Hayes & Scharkow, 2013) (Fig. 1).

We also tested the mediation effects of personal growth, international harmony and depressive feeling. None of these potential mediators correlated with cultural adjustment nor did they produce significant indirect effects according to the bootstrapping results (Table 3). To conclude, only relational security was shown to a significant partial mediator of the home culture primes on cultural adjustment.

Study 2: insecure expats vs. secure expats

If home culture primes work by allaying insecurity, its facilitative effect should be manifest for students who feel insecure about their interactions abroad but less so for students who feel secure to begin with. We tested our proposition with an Insecurity × Prime design in Study 2.

Design

To test the Insecurity × Prime interaction effect in Study 2, we examined Hong Kong Chinese students taking a term abroad. Some did it in very different cultural settings (e.g. United States, Sweden) and some in fairly familiar settings (e.g. Singapore, UK) due to ethnic/cultural background and historical reasons. Hence we expect wide variation in the degree of insecurity felt about their interactions abroad, because of variation in destinations and variation in prior experience abroad. We measured their insecurity before they started the exchange study (Time 1) and assessed the impact of a prime manipulation (home or host culture) on their subsequent adjustment (Time 2) and their longer term meaningful engagement during the study abroad experience (Time 3). We hypothesized that home culture primes, compared to host culture primes, would increase adjustment among students with prior insecurities but not for students free from prior insecurities.
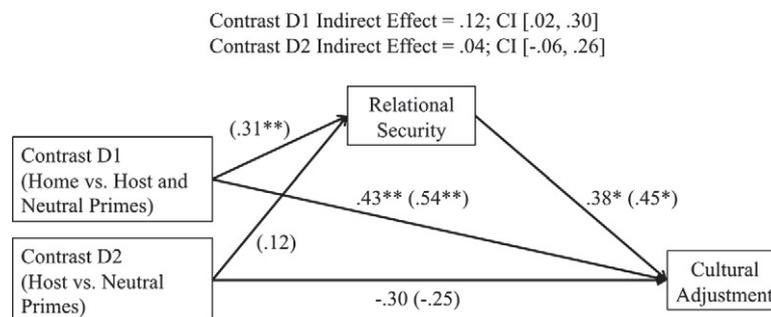
Contrast D1 Indirect Effect = .12; CI [.02, .30]
Contrast D2 Indirect Effect = .04; CI [-.06, .26]

Note: Numbers denote unstandardized coefficients. Coefficients in parentheses are zero-order coefficients. CI stands for bias-corrected confidence interval. * $p < .05$; ** $p < .01$

Fig. 1. Unstandardized coefficients and indirect effects in mediational analysis of relational security in Study 1.

Table 3
Indirect effects by bootstrapping in Study 1.

	Mediator: relational security	Mediator: personal growth	Mediator: international harmony	Mediator: depressive feeling
	DV: cultural adjustment			
IV				
Contrast D1:				
b (SE)	.43*(.17)	.51**(.17)	.54**(.17)	.48**(.18)
Contrast D2:				
b (SE):	−.30 (.21)	−.28 (.22)	−.26 (.22)	−.28 (.21)
Mediator:				
b (SE)	.38*(.14)	.23 (.16)	.18 (.13)	−.22 (.21)
Indirect effects at 95% BC CI				
Contrast D1:				
Effect	.12*	.04	.01	.07
[lower limit, upper limit]	[.02, .30]	[−.01, .16]	[−.04, .12]	[−.04, .30]
Contrast D2:				
Effect	.04	.03	.01	.03
[lower limit, upper limit]	[−.06, .26]	[−.02, .19]	[−.05, .13]	[−.03, .23]

Note: D1 = contrast between home (American) culture and other conditions (host culture and neutral combined); D2 = contrast between host (Chinese) and neutral condition; b stands for unstandardized coefficient; SE stands for standard error; BC CI stands for bias-corrected confidence interval.

** $p < .01$.
* $p < .05$.

Also, the increased adjustment would in turn benefit their perceived value of the experiences abroad.

Method

Participants

Undergraduates from a university in Hong Kong were recruited for a study of exchange experience. They gave consent to completing surveys before, during and after their exchange study. Seventy-seven Hong Kong Chinese undergraduates participated at Time 1. 21 dropped out before Time 2 and 13 more dropped out before Time 3. The distribution of the drop-outs from Time 2 and Time 3 was even across the two conditions (6 in Home Culture condition and 7 in Host Culture condition). Our dataset comprised 43 individuals who completed all three surveys (age: $M = 21.51$, $SD = 1.18$; 30.2% male; 88.4% born in Hong Kong). 10 students went to Asia Pacific (e.g. Singapore, South Korea, Australia), 19 to Europe (e.g. United Kingdom, Sweden, France) and 14 to North America (United States and Canada). For completing all surveys, participants received approximately US$20 and were debriefed. All surveys were conducted in English. Data collection was stopped after reaching the target sample size. There is no ongoing data collection for this study.

