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## **Negotiating Biculturalism: Cultural Frame Switching in Biculturals with Oppositional Versus Compatible Cultural Identities**

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The authors propose that cultural frame shifting—shifting between two culturally based interpretative lenses in response to cultural cues—is moderated by perceived compatibility (vs. opposition) between the two cultural orientations, or bicultural identity integration (BII). Three studies found that Chinese American biculturals who perceived their cultural identities as compatible (high BII) responded in culturally congruent ways to cultural cues: They made more external attributions (a characteristically Asian behavior) after being exposed to Chinese primes and more internal attributions (a characteristically Western behavior) after being exposed to American primes. However, Chinese American biculturals who perceived their cultural identities as oppositional (low BII) exhibited a reverse priming effect. This trend was not apparent for noncultural primes. The results show that individual differences in bicultural identity affect how cultural knowledge is used to interpret social events.

## NEGOTIATING BICULTURALISM

### Cultural Frame Switching in Biculturals

### With Oppositional Versus Compatible Cultural Identities

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“How much is the parrot?” a woman asked. “Wow, ma’am,” uttered the owner, “this is a very expensive parrot, because he speaks both Spanish and English.” “Oh really? Can you get him to speak in both languages?” “Sure you can. Look, it’s quite simple: If you pull the left leg he speaks English.” And he pulled the parrot’s left leg. “Good morning,” said the bird. “And if you pull the right leg like this, he speaks Spanish.” And the parrot said: “Buenos Dias!” At which point the woman asked: “What happens if you pull both of his legs, will he speak Tex-Mex?” “Noooo,” answered the parrot. “I will fall on my ass.”

—Mexican American folk tale, West (1988)

A large body of cross-cultural research shows that individuals from Western cultures (e.g., United States) and individuals from East Asian cultures (e.g., China, Japan, Korea) differ along myriad psychological processes. For instance, Westerners and East Asians differ on their self-definitions and self-related processes (Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Rhee, Uleman, Lee, & Roman, 1995) or how they generally reason

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about events in their social worlds (Norenzayan & Nisbett, 2000). Central to this line of research is the idea that individuals have culturally specific meaning systems, that is, learned associative networks of ideas, values, beliefs, and knowledge, that are shared by individuals within the same culture (D'Andrade, 1984). These cultural meaning systems are interpretative frames that affect individuals' affect, cognition, and behavior (Geertz, 1973; Hong, Chiu, & Kung, 1997; Kashima, 2000; Mendoza-Denton, Shoda, Ayduk, & Mischel, 1999).

In examining cultural differences, psychologists have typically relied on cross-national designs that compare modal Western and East Asian samples—that is, individuals who are either Western or East Asian in their nationality or cultural background—on various psychological processes. This approach focuses on variations between rather than within cultural groups and has encouraged a conceptualization of cultural meaning systems as uniform, unchanging, and internalized worldviews that color individuals' experiences in a continuous way (Segall, Lonner, & Berry, 1998). More recently, psychologists have shown that individuals can possess dual cultural identities and engage in active cultural frame switching, in which they move between different cultural meaning systems in response to situational cues. For example, Hong, Morris, Chiu, and Benet-Martínez (2000; see also Hong, Ip, Chiu, Morris, & Menon, 2001) showed that Hong Kong and Chinese American biculturals exhibit characteristically Western behaviors when primed with Western cultural cues and characteristically East Asian behaviors when primed with East Asian cues. This work suggests that culture is not monolithic: People have access to multiple cultural meaning systems and switch between different culturally appropriate behaviors depending on the context.

The literature on acculturation and biculturalism suggests that large variations exist in how people with more than one cultural identity manage and experience these multiple meaning systems. For example, considerable attention has been given to how cultural identity is affected by exogenous variables such as generational status (Tsai, Ying, & Lee, 2000), linguistic assimilation (Laroche, Kim, Hui, & Tomiuk, 1998), sociopolitical climate (Berry, 1990; Fordham & Ogbu, 1986; Gurin, Hurtado, & Peng, 1994), or situational cues (Hong et al., 2000, 2001). In contrast, the role played by individual-difference cognitive, affective, and motivational variables is much less understood. A rich qualitative literature suggests that biculturals, or individuals that have experienced and internalized more than one culture, differ in their subjective perception of the tension between the mainstream and ethnic cultures (Camilleri & Malewska-Peyre, 1997; LaFromboise, Coleman, & Gerton, 1993; Phinney & Devich-Navarro, 1997; Vivero & Jenkins, 1999). Although some biculturals perceive their cultural identities as compatible and complementary, others tend to describe them as oppositional and contradictory. In this article, we call this individual difference *bicultural identity integration* (BII) and propose that differences in BII moderate the cultural frame-switching process. Our focus on individual differences in bicultural identity dynamics has important theoretical implications for understanding the psychological processes underlying biculturalism and acculturation, as well as the practical implications for the social adjustment and well-being of immigrants and ethnic minorities.

#### BICULTURALISM: MANAGING DUAL CULTURAL SYSTEMS

In today's increasingly global world, it is common for individuals to have multiple cultural and racial backgrounds, travel overseas extensively, live in ethnically diverse environments, or live in more than one country. For example, in the United States, the 2000 census reported that 26.4 million people (roughly 10% of the total population) were born overseas (<http://www.census.gov>) and an even larger percentage of people have parents who were

born in another country. These percentages are considerably higher in other countries such as Canada, Switzerland, and Australia (Simon, 1995). Indeed, many of us are multicultural rather than monocultural.

Biculturals pose an interesting theoretical and methodological challenge to traditional cross-cultural psychological research. Little is known about how biculturals manage and negotiate their dual cultural identities. For example, there is extensive research showing that Westerners are more inclined to make internal attributions for social events whereas East Asians are more likely to focus on external factors (Lee, Hallahan, & Herzog, 1996; Menon, Morris, Chiu, & Hong, 1999; Morris & Peng, 1994). However, it is not clear how bicultural individuals who are socialized into both East Asian and Western cultures manage these two attributional orientations. For instance, do they average across these two different ways of making attributions, resulting in attributions that are somewhat internal and somewhat external? Or do they make external attributions under some conditions and internal attributions under others? Alternatively, do they simply adopt one way of thinking, be it East Asian or Western (see Oyserman, Sakamoto, & Lauffer, 1998)?