Procedures and materials

Time 1 pre-trip insecurity. The Time 1 survey was administered approximately within a week of the students' starting their experience abroad. This survey measured our target variables: participants' demographic information, host university and country, their initial insecurity vis-à-vis locals (2 items; inter-item $r = .32$, $p < .05$; 'It would be difficult to make friends with people from the country of the exchange study', 'I don't worry about being rejected by people from the country of the exchange study' (reverse-coding); 11-point: 0 = 'Not at all' to 10 = 'Very strongly').

Time 2 cultural priming and cultural adjustment. The Time 2 survey was administered six to eight weeks ($M = 7.04$ weeks, $SD = 2.64$ weeks) after Time 1. Participants were randomly assigned to either home culture condition (Hong Kong) or host culture condition (the country

in which they undertook the exchange study). They were asked to first generate three symbols that were representative of the assigned culture and then provide an explanation for each of the symbols why it was representative of the culture. For example, participants wrote about Hong Kong icons such as 'Victoria Harbour', 'The Peak', and 'Tea restaurant'. Because participants freely generated their own symbols, the stimuli varied across participants even within the same condition.

Afterwards, they responded to measures of cultural adjustment (Black & Stephens, 1989) ($\alpha = .86$; 13 items; Study 1 participants suggested that the item on 'Supervisory responsibilities' were not applicable in their context and hence this item was not included in this study) and of ambassador orientation (constructed by authors) (5 items; $\alpha = .91$; 'To what extent do you feel that you are representing Chinese culture', 'To what extent do you feel obliged to display socially appropriate behaviors because you reflect your national culture in the host culture'; 1 = 'Not at all' to 10 = 'Very much'). Next, we asked participants to recall their three symbols (to refresh the primes) and then complete scales for depressive feeling (Zung, 1965) ($\alpha = .63$, same items as in Study 1) and learning goal orientation (VandeWalle, 1997) (5 items; $\alpha = .84$; 'I am willing to select a challenging task assignment that I can learn a lot from', 'I enjoy challenging and difficult tasks where I will learn new skills'; 1 = 'Strongly disagree' to 6 = 'Strongly agree').

Time 3 long term evaluation. The Time 3 survey was administered in person after the students returned to Hong Kong (approximately 3 months after Time 2; $M = 14.34$ weeks, $SD = 3.44$ weeks). Participants responded to evaluations of the study abroad experience (4 items; $\alpha = .81$; "My exchange study was a rewarding experience", "This exchange study was meaningful to me", "I feel satisfied with this exchange study", and "My exchange study was worthwhile"; 6-point: 1 = 'Strongly disagree' to 6 = 'Strongly agree') and some other exchange study questions, such as course marks/grades for courses undertaken and intention to return to host country (intention to go back to study and intention to go back to work, $\alpha = .74$).

Results

We first explored whether destinations of the exchange study affected insecurity before students started the exchange experience. We ran a one-way ANOVA to test for the effect of geographic area of destination (Asia-Pacific, Europe, or North America) on Time 1 insecurity. Results showed a significant geographic area effect, $F(2, 42) = 4.98$, $p = .012$. Scheffé post-hoc test showed that exchange students going to Asia Pacific countries ($M = 4.65$, $SE = .58$) reported significantly less insecurity$_{Time 1}$ than those going to North America ($M = 6.71$, $SE = .52$), $t(42) = −2.71$, $p = .034$, CI $[−4.00, −.13]$. Students going to European countries ($M = 4.95$, $SE = .40$) also showed significantly less insecurity$_{Time 1}$ than those going to North America, $t(42) = −2.73$, $p = .033$, CI $[−3.41, −.12]$. Thus, results suggested that insecurity prior to the exchange experience varied with regard to the geographic location of the exchange study. Note that these results were based on a relatively rough categorization of the destinations. A more proper analysis on the relationship between home–host cultural distance and pre-trip insecurity can only be achieved with a much bigger sample size across destinations. The current study does not have enough power to include cultural distance or individual destination in the full analyses.

To test our hypothesis that home culture primes, compared to host culture primes, would increase adjustment among insecure students but not secure ones, we first centered insecurity$_{Time 1}$ ($M = 5.45$, $SD = 2.01$) and then regressed cultural adjustment$_{Time 2}$ on insecurity$_{Time 1}$, prime$_{Time 2}$, and the Insecurity$_{Time 1}$ × Prime$_{Time 2}$ interaction effect. The insecurity$_{Time 1}$ main effect was significant, $b = −.25$, $t(39) = −2.59$, $p = .01$, CI $[−.44, −.06]$, indicating that the higher the pre-trip insecurity, the lower the felt cultural adjustment during the stay. The prime$_{Time 2}$ main effect was not significant, $t(39) = .55$, *ns*,
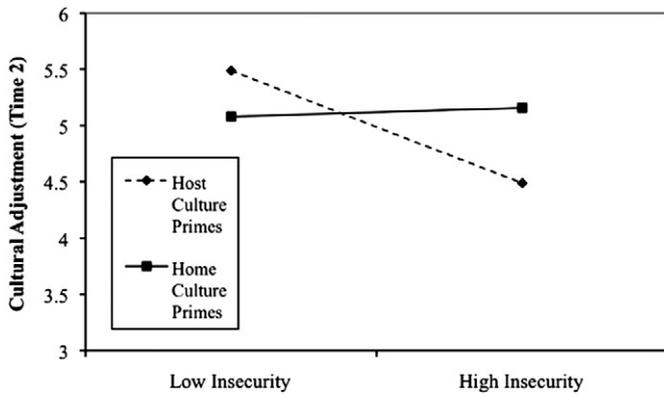
Fig. 2. Cultural adjustment$_{Time 2}$ as a function of insecurity$_{Time 1}$ and prime$_{Time 2}$ in Study 2.

despite a trend in favor of the home culture direction ($M_{home} = 5.12$, $SE_{home} = .16$; $M_{host} = 4.99$, $SE_{host} = .18$).

Most importantly, the predicted Insecurity$_{Time 1}$ × Prime$_{Time 2}$ 2-way interaction effect was significant, $b = .27$, $t(39) = 2.19$, $p = .04$, CI [.02, .52]. Follow-up simple slope test (Aiken & West, 1991) showed that insecure participants (1SD above mean) felt better adjusted after writing home cultural symbols ($M_{home} = 5.16$, $SE_{home} = .24$) than host cultural symbols ($M_{host} = 4.49$, $SE_{host} = .24$), $t(39) = 1.99$, $p = .05$, yet no such difference was observed among secure participants (1SD below mean), $t(39) = -1.17$, ns ($M_{home} = 5.08$, $SE_{home} = .21$; $M_{host} = 5.49$, $SE_{host} = .28$, see Fig. 2)[3]. The level of adjustment of the home-culture primed insecure individuals was in the range comparable to those secure individuals regardless of primes. This finding suggests that home culture primes allay deficits in adjustment associated with insecurity.

We ran the same set of analyses on ambassadorship and learning goal orientation as well as for depressive feeling, that were measured in Time 2. All effects were nonsignificant.[4]

To assess the long-term consequences of boosting relational security and adjustment, we regressed retrospective evaluations of the study abroad experience, evaluation$_{Time 3}$, on the same predictor variables: insecurity$_{Time 1}$, prime$_{Time 2}$, and the Insecurity$_{Time 1}$ × Prime$_{Time 2}$ interaction effect. Test of main effects revealed a marginally significant effect of insecurity$_{Time 1}$, $b = -.12$, $t(39) = -1.92$, $p = .06$, CI [$-.24$, .01], indicating that the more insecure the students were at the beginning of the trip, the worse their retrospective evaluation of the experience. More importantly, the predicted Insecurity$_{Time 1}$ × Prime$_{Time 2}$ interaction effect was significant, $b = .20$, $t(39) = 2.60$, $p = .01$, CI [.04, .36]. Specifically, students who were insecure (1SD above mean) at the

---

[3] The interaction effect can be decomposed in another way. The simple slope tests by prime condition showed that the slope of pre-trip insecurity on cultural adjustment was significant for host icons, $t(39) = -2.63$, $b = -.25$, $p = .012$, but not for home icons, $t(39) = .25$, $b = .02$, ns.