Mary Antin (1912), a Russian Jew who immigrated to the United States at the turn of the century, described this dilemma of biculturalism in the following way:

Everything impressed itself on my memory, and with double associations; for I was constantly referring my new world to the old for comparison, and the old to the new for elucidation. . . . All the processes of uprooting, transportation, replanting, acclimatization, and development took place in my soul. . . . It is painful to be conscious of two worlds. (p. 3)

Psychologists have only recently begun to examine how this “double consciousness” is managed (Du Bois, 1990). Contemporary work on acculturation provides strong support for the idea that individuals can successfully develop competency within more than one culture (Berry & Sam, 1996; Laroche, Kim, Hui, & Joy, 1996; Ogbu & Matute-Bianchi, 1986; Tsai et al., 2000). For instance, Berry (1990) described four acculturation strategies that immigrants and ethnic minorities use to manage their cultural identities: assimilation, integration (or biculturalism), marginalization, and separation. Assimilated and separated individuals identify with only one culture (the mainstream or ethnic culture, respectively), and marginalized individuals identify with neither culture. However, integrated individuals identify with both the mainstream and ethnic cultures. Ryder, Alden, and Paulhus (2000) recently found strong evidence that ethnic and mainstream identifications are independent and have noninverse correlations with personality, self-identity, and adjustment variables.

Recent studies by Hong and her colleagues (Hong et al., 1997; Hong et al., 2000, 2001) provide a useful sociocognitive model for how biculturals navigate between their dual cultural identities. For instance, Hong et al. (2000) showed that Hong Kong and Chinese American biculturals possess both East Asian and Western cultural meaning systems and that each system can be independently activated by culturally relevant icons or primes. In these studies, Chinese American biculturals were exposed to either American cultural primes (e.g., pictures of an American flag, Superman, Marilyn Monroe, and the U.S. Capitol building) or Chinese cultural primes (e.g., pictures of a Chinese dragon, Stone Monkey, a Peking opera singer, and the Great Wall). The results showed that exposure to these cultural icons activated cultural frame switching. Specifically, biculturals exposed to American primes made more internal attributions, a characteristically Western attribution style, and biculturals exposed to Chinese primes made more external attributions, a characteristically East Asian attribution style.

Hong et al.'s (2000) work provides compelling evidence that biculturals can move between different interpretive frames rooted in their dual cultural backgrounds. However, there is reason to question whether the process of cultural frame switching is uniform across all biculturals. As mentioned earlier, the acculturation literature suggests that there are large variations in how biculturals manage their dual identities, particularly their subjective perceptions of how much the mainstream and ethnic cultures can be integrated. Specifically, we propose that perceptions of compatibility (vs. opposition) between the two cultures affect biculturals' frame-switching behavior. In the next section, we discuss these ideas in more detail and propose specific hypotheses about how these differences in bicultural identity dynamics may affect cultural frame switching.

#### **NEGOTIATING BICULTURALISM: OPPOSITIONAL VERSUS COMPATIBLE CULTURAL IDENTITIES**

Implicit in much of the acculturation literature is the idea that biculturals are consistently faced with the challenge of integrating different sets of cultural demands and messages, conflicting interpersonal expectations, and the potential threats of minority status and discrimination (LaFromboise et al., 1993). A careful review of this literature reveals that despite these challenges of dual cultural membership, many biculturals succeed at developing a compatible bicultural identity (LaFromboise et al., 1993; Padilla, 1994; Phinney & Devich-Navarro, 1997; Rotheram-Borus, 1993; Sue, Sue, & Sue, 1983). These individuals identify with both cultures, even if not at the same level. For example, when asked to describe if they are ethnic or American, these biculturals tend to say "I am both" or "I am Mexican (or African, or Asian) American" (Phinney & Devich-Navarro, 1997). Most important, these biculturals do not perceive the mainstream and ethnic cultures as being mutually exclusive, oppositional, or conflicting. They integrate both cultures in their everyday lives, show behavioral competency in both cultures, and switch their behavior depending on the cultural demands of the situation (Birman, 1994; Chuang, 1999). For instance, Rotheram-Borus (1993) described the case of self-labeled Mexican Americans who report engaging in both prototypical American behaviors (e.g., being competitive, task oriented, and individualistic) and prototypical Mexican behaviors (having a strong sense of obligation to the family, being emotionally warm and expressive, and deferring to authority) depending on the demands of the situation.

On the other hand, the acculturation literature also describes a second type of bicultural experience. For some biculturals, mainstream and ethnic cultures are perceived as highly distinct, separate, and even oppositional orientations (Chuang, 1999; Gil, Vega, & Dimas, 1994; Phinney & Devich-Navarro, 1997; Vivero & Jenkins, 1999). Although these individuals also identify with both cultures or think of themselves as biculturals, they are highly aware of the discrepancies between the mainstream and ethnic cultures and see these discrepancies as a source of internal conflict. As a result, these biculturals keep the two cultural identities dissociated and report that it is easier to be either ethnic or mainstream but hard to be both at the same time (Phinney & Devich-Navarro, 1997; Vivero & Jenkins, 1999). For instance, when asked to describe their ethnicity, these biculturals report "I am a Black (or a Mexican) in America," as opposed to "I am African (or Mexican) American" (Phinney & Devich-Navarro, 1997). They further state that their dual cultures have "very different views," and that they feel as if they have to choose one or the other. For example, one bicultural participant in Benet-Martínez and Haritatos's (2002) study said the following:

Being “bicultural” makes me feel special and confused. Special because it adds to my identity: I enjoy my Indian culture, I feel that it is rich in tradition, morality, and beauty; confused because . . . being both cultures isn’t an option. My cultures have very different views on things like dating and marriage. I feel like *you have to choose one or the other*. (19-year-old bicultural Indian American)

Although perceptions of opposition between different cultural identities are more characteristic of recent immigrants (see Gil et al., 1994; Tsai et al., 2000), they are also common among individuals with many years of exposure to the mainstream culture, as well as U.S.-born biculturals (Benet-Martínez & Haritatos, 2002; Kibria, 2000; Phinney & Devich-Navarro, 1997; Vivero & Jenkins, 1999). Furthermore, perceptions of opposition (vs. compatibility) between multiple cultural identities do not seem to be consistently related to an individual’s attitude toward biculturalism (Benet-Martínez & Haritatos, 2002; Vivero & Jenkins, 1999).

In summary, our review of the acculturation literature reveals that although all biculturals identify with both mainstream and ethnic cultures, some biculturals perceive their dual cultural identities as compatible and integrated, whereas others see them as oppositional and difficult to integrate.<sup>1</sup> In this article, we use the term *bicultural identity integration* to describe this continuum. High BII individuals tend to see their dual identities as compatible, whereas low BII individuals experience their dual identities as oppositional.