[4] We provided here the results from all valid data (N = 55) available at Time 2 (one participant's data were excluded due to the excessively long time taken to complete this survey as compared to the rest of the Time 2 participants). With 55 participants, we centered insecurity$_{Time 1}$ at $M = 5.55$ ($SD = 1.95$) and then regressed cultural adjustment$_{Time 2}$ on insecurity$_{Time 1}$, prime$_{Time 2}$, and the Insecurity$_{Time 1}$ × Prime$_{Time 2}$ interaction effect. The insecurity$_{Time 1}$ main effect was significant, $t(51) = -2.01$, $p = .05$, $b = -.17$, CI [$-.34$, .00], indicating that the higher the pre-trip insecurity, the lower the felt cultural adjustment during the stay. The prime$_{Time 2}$ main effect was not significant, $t(51) = .93$, ns, despite a trend in favor of the home-culture direction ($M_{Home} = 5.16$, $SE_{home} = .15$; $M_{host} = 4.96$, $SE_{host} = .16$). The predicted Insecurity$_{Time 1}$ × Prime$_{Time 2}$ 2-way interaction effect was marginally significant, $t(51) = 1.76$, $p = .085$, C.I. [$-.03$, .43]. Follow-up simple slope test (Aiken & West, 1991) showed that insecure participants (1SD above mean) felt marginally significantly better adjusted after writing home cultural symbols ($M_{home} = 5.23$, $SE_{home} = .23$) than host cultural symbols ($M_{host} = 4.63$, $SE_{host} = .21$), $t(51) = 1.90$, $p = .06$, yet such difference was not observed among secure participants (1SD below mean), $t(51) = -.60$, ns, ($M_{home} = 5.10$, $SE_{home} = .20$; $M_{host} = 5.29$, $SE_{host} = .24$). We ran the same set of analyses on ambassadorship, learning goal orientation and depressive feeling. All effects were nonsignificant.
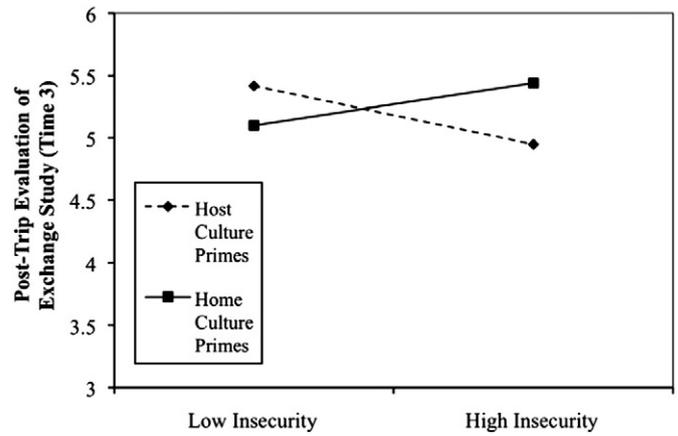

Fig. 3. Evaluation of exchange study$_{Time 3}$ as a function of insecurity$_{Time 1}$ and prime$_{Time 2}$ in Study 2.
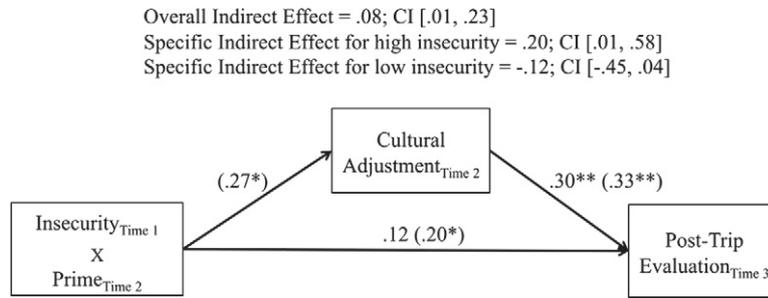
start of their term abroad (Time 1 measure) evaluated the experience as more valuable (Time 3 measure) if they were in the group who wrote about home culture symbols ($M_{home} = 5.44$, $SE_{home} = .15$) than the group who wrote about host culture symbols ($M_{host} = 4.95$, $SE_{host} = .15$) during Time 2 manipulation, $t(39) = 2.27$, $p = .03$, yet no such difference was observed among participants who were secure (1SD below mean) at the start of their trip ($M_{home} = 5.10$, $SE_{home} = .13$; $M_{host} = 5.42$, $SE_{host} = .18$), $t(39) = -1.46$, ns (Fig. 3)[5]. This pattern in retrospective evaluations mirrors that in the immediate Time 2 measure of cultural adjustment.