#### BII AND CULTURAL PRIMING

We suggest that variations in BII may influence the process of cultural frame switching. Because biculturals with high levels of BII are unconflicted about their two cultural orientations and see them in nonoppositional terms, they will engage in cultural frame switching fluidly by reacting to external cues in culturally consistent ways. In other words, when primed with Western cues, high BII individuals will behave in characteristically Western ways; when primed with East Asian cues, high BII individuals will behave in characteristically East Asian ways.

However, low BII biculturals perceive their ethnic (e.g., Chinese) and mainstream (e.g., American) identities as oppositional to each other, and we propose that this will lead them to react to cultural cues in the opposite way. First, chronic polarization of cultures in low BII biculturals may lead to a cognitive linking of the two cultural meaning systems such that activation of one system spreads to the other (Hong et al., 2000). Accordingly, cultural priming in low BII biculturals (for example, activating the Chinese meaning system) will lead to an activation of the other culture (e.g., American). Thus, compared to individuals with high BII, we predict that low BII individuals will react to the Western primes by providing characteristically East Asian behavior and to the East Asian primes by providing characteristically Western behavior.

The rationale for the above contrast or reverse priming effect, specifically, that low BII individuals will respond to the cultural primes by engaging in behavior that is more consistent with the other culture, is also based in the depictions of bicultural identity dynamics found in the popular media and literature (Chavez, 1994; Durczak, 1997; O’Hearn, 1998; Roth, 1969). In these accounts, biculturals’ experience of cultural clash or tension is described as often involving behavioral and/or affective “reactance” against the cultural expectations embedded in particular situations. For instance, in Philip Roth’s (1969) novel *Portnoy’s Complaint*, the partially assimilated Jewish American narrator reports his

experience of never feeling and acting more Jewish than when traveling to the Midwest and never feeling and acting less Jewish than when visiting Israel. In short, he feels more Jewish in a non-Jewish setting and less Jewish in a Jewish setting. Similarly, the 19-year-old Indian American bicultural who felt that he or she had “to choose one (culture) or the other” may exhibit this reactance by feeling or behaving in an American manner in Indian settings while feeling and behaving in an Indian manner in American settings.

The hypothesized reverse priming effect is further supported by findings reported in the acculturation and social cognition literatures. Specifically, recent acculturation work shows that bicultural individuals who display low levels of BII tend to see their two cultures as highly distinct (different from one another), perceive cultural cues to be extremely valenced (embodying important meaning for guiding behavior), and display hypervigilance toward cultural cues to determine appropriate behavior (Phinney & Devich-Navarro, 1997; Sussman, 2000; Vivero & Jenkins, 1999). These cognitive-affective processes have been shown to elicit contrast or reverse priming effects. For example, seeing external cues as highly disparate (Sherif & Hovland, 1961), having high awareness of the cues (Lombardi, Higgins, & Bargh, 1987; Starck, Schwarz, Bless, Kubler, & Wanke, 1993), thinking more about the cues (Martin, Seta, & Crelia, 1990), and perceiving cues as highly valenced (Glaser & Banaji, 1999) have all been shown to elicit contrast effects.

The goal of this article is to examine whether, compared to high BII individuals, low BII individuals are relatively more likely to exhibit a contrast effect in response to cultural cues. Although we suggested that multiple factors—for example, cue distinctiveness, cue valence, and awareness of cultural cues—may all contribute to the contrast effect, the purpose of this article is not to pinpoint which specific mechanism may be at work but to reliably capture how BII moderates cultural priming. Overall, we hypothesize an interaction between bicultural type (high vs. low BII) and cultural primes (American cues vs. Chinese cues) on the social attributions of Chinese American biculturals. Chinese American biculturals with high BII will behave in a prime-consistent manner, making stronger internal attributions (a characteristically Western behavior) for American primes than for Chinese primes. Chinese American biculturals with low BII, on the other hand, will behave in a relatively more prime-resistant manner, making stronger internal attributions for Chinese primes than for American primes.

## STUDY 1

Study 1 replicated the procedures used in Hong et al. (2000), in which Chinese American biculturals were first exposed to either East Asian or Western cultural primes and then, in an allegedly unrelated task, asked to provide interpretations for an ambiguous social event. In addition, we measured BII and examined how BII moderated the effect of the cultural primes on attributions.

### METHOD

#### Participants

Our sample consisted of 65 first-generation or immigrant Chinese American undergraduates (26 men, 39 women; mean age = 20.3,  $SD = 3.4$ ) from a large university on the West

Coast of the United States. All participants were born in a Chinese country (People's Republic of China, Taiwan, Hong Kong, Macao, or Singapore), lived at least 5 years in a Chinese country ( $M = 12.4$ ,  $SD = 5.6$ ), and lived at least 5 years in the United States ( $M = 8.4$ ,  $SD = 3.3$ ). We recruited our participants through campus flyers soliciting individuals that have lived at least 5 years in a Chinese country and at least five years in the United States and paid them each \$12 for their participation.

### Procedure

Procedures were similar to those used in Hong et al. (2000). Participants were first randomly assigned to the American or Chinese priming condition. In the American condition, participants were shown American cultural primes, specifically, pictures of Mickey Mouse, the U.S. Capitol building, a cowboy, Mount Rushmore, and the Statue of Liberty. In the Chinese condition, they were shown Chinese cultural primes, including pictures of a Chinese dragon, the Summer Palace in Beijing, a rice farmer, the Great Wall of China, and a mythical Chinese goddess. This priming procedure was designed to activate the American or Chinese cultural meaning systems.

Participants then engaged in an allegedly unrelated inferential task in which they were shown a computer-generated animation display of a single fish swimming in front of a group of fish. After watching the display, participants were instructed to interpret why the single fish and the group of fish were swimming apart using a 9-point Likert-type scale. This scale measured participants' internal (vs. external) attributions of the display, where 1 indicated agreement with the statement that "the one fish is being influenced by the group (e.g., being chased, teased, or pressured by the others)" and 9 indicated agreement with the statement that "the one fish is influenced by some internal trait (such as independence, personal objective, or leadership)" (see Hong et al., 2000, and Morris & Peng, 1994, for other studies using the same method and items for measuring social attributions).<sup>2</sup>

After the experimental session, participants completed a questionnaire that asked them to provide information regarding gender, age, country of birth, years lived in the United States and in a Chinese country, English and Chinese language proficiency and usage, and cultural identification.<sup>3</sup> Participants' degree of BII was assessed using a short vignette, developed for the purposes of this study, which we called the Bicultural Identity Integration Scale–Pilot Version (BIIS-P). Rather than developing multiple items, this preliminary, short measure of BII assesses perceived opposition between Chinese and American cultural identities in a multistatement paragraph that is rated as a single item (for a discussion of the justification for and advantages of single-item measures, see Gosling, Rentfrow, & Swann, 2001; Robins, Hendin, & Trzesniewski, 2001). These statements were drawn from qualitative data in past research.<sup>4</sup> Specifically, we examined actual interview data and selected key statements that best differentiated low BIIs from high BIIs (Phinney & Devich-Navarro, 1997). We reasoned that these statements have a high level of face validity with our respondents, who have similar experiences as the informants from past research. The final vignette read,

I am a bicultural who keeps American and Chinese cultures separate and feels conflicted about these two cultures. I am simply a Chinese who lives in America (vs. a Chinese-American), and I feel as someone who is caught between two cultures.