To test whether the beneficial effect of home culture primes on cultural adjustment might have a long-term effect on the exchange study experience, we performed the following steps to test for the mediating role of cultural adjustment. First, we regressed evaluation$_{Time 3}$ on cultural adjustment$_{Time 2}$ and results showed that cultural adjustment$_{Time 2}$ was positively correlated with evaluation$_{Time 3}$, $b = .33$, $t(41) = 4.00$, $p < .0001$.

Next, we ran an indirect effect test using bootstrapping procedures by Hayes (2013) with main effects and interaction effect of Insecurity$_{Time 1}$ and Prime$_{Time 2}$ as predictors, cultural adjustment$_{Time 2}$ as mediator and evaluation$_{Time 3}$ as DV (bootstrapping with 10,000 samples). Results showed that the Insecurity$_{Time 1}$ × Prime$_{Time 2}$ interaction effect fell to non-significance, $b = .12$, $SE = .07$, ns. The main effect of Insecurity$_{Time 1}$ $b = -.04$, $SE = .06$, ns, and that of Prime$_{Time 2}$, $b = .05$, $SE = .13$, ns, were also non-significant. Cultural adjustment$_{Time 2}$, the mediator, was found to be significantly and positively related to evaluation$_{Time 3}$, $b = .30$, $SE = .09$, $p = .002$. Finally, bias-corrected confidence interval suggested that the indirect effect of the Insecurity$_{Time 1}$ × Prime$_{Time 2}$ interaction effect on evaluation$_{Time 3}$ via adjustment$_{Time 2}$ was significant at 95%, indirect effect = .08, CI [.01, .23] (Fig. 4). Specifically, the indirect effect was significant for insecure participants (1SD above mean), indirect effect = .20, CI [.01, .58] but not the secure ones (1SD below mean), indirect effect = $-.12$, CI [$-.45$, .04].

For exploratory purposes, we also analyzed whether the Insecurity$_{Time 1}$ × Prime$_{Time 2}$ interaction effect would be observed in academic performance and future returning intention, supplementary measures obtained in Time 3. For academic performance measure, we transformed the grades or marks to grade-point-average (GPA) by referring to the websites of the host universities or corresponding offices. For both of these measures, the Insecurity$_{Time 1}$ × Prime$_{Time 2}$ interaction effect was not significant, nor were the two main effects.

---

[5] The interaction effect can be decomposed in another way. The simple slope tests by prime condition showed that the slope of pre-trip insecurity on long term evaluation was marginally significant for both host icons, $t(39) = -1.85$, $b = -.12$, $p = .072$, and home icons, $t(39) = 1.90$, $b = .09$, $p = .065$ but the directions were opposite.

Overall Indirect Effect = .08; CI [.01, .23]
Specific Indirect Effect for high insecurity = .20; CI [.01, .58]
Specific Indirect Effect for low insecurity = -.12; CI [-.45, .04]

Note: Numbers denote unstandardized coefficients. Coefficients in parentheses are zero-order coefficients. CI stands for bias-corrected confidence interval. * *p* < .05; ** *p* < .01

Fig. 4. Unstandardized coefficients and indirect effects in mediational analysis of cultural adjustment in Study 2.

We speculated that these two outcomes were more nuanced than cultural adjustment. Academic performance was largely influenced by individual ability whereas career choice could restrict opportunities of overseas assignment. Thus, the home culture priming effect might not be observed in these two outcome variables.

In sum, Study 2 provided evidence toward our proposal that home culture primes work by buffering expats' insecurities about interacting with host locals. Insecure expats were much more likely than secure expats to be benefited from home culture primes in their feelings of cultural adjustment. Study 2 also added striking evidence for the long-term consequences of boosting cultural adjustment. Overall evaluations of the educational value of the study abroad experience measured months later were improved by the home culture prime writing exercise and this effect ran through the immediate effect on felt cultural adjustment. There were two limitations in this study though. The first one was that without a control condition, we could not rule out the explanation that the change in cultural adjustment could be attributed to the host culture primes rather than the home culture primes. The second limitation was that due to the drop-out of participants between Time 2 and Time 3, our final sample size became relatively small for a 2-factor (one continuous), crossed design. Our conclusion was drawn from those who completed all study surveys. We should caution that those who dropped out of the study might have a different pattern of responses.