Using a scale ranging from 1 (*definitely not true*) to 8 (*definitely true*), participants rated how well the above statements described their own experiences as a Chinese American.<sup>5</sup>



## RESULTS

### Preliminary Considerations

Two separate (English and Chinese) language composite scores were created after factor analyses of the 14 language proficiency and usage items supported the existence of two reliable and independent language factors. We found that our sample reported similar levels of proficiency with English ( $M = 5.6$ ,  $SD = 1.2$ ) and with Chinese ( $M = 5.4$ ,  $SD = 1.4$ ). Recall that our participants had also rated the strength of their identification with Chinese and American cultures on a scale of 1 to 6 (with higher scores indicating stronger identification); our sample reported identifying with both American culture ( $M = 3.9$ ,  $SD = 1.3$ ) and Chinese culture ( $M = 4.8$ ,  $SD = 1.0$ ).<sup>6</sup>

Participants' ratings of the statements describing cultural opposition displayed a normal distribution with a mean of 4.3 ( $SD = 2.0$ , median = 4.0). We performed a median split on these ratings to separate participants into high and low BII groups. Participants who scored below the median (perceived low opposition) were categorized as high BII ( $n = 27$ ), and participants who scored at or above the median (perceived high opposition) were categorized as low BII ( $n = 38$ ). Table 1 reports the descriptive statistics for high and low BII bicultural groups. Note that both groups had relatively high levels of Chinese and American language proficiency/use and cultural identification and did not differ in years spent in each country or age of migration to United States. This supports the bicultural status of both high and low BIIs and suggests that at least for this sample, BII was not driven by exogenous variables such as degree of exposure to mainstream and ethnic cultures.

### Hypothesis Testing

The study had a 2 (cultural priming: American or Chinese)  $\times$  2 (bicultural type: low vs. high BII) design. The dependent variable was participants' attributional rating of the fish display. Results from this 2  $\times$  2 ANOVA revealed that the main effects for cultural priming and bicultural type did not reach conventional levels of significance. Participants in the American priming condition made somewhat stronger internal attributions than those in the Chinese priming condition,  $F(1, 61) = 2.81$ ,  $p = .10$ . Biculturals low on BII made somewhat stronger internal attributions than those with high BII,  $F(1, 61) = 2.57$ ,  $p = .11$ .

The predicted interaction between bicultural type and priming was significant,  $F(1, 61) = 5.94$ ,  $p = .02$ . The means and standard errors for each condition are listed in Table 2. Figure 1 shows the interaction residuals with main effects and grand mean subtracted, following Rosenthal and Rosnow's (1992) advice.<sup>7</sup> As Figure 1 shows, biculturals high on BII behaved in a prime-consistent manner, making relatively stronger internal attributions in the American prime condition than in the Chinese prime condition. Biculturals with low BII, on the other hand, behaved in a prime-resistant manner by making relatively weaker internal attributions in the American prime condition than in the Chinese prime condition. This interaction effect supports our predictions.<sup>8</sup>

## DISCUSSION

Study 1 found initial support for our hypothesis. We found that bicultural type significantly moderated the effects of cultural priming on attributions. When shown American primes, biculturals with high BII made stronger internal attributions, a characteristically

**TABLE 1**  
**Study 1: Descriptive Statistics for**  
**High and Low Bicultural Identity Integration (BII) Participants**

	<i>High BII</i>		<i>Low BII</i>	
	M	SD	M	SD
Years in United States	8.7	4.1	8.2	4.4
Years in Chinese culture	11.8	6.2	12.8	5.8
Age of migration	12.2	6.2	12.1	6.2
English language <sup>a</sup>	6.0	1.3	5.2*	0.9
Chinese language <sup>a</sup>	4.5	1.5	5.6*	1.4
U.S. identification <sup>b</sup>	4.1	1.3	3.5	1.2
Chinese identification <sup>b</sup>	4.5	0.9	5.1*	0.9

NOTE:  $n = 65$  first-generation Chinese American bicultural college students.

a. Composite score tapping ability, past and present use, and media exposure (1 to 8 scale range).

b. Composite score tapping ability, past and present use, and media exposure (1 to 6 scale range).

\*Significant mean difference ( $p < .01$ ).

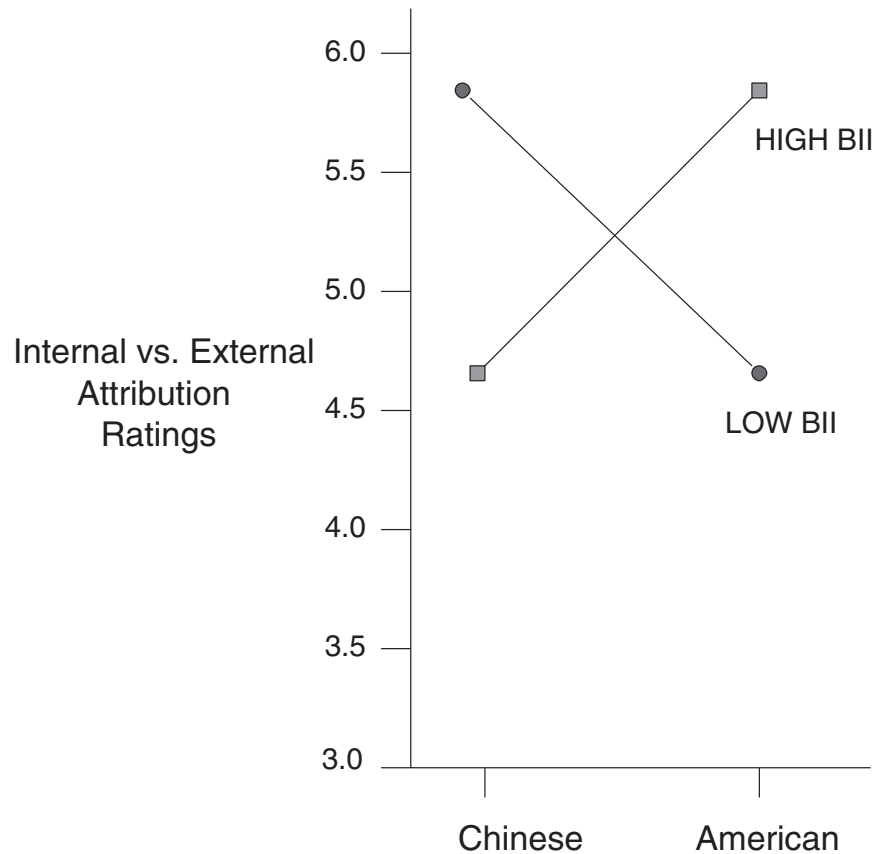
**TABLE 2**  
**Study 1: Attribution Means and Standard Errors of High and Low**  
**Bicultural Identity Integration (BII) Participants by Priming Condition**

<i>Dependent Variable</i>	<i>BII</i>	<i>Prime</i>	M	SE
Internal attribution	High	Chinese	3.53	0.49
		American	5.87	0.76
	Low	Chinese	5.83	0.51
		American	5.40	0.48

Western attribution style, than when they were shown Chinese primes. Biculturals with low levels of BII, on the other hand, exhibited the reverse pattern.

Our study has several limitations. First, we relied on a single bipolar item to measure attributions (whether the fish was influenced by the group vs. influenced by a trait) instead of measuring external and internal attributions separately. Although some studies have measured attribution on a single scale, other studies have measured internal and external attributions on separate dimensions (Krull, 1993; Lee et al., 1996) and have shown that they do not always correlate highly with one another (Choi & Nisbett, 1998). In addition, we asked participants about their attributions for only a single animated fish display. Both these factors may have contributed to a less complete and reliable picture of our participants' attributions. Using separate measures of internal and external attributions with multiple fish displays may increase the reliability of our results.

Furthermore, we asked participants to rate how well the leading fish's behavior was explained by an internal cause (trait of the fish) or an external cause (the group of fish). Although rating attributional scales have been used in past research (Hong et al., 2000; Morris & Peng, 1994), they do not allow consideration of a broad range of possible internal and external causes for the fish's behavior. For example, it is plausible that participants attributed the fish's behavior to an unseen predator, a food source ahead, or other external factors that



**Figure 1: Study 1: Interaction Residuals of Internal Attributional Ratings for High and Low Bicultural Identity Integration (BII) Participants Across Priming Conditions**

we did not include in our attributional measure. As such, it is not clear whether the results might have been affected by idiosyncratic features of the specific internal and external causes we selected to anchor our scale. A more open-ended response format may be needed to examine the full range of attributions participants could possibly make for the fish's behavior.

One possible limitation of our study is that it was conducted with college students in an American university laboratory. This setting provides a strong Western cultural backdrop, in essence, creating an underlying Western prime. The university is a linguistically homogeneous environment (Williamson, 1999), and college students spend most of their time studying, working, and even living on campus, where opportunities to function within other cultural settings might be limited. Accordingly, biculturals in our sample might be less likely to switch between their dual modes of behavior, even when primed to do so. To address this problem, it is necessary to examine biculturals in community settings where both American and Chinese cultural cues are present and where biculturals are more likely to actively move between the two cultures.

## STUDY 2

A second study was conducted with the goal of replicating the hypothesized bicultural type by cultural priming interaction and addressing the limitations of Study 1. The procedure used in Study 2 was similar to Study 1, with the following changes. First, additional items and methods were used to measure attributions. Specifically, participants rated external and internal attributions separately, provided both close-ended and open-ended attributional responses, and provided attributions for multiple animated fish displays. Second, we expanded our sample beyond college students to include high school students as well. Third, we conducted the study not only within a university setting but also in community settings (Chinese high schools and community centers).

### METHOD

#### Participants

Our sample consisted of 176 first-generation Chinese American individuals (73 males, 103 females; mean age = 15.96,  $SD = 1.55$ ) drawn from college campuses ( $n = 84$ ), local Chinese high schools ( $n = 26$ ), and Chinese youth community centers ( $n = 66$ ) from the West Coast of the United States. As in Study 1, all participants were born in a Chinese country (People's Republic of China, Taiwan, Hong Kong, Macao, or Singapore) and had lived at least 5 years in a Chinese country ( $M = 8.75$ ,  $SD = 3.55$ ) and the United States ( $M = 8.31$ ,  $SD = 3.70$ ). Like Study 1, our sample was highly bilingual and identified with both American and Chinese cultures. Participants were recruited by means of campus e-mails and flyers, advertisements placed in newspapers, and through liaisons in high schools and youth community centers. Participants were each paid \$12 for their involvement.

#### Procedure

The procedure of Study 2 was similar to that of Study 1. High school participants were tested in their homes, high schools, or local community centers. University students were tested in a laboratory room. Like Study 1, all participants were randomly assigned to either the American or the Chinese priming condition and exposed to either American or Chinese cultural primes. Next, participants were shown two animated fish displays, each showing a fish swimming in front of a group of fish (the only difference between the two displays were the colors used to depict the fish). After viewing each animation, participants responded to an open-ended question: "Why are the single fish and the group of fish swimming apart?" Then, using a 7-point Likert-type scale ranging from 1 (*definitely not true*) to 7 (*definitely true*), participants indicated their agreement with the statement "the one fish is being influenced by the group (e.g., is being chased, teased, or pressured by others)" as a measure of external attribution and the item "the one fish is influenced by some internal trait (such as independence, personal objective, or leadership)" as a measure of internal attribution.

Next, participants provided demographic information similar to that collected in Study 1 and responded to the statements from the BIIS-P measure using a scale that ranged from 1 (*definitely not true*) to 5 (*definitely true*). Participants also completed Berry, Kim, Power, Young, and Bujaki's (1989) 20-item measure of the four acculturation strategies: assimilation, integration (or biculturalism), separation, and marginalization. Each item was rated with a scale that ranged from 1 (*strongly disagree*) to 5 (*strongly agree*).

## RESULTS

### Preliminary Considerations

English and Chinese proficiency scores were computed using the same method as Study 1. On a scale of 1 to 6 (higher numbers indicating higher proficiency on and use of the particular language), our sample reported similar levels of English ( $M = 3.4$ ,  $SD = 0.7$ ) and Chinese ( $M = 3.5$ ,  $SD = 0.7$ ) proficiency and use. Mean cultural identification levels, which ranged from 1 (*very weak*) to 6 (*very strong*), were 3.9 ( $SD = 1.2$ ) and 4.7 ( $SD = 1.0$ ) for American and Chinese cultures, respectively. Overall scores on Berry et al.'s (1989) four acculturation scales were 4.1 ( $SD = 0.5$ ), 2.3 ( $SD = 0.7$ ), 2.1 ( $SD = 0.6$ ), and 1.5 ( $SD = 0.6$ ) for integration (biculturalism), separation, assimilation, and marginalization, respectively; these results indicate that biculturalism is the predominant orientation of the participants.