General discussion

Results from the two main studies with different prime operationalizations and participant populations consistently supported our proposal that expats struggling with insecurity benefit from primes of their home culture. Home culture icons evoke thoughts and feelings of connectedness that insecure expatriates lack during the adjustment process and thus enhance feeling of adjustment. Evidence was found with different types of priming. Incidental exposure to sentences about home-culture traditions (baseball) induced Americans abroad to feel greater cultural adjustment, and this effect was partially mediated by relational security (Study 1). For Hong Kong Chinese abroad, the exercise of writing about home culture icons (Victoria Harbour) fostered more adjustment for students who had been struggling with insecurity than did that of writing about host culture icons. This effect on felt adjustment then predicted evaluations of the educational value of the study abroad experience, assessed in post-trip evaluations months later (Study 2). Furthermore, the current results indicate that beneficial effects of home culture primes on cultural adjustment run through relational security instead of ambassador, learning goal orientations, or depressive feelings.

The current findings contribute to several psychology literatures. For attachment research, the current findings extend Mikulincer and

Shaver's (2001) link between relational security and intergroup attitudes. Whereas they focused on participants' feelings about minorities in their home country, we find that boosting felt relational security (through priming home culture icons) buffers expats' insecurities about interacting with locals. Note that our setting differs also in that the expats are the minority group. One boundary condition is that this effect only holds for exchange students struggling with insecurity about interacting with locals, not for those who reported security to begin with. Another limiting condition may be behaviors of the locals that inhibit adjustment, such as local anger toward an occupying army or local prejudice against a refugee group. The welcome that exchange students experience is not enjoyed by all kinds of expats.

Our link between cultural priming and attachment may elucidate some puzzling findings in intergroup research. Butz, Plant, and Doerr (2007) found that highly nationalistic Americans were less hostile toward outgroup (Arabs and Muslim) after being exposed to the American national flag. How can this result be reconciled with the classic principle that ingroup identity salience leads to rejection of outgroup members (Tajfel & Turner, 1979)? We can speculate on the basis of our findings on relational security that home culture primes may invoke ingroup attachment more than ingroup glorification (Roccas, Klar, & Liviatan, 2006), spurring openness rather than ethnocentrism. Future research can test whether relational security mediates such pattern in intergroup behaviors.

For cultural psychology, the current findings provide important evidence that cultural icon primes produce effects that go beyond a purely cognitive accessibility or fluency account (Oyserman, 2011). Fluency account would predict the opposite effect — that host culture primes, instead of home culture primes, should help host culture adjustment. Our findings provide important evidence that cultural icon primes could help individuals with emotional needs, such as those struggling with interactional insecurity. The comforting characteristics of home culture primes were also observed in terror management studies, where interacting with heritage–culture artifacts can buffer existential anxiety (Arndt, Greenberg, Solomon, Pyszczynski & Simon, 1997). Future studies can identify the specific emotions that home culture artifacts influence.

Models of acculturation literature hold that home culture stimuli interfere the learning of the host culture (Gudykunst & Kim, 1997). Recent studies show that home culture stimuli can disrupt effortful performances of students abroad, such as speaking in a second language (Zhang et al., 2013). These ideas underlie the common recommendation for immersive study of foreign languages and cultures, avoiding home-culture exposure. Our findings suggest an important caveat to this advice. Expats' sense of insecurity should be considered. Expats who are struggling with insecurity may find the idea of immediate immersion in the host culture too challenging. Rather, home-culture cuisine, images or media that call up feelings of security and belonging can

buffer the insecurities felt toward foreign cultures. The evidence for this applied recommendation rests on our findings of long-term effects. Long-term effects of brief writing exercises are similarly seen in the effects of self-affirmation manipulations on the success of minority students in mainstream educational institutions (Cohen, Garcia, Apfel, & Master, 2006). Home culture primes may not have this effect unless the individual engages in judgments or decisions soon after the prime, as effects on these immediate judgments mediate long-term effects of primes (Srull & Wyer, 1980). One point to note is that in the current studies, the home culture priming effect is observed on cultural adjustment — a subjective perception on a broad range of behaviors (general, interactional, and work/study) rather than objective measures of performance such as second language production (Zhang et al., 2013) or academic achievement (Cohen et al., 2006). In Study 2, home culture primes did not produce effects on academic performance. Future research is needed to explore whether and how home cultural primes affect objective measures of performance during expatriation.

We speculate that there are social contexts in which the positive effect of home cultural primes may not apply. For instance, refugees who cannot return to their home country may feel pain or anger rather than reassurance when exposed to reminders of home. Generally speaking, expats who have different problems than insecurity may show different effects of home culture primes.

Appendix A. Supplementary Materials for Pilot Study

Supplementary data to this article can be found online at http://dx.doi.org/10.1016/j.jesp.2015.02.004.