Two coders blind to the experimental conditions coded the open-ended attributional responses for levels of internality and externality. Responses that focused on the traits, attributes, and behaviors of the single fish (for example, "the fish is a strong leader") were given high internal ratings and low external ratings. Responses that focused on the group of fish or other contextual factors (for example, "the group is powerful and chases the fish") were given high external ratings and low internal ratings. Responses that included explanations in terms of both internal traits of the single fish and external factors were given high internal and high external ratings. The interrater reliability was high for both internal ( $\alpha = .87$ ) and external ( $\alpha = .89$ ) attributions. Ratings were averaged across the two coders.

As mentioned earlier, participants provided attributions for two animated fish displays. Participants' attribution ratings across the two fish displays were averaged (the internal reliability between the two displays, as measured by the Spearman Brown coefficient, were  $R = .72$  for close-ended internal ratings,  $R = .58$  for close-ended external ratings,  $R = .76$  for open-ended internal ratings, and  $R = .68$  for open-ended external ratings). A comparison between the high school and college subsamples revealed no significant differences on their BII ratings,  $t(173) = 0.99$ ,  $p = .32$ . The two subsamples differed in their ratings of open-ended external attributions,  $t(174) = 2.11$ ,  $p = .04$ , but showed no differences in the other attributional ratings. Thus, data from these two samples were combined.

Like Study 1, BII ratings were normally distributed ( $M = 2.85$ ,  $SD = 1.17$ , median = 3). We performed a median split on these ratings to separate participants into high and low BII groups. Participants who scored below the median were categorized as high BII ( $n = 87$ ), and participants who scored at or above the median were categorized as low BII ( $n = 88$ ). The high school and college subsamples did not differ in the ratio of low to high BII biculturals (college ratio = 0.77, high school ratio = 1.30;  $\chi^2 = 3.02$ ,  $p = .08$ ).

Table 3 reports the descriptive statistics for low and high BII groups. When examining results for the entire sample, we find that, unlike Study 1, high and low BII individuals differed in age of migration, years spent in each country, and Chinese and American language and cultural identification. These differences appear to suggest that compared to those with high BII, low BII individuals were less assimilated into American culture and more involved with Chinese culture (although these differences were less evident when examining the high school and college subsamples separately). These differences between high and low BII individuals, however, do not undermine the bicultural status of individuals with low BII. First, scores for low BIIs on both American and Chinese language and identification scores were moderate to high. More important, low and high BII groups did not differ in their endorsement of biculturalism (as measured by Berry et al.'s, 1989, scale), and both groups

endorsed this acculturation strategy well above the other three (separation, assimilation, and marginalization). This latter finding was true in both the college and high school samples, suggesting that both high and low BIIs were biculturals.

### Hypothesis Testing

Study 2 consisted of a  $2 \times 2$  factorial design with cultural primes (American or Chinese) and bicultural types (low vs. high BII) as independent variables. The dependent variables were participants' internal and external attributions of the fish displays, which were measured using both open-ended and close-ended formats.<sup>9</sup>

We first conducted a MANOVA on all four dependent variables (ratings of external attributions were reversed scored). The analysis did not reveal a main effect for cultural priming,  $F(1, 170) = 0.13, p = .97$ , nor for bicultural type,  $F(1, 170) = 0.32, p = .86$ . The interaction between cultural priming and bicultural type did not reach conventional levels of significance, although the effect was in the predicted direction,  $F(1, 170) = 1.85, p = .12$ .

We then conducted  $2 \times 2$  ANOVAs separately for each of the four dependent variables. The means and standard errors are reported in Table 4. With close-ended internal attributions, there were no main effects for cultural priming,  $F(1, 170) = 0.05, p = .82$ , or bicultural type,  $F(1, 170) = 1.02, p = .31$ . We found a significant interaction effect between bicultural type and cultural priming,  $F(1, 170) = 4.39, p = .04$ . The interaction residuals are illustrated in Figure 2. As predicted, biculturals with high BII behaved in a prime-consistent manner, making relatively more internal attributions in the American than Chinese priming conditions. Low BII biculturals, meanwhile, behaved in a prime-resistant manner, making relatively more internal attributions in the Chinese than American priming conditions.

We also found support for our hypothesis when we examined close-ended external attributions. There was no main effect for cultural priming,  $F(1, 170) = 0.26, p = .61$ , or bicultural type,  $F(1, 170) = 0.18, p = .67$ . The interaction between bicultural type and cultural priming was significant,  $F(1, 170) = 5.41, p = .02$ . The interaction residuals shown in Figure 2 indicate that high BII biculturals were prime consistent, making relatively more external attributions when shown Chinese primes than American primes, and that low BII biculturals were prime resistant, making relatively more external attributions when shown American primes than Chinese primes.

Analyses using open-ended internal attributions as the dependent variable revealed no main effects for cultural priming,  $F(1, 170) = 0.00, p = .99$ , nor for bicultural type,  $F(1, 170) = 0.46, p = .50$ . The interaction between cultural priming and bicultural type did not reach conventional levels of significance,  $F(1, 170) = 2.81, p = .10$ , although the effect was in the predicted direction (see interaction residuals in Figure 3): High BII biculturals were prime consistent, making more internal attributions for American than Chinese primes, and low BII biculturals were prime resistant, showing a trend toward making more internal attributions for Chinese than American primes.

Analyses using open-ended external attributions as the dependent variable found no main effects for cultural priming,  $F(1, 170) = 0.01, p = .95$ , nor for bicultural type,  $F(1, 170) = 0.20, p = .66$ . The interaction between priming and bicultural type did not reach conventional levels of significance,  $F(1, 170) = 3.36, p = .07$ , although the effect was in the predicted direction (see the interaction residuals in Figure 3).<sup>10</sup>

**TABLE 3**  
**Study 2: Descriptive Statistics for High and Low Bicultural Identity Integration (BII) Participants**

	<i>Entire Sample (N = 176)</i>				<i>College (n = 84)</i>				<i>High School (n = 92)</i>			
	<i>High BII</i>		<i>Low BII</i>		<i>High BII</i>		<i>Low BII</i>		<i>High BII</i>		<i>Low BII</i>	
	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Years in United States	9.2	3.6	7.0*	3.6	10.8	3.2	9.0	4.0	7.6	3.2	5.4*	2.4
Years in Chinese culture	8.2	3.4	10.1*	3.3	7.9	3.1	9.7	3.8	8.1	3.7	10.2*	3.0
Age of migration	8.0	3.2	10.0*	3.1	8.0	3.1	9.7	3.8	8.4	3.6	10.2*	3.0
English language <sup>a</sup>	4.0	0.7	3.6*	0.7	4.4	0.4	3.9*	0.6	3.6	0.7	3.3	0.7
Chinese language <sup>a</sup>	3.3	0.8	3.8*	0.6	2.9	0.8	3.7*	0.5	3.7	0.6	3.9	0.6
U.S. identification <sup>b</sup>	4.1	1.2	3.5*	1.1	4.5	1.1	3.6	1.0	3.8	1.2	3.4	1.2
Chinese identification <sup>b</sup>	4.6	1.0	5.0*	0.9	4.3	1.1	4.9	0.9	4.8	0.9	5.1	0.9
Acculturation strategies <sup>c</sup>												
Biculturalism	4.0	0.5	4.0	0.5	3.9	0.5	3.9	0.4	4.0	0.5	3.9	0.6
Separation	2.2	0.7	2.4*	0.6	2.1	0.7	2.4*	0.5	2.4	0.7	2.6	0.6
Assimilation	2.2	0.7	2.1	0.5	2.4	0.8	1.9	0.5	1.9	0.5	2.2	0.5
Marginalization	1.5	0.6	1.7	0.6	1.4	0.4	1.5	0.5	1.7	0.7	1.7	0.6

NOTE:  $N = 176$  first-generation Chinese American bicultural high school and college students.

a. Composite score tapping ability, past and present use, and media exposure (1 to 6 scale range).

b. Composite score tapping ability, past and present use, and media exposure (1 to 6 scale range).

c. Composite score tapping ability, past and present use, and media exposure (1 to 5 scale range).

\*Significant mean difference ( $p < .01$ ) between low and high BII.

**TABLE 4**  
**Study 2: Attribution Means and Standard Errors of High and Low Bicultural Identity Integration (BII) Participants by Priming Condition**

	<i>Dependent Variable</i>	<i>BII</i>	<i>Prime</i>	M	SE
Closed ended	Internal	Low	Chinese	4.99	0.23
			American	4.51	0.21
	High	Chinese	4.75	0.21	
		American	5.16	0.23	
Closed ended	External	Low	Chinese	3.75	0.26
			American	4.20	0.24
	High	Chinese	4.23	0.24	
		American	3.51	0.26	
Open ended	Internal	Low	Chinese	4.77	0.26
			American	4.38	0.24
	High	Chinese	4.52	0.25	
		American	4.95	0.26	
Open-Ended	External	Low	Chinese	3.50	0.25
			American	3.98	0.23
	High	Chinese	3.84	0.23	
		American	3.41	0.25	

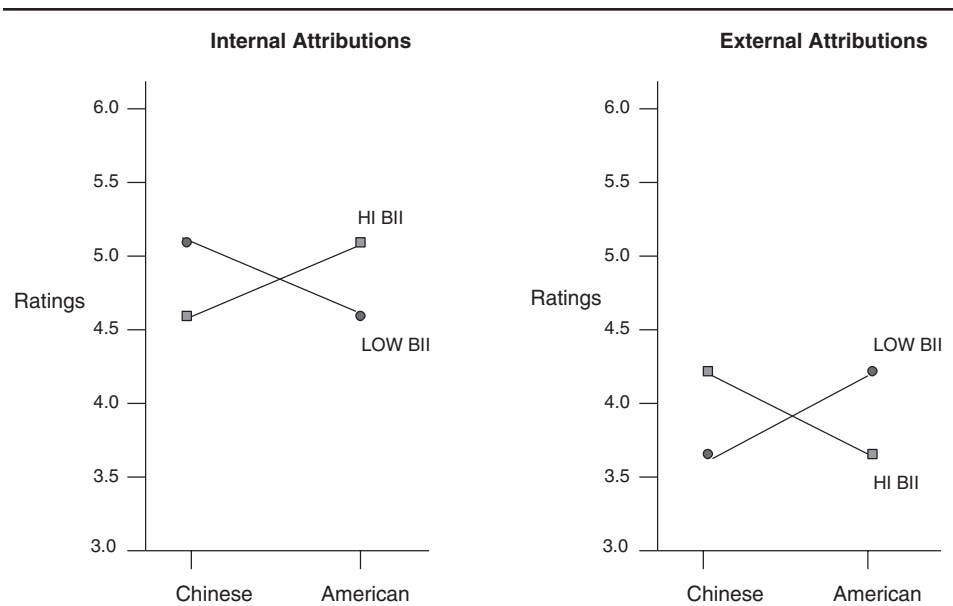


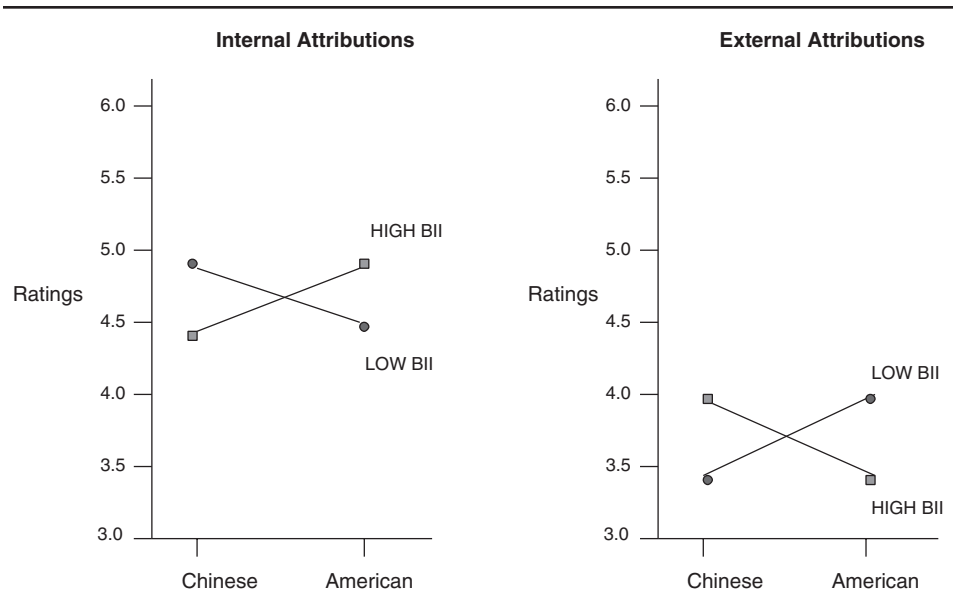
Figure 2: Study 2: Interaction Residuals of Close-Ended Measures of Internal and External Attributions for High and Low Bicultural Identity Integration (BII) Participants Across Priming Conditions

## DISCUSSION

Study 2 extended Study 1 by using a larger, more diverse sample of Chinese American biculturals and using multiple measures of attributions. The results of Study 2 found consistent evidence of an interaction between bicultural type and cultural primes on attributions for the internal and external (close-ended) attributions. As we predicted, biculturals high on BII behaved in a prime-consistent manner: Chinese primes elicited more external attributions, and American primes elicited more internal attributions. Biculturals with low BII, on the other hand, behaved in a prime-resistant manner by making more internal attributions in the Chinese priming condition and more external attributions in the American priming condition.