References

Adler, P.S. (1975). The transitional experience: An alternative view of culture shock. *Journal of Humanistic Psychology, 15*, 13–23.
Aiken, L.S., & West, S.G. (1991). *Multiple regression: Testing and interpreting interactions.* London: Sage.
Arndt, J., Greenberg, J., Solomon, S., Pyszczynski, T., & Simon, L. (1997). Suppression, accessibility of death-related thoughts, and cultural worldview defense: Exploring the psychodynamics of terror management. *Journal of Personality and Social Psychology, 73*(1), 5–18.
Banaji, M.R., Hardin, C., & Rothman, A.J. (1993). Implicit stereotyping in person judgment. *Journal of Personality and Social Psychology, 65*(2), 272–281.
Berry, J.W. (1997). Immigration, acculturation, and adaptation. *Applied psychology: An international review, 46*(1), 5–68.
Bhaskar-Shrinivas, P., Harrison, D.A., Luk, D.M., & Shaffer, M.A. (2005). Input-based and time-based models of international adjustment: Meta-analytic evidence and theoretical extensions. *Academy of Management Journal, 48*, 257–281.
Black, J.S., & Gregersen, H.B. (1991). Antecedents to cross-cultural adjustment for expatriates in Pacific Rim assignments. *Human Relations, 44*(5), 497–515.
Black, J.S., & Stephens, G.K. (1989). The influence of the spouse on American expatriate adjustment and intent to stay in Pacific Rim overseas assignments. *Journal of Management, 15*, 529–544.
Bowlby, J. (1969). *Attachment and loss: Vol. 1. Attachment.* New York: Basic Books.
Braithwaite, V.A., & Law, H.G. (1985). Structure of human values: Testing the adequacy of the Rokeach Value Survey. *Journal of Personality and Social Psychology, 49*(1), 250–263.
Butz, D.A., Plant, E.A., & Doerr, C.E. (2007). Liberty and justice for all? Implications of exposure to the U.S. flag for intergroup relations. *Personality and Social Psychological Bulletin, 33*(3), 396–408.
Cheung, G.W., & Rensvold, R.B. (1999). Testing factorial invariance across groups: A reconceptualization and proposed new method. *Journal of Management, 25*(1), 1–27.
Church, A.T. (1982). Sojourner adjustment. *Psychological Bulletin, 91*, 540–572.
Cohen, G.L., Garcia, J., Apfel, N., & Master, A. (2006). Reducing the racial achievement gap: A social-psychological intervention. *Science, 313*(5791), 1307–1310.
Fu, J.H., Chiu, C., Morris, M.W., & Young, M. (2007a). Spontaneous inferences from cultural cues: Varying responses of cultural insiders and outsiders. *Journal of Cross-Cultural Psychology, 38*(1), 58–75.
Fu, J.H., Morris, M.W., Lee, S., Chao, M., Chiu, C., & Hong, Y. (2007b). Epistemic motives and cultural conformity: Need for closure, culture, and context as determinants of conflict judgments. *Journal of Personality and Social Psychology, 92*(2), 191–207.
Gardner, W.L., Gabriel, S., & Lee, A.Y. (1999). "I" value freedom, but "we" value relationships: Self-construal priming mirrors cultural differences in judgment. *Psychological Science, 10*(4), 321–326.
Gelfand, M.J., Erez, M., & Aycan, Z. (2007). Cross-cultural organizational behavior. *Annual Review of Psychology, 58*, 479–514.

Gudykunst, W.B., & Kim, Y.Y. (1997). *Communicating with strangers.* Reading, MA: Addison-Wesley.
Hayes, A.F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach.* Guilford Press.
Hayes, A.F., & Preacher, K.J. (2014). Statistical mediation analysis with a multicategorical independent variable. *British Journal of Mathematical and Statistical Psychology, 67*(3), 451–470.
Hayes, A.F., & Scharkow, M. (2013). The relative trustworthiness of inferential tests of the indirect effect in statistical mediation analysis: Does method really matter? *Psychological Science, 24*(10), 1918–1927.
Hong, Y., Fang, Y., Yang, Y., & Phua, D. (2013). Cultural attachment: A new theory and method to understand cross-cultural competence. *Journal of Cross-Cultural Psychology, 44*, 1024–1044.
Hong, Y., Morris, M.W., Chiu, C., & Benet-Martinez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist, 55*, 709–720.
Mikulincer, M., & Shaver, P.R. (2001). Attachment theory and intergroup bias: Evidence that priming the secure base schema attenuates negative reactions to out-groups. *Journal of Personality and Social Psychology, 81*(1), 97–115.
Mikulincer, M., & Shaver, P.R. (2007). Boosting attachment security to promote mental health, prosocial values, and intergroup tolerance. *Psychological Inquiry: An International Journal for the Advancement of Psychological Theory, 18*(3), 139–156.
Morris, M. W., & Mok, A. (2011). Isolating effects of cultural schemas: Cultural priming shifts Asian-Americans' biases in social description and memory. *Journal of Experimental Social Psychology, 47*, 117–126.
Ng, S.H., & Lai, J.C.L. (2009). Effects of cultural priming on the social connectedness of the bicultural self: A self-reference effect approach. *Journal of Cross-Cultural Psychology, 40*, 170–186.
Oberg, K. (1960). Culture shock: Adjustment to new cultural environment. *Practical Anthropologist, 7*, 177–182.
Oyserman, D. (2011). Culture as situated cognition: Cultural mindsets, cultural fluency, and meaning making. *European Review of Social Psychology, 22*(1), 164–214.
Palthe, J. (2004). The relative importance of antecedents to cross-cultural adjustment: implications for managing a global workforce. *International Journal of Intercultural Relations, 28*, 37–59.
Perunovic, W.Q.E., Heller, D., & Rafaeli, E. (2007). Within-person changes in the structure of emotion. *Psychological Science, 18*(7), 607–613.
Roccas, S., Klar, Y., & Liviatan, I. (2006). The paradox of group-based guilt: Modes of national identification, conflict vehemence, and reactions to the in-group's moral violations. *Journal of Personality and Social Psychology, 91*(4), 698–711.
Rokeach, M. (1973). *The nature of human values.* New York: Free Press.
Seale, W., & Ward, C. (1990). The prediction of psychological and sociocultural adjustment during cross-cultural transitions. *International Journal of Intercultural Relations, 14*(4), 449–464.
Srull, T.K., & Wyer, R.S. (1980). Category accessibility and social perception: Some implications for the study of person memory and interpersonal judgments. *Journal of Personality and Social Psychology, 38*(6), 841–856.
Sui, J., Zhu, Y., & Chiu, C.Y. (2007). Bicultural mind, self-construal, and self-and mother-reference effects: Consequences of cultural priming on recognition memory. *Journal of Experimental Social Psychology, 43*(5), 818–824.
Tajfel, H., & Turner, J.C. (1979). The social identity theory of intergroup behavior. In W.G. Austin, & S. Worchel (Eds.), *Psychology of intergroup relations* (pp. 94–109). Chicago: Nelson-Hall.
Tam, K.P., Lau, H.P.B., & Jiang, D. (2012). Culture and subjective well-being: A Dynamic Constructivist view. *Journal of Cross-Cultural Psychology, 43*(1), 23–31.
Van Vianen, A.E.M., De Pater, I.E., Kristof-Brown, A.L., & Johnson, E.C. (2004). Fitting in: Surface- and deep-level cultural differences and expatriates' adjustment. *Academy of Management, 47*(5), 697–709.
VandeWalle, D. (1997). Development and validation of a work domain goal orientation instrument. *Educational and Psychological Measurement, 57*(6), 995–1015.
Verkuyten, M., & Pouliasi, K. (2006). Biculturalism and group identification: The mediating role of identification in cultural frame switching. *Journal of Cross-Cultural Psychology, 37*(3), 312–326.
Ward, C., Leong, C.H., & Low, M. (2004). Personality and sojourner adjustment an exploration of the Big Five and the cultural fit proposition. *Journal of Cross-Cultural Psychology, 35*(2), 137–151.
Wong, R. Y. -M., & Hong, Y. Y. (2005). Dynamic influences of culture on cooperation in the prisoner's dilemma. *Psychological Science, 16*(6), 429–434.
Yeh, C.J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counseling Psychology Quarterly, 16*(1), 15–28.
Zhang, S., Morris, M.W., Cheng, C. -Y., & Yap, A.J. (2013). Heritage-culture images disrupt immigrants' second-language processing through triggering first-language interference. *Proceedings of the National Academy of Sciences of the United States of America, 110*(28), 11272–11277.
Zou, X., Morris, M. W., & Benet-Martinez, V. (2008). Identity motives and cultural priming: Cultural (dis)identification in assimilative and contrastive responses. *Journal of Experimental Social Psychology, 44*(4), 1151–1159.
Zung, W.W.K. (1965). A self-rating depression scale. *Archives of General Psychiatry, 12*, 63–70.