These interactions between bicultural type and priming condition were evident for internal as well as external attributions. However, although the hypothesized interaction effect was significant for the close-ended attribution measures, they were not significant for the open-ended measures (although the means were in the predicted direction). We argued earlier that open-ended measures of attributions were more nuanced, as they were not restricted to specific internal and external causes listed in the close-ended items. Yet because participants were free to respond openly, there might be more variance in the coding and measurement of attributions, contributing to the slightly weaker effect. However, it is important to note that the size of the interaction effects of the open-ended measures did not differ significantly from the size of the effects obtained using the close-ended measures. Meta-analytical comparisons between the effect sizes of the close-ended and open-ended effects found no significant differences,  $Z$  (internal attributions) = 0.29,  $p = .39$ ;  $Z$  (external attributions) = 0.34,  $p = .37$ .





**Figure 3: Study 2: Interaction Residuals of Open-Ended Measures of Internal and External Attributions for High and Low Bicultural Identity Integration (BII) Participants Across Priming Conditions**

Studies 1 and 2 provide compelling evidence that BII moderates the cultural frame-switching process. We argued that biculturals with low levels of BII perceived more opposition between their dual cultural identities; as such, there might be a strong cognitive-affective linking of the two cultural meaning systems (Hong et al., 2000). Furthermore, low BII individuals might have perceived Chinese and American cultural cues as more disparate, paid more attention to cultural cues, and attached higher levels of valence to cultural cues (Phinney & Devich-Navarro, 1997; Sussman, 2000; Vivero & Jenkins, 1999). As such, the predicted interaction in Studies 1 and 2 should be evident only when high and low BII biculturals are exposed to cultural cues. Indeed, we would not expect low BII biculturals to behave differently from high BII biculturals toward environmental cues that are not culturally specific. Thus, to show that bicultural type moderates the relationship between attributions and cultural primes only, we need to also show that low and high BII biculturals would not react differently to culturally neutral primes, or primes that are not directly related to any one culture.

### STUDY 3

Study 3 used the same methodology as Studies 1 and 2, except both high and low BII biculturals were shown culturally neutral primes. We predicted no differences in attributions between these two groups under these conditions, as culturally neutral primes should not induce a stronger cognitive-affective link, perceptions of disparity between cues, heightened attention, or stronger valence among biculturals with low BII.

## METHOD

### Participants

Our sample consisted of 35 first-generation Chinese American individuals (15 men, 20 women; mean age = 20.37,  $SD = 1.40$ ) drawn from a large university on the West Coast of the United States. As in Studies 1 and 2, all participants were born in a Chinese country and had lived at least 5 years in a Chinese country ( $M = 10.5$ ,  $SD = 4.7$ ) and in the United States ( $M = 9.2$ ,  $SD = 4.7$ ). Again, all participants were bilingual and identified equally with Chinese and American cultures. Means for the Chinese and English composite language scores (which ranged from 1 to 8) were 6.3 ( $SD = 1.7$ ) and 7 ( $SD = 1.4$ ), respectively. Mean Chinese and American cultural identification levels (which ranged from 1 to 6) were 4.8 ( $SD = 1$ ) and 3.8 ( $SD = 1.4$ ), respectively. We recruited our participants through campus flyers and paid them each \$12.

### Procedure

The procedure of Study 3 was similar to that of Studies 1 and 2. However, instead of being exposed to American or Chinese cultural primes, all participants were shown primes of landscapes, including a full moon over mountains, a lake with trees around it, a desert with sand dunes, a river winding through a valley, a thick forest, and an ocean shoreline. These landscape pictures were generic and did not reflect unique landscape features of any East Asian or Western countries. In short, the primes were devoid of any cultural specificity. Next, participants were shown an animated fish display and then provided separate closed-ended internal and external attributions of why the one fish was swimming ahead of the group. Last, we measured participants' levels of BII using the BIIS-P, as in Studies 1 and 2.

## RESULTS AND DISCUSSION

Like Studies 1 and 2, we performed a median split on the ratings of the BII statements ( $M = 4.5$ ,  $SD = 2$ , median = 5.00) to separate participants into low ( $n = 16$ ) and high ( $n = 19$ ) BII types. Table 5 reports descriptive statistics for these two groups. Note that the only difference between the high and low BII groups was in the Chinese language scores.

We next compared the attributions of high and low BII biculturals. As predicted, high and low BII biculturals did not exhibit different attributional behaviors after being exposed to culturally neutral primes (means and standard errors are listed in Table 6). This was true when we examined internal attribution ratings,  $t(32) = 0.28$ ,  $p = .78$ , as well as external attribution ratings,  $t(33) = -0.21$ ,  $p = .83$ . Both effect sizes were small ( $r = .05$  for internal attributions, and  $r = .04$  for external attributions). The lack of effects in this study was confirmed by a power analysis that showed that our design had an 85% probability of detecting a medium effect size and more than a 90% probability of detecting a large effect size. Although Study 3 did not provide a direct test of how biculturals behave in response to cultural versus noncultural cues, note that participants in this and the other two studies are quite similar in their demographics and descriptive characteristics, and as such, an implicit comparison can be made. All in all, results from Study 3 confirm our prediction that differences in BII would not moderate biculturals' attributions after being exposed to noncultural cues.

**TABLE 5**  
**Study 3: Descriptive Statistics for High and Low**  
**Bicultural Identity Integration (BII) Participants**

	<i>High BII</i>		<i>Low BII</i>	
	M	SD	M	SD
Years in United States	10.3	5.4	8.2	3.4
Years in Chinese culture	9.2	5.0	11.5	4.3
English language <sup>a</sup>	7.2	1.8	6.8	1.2
Chinese language <sup>a</sup>	5.3	1.7	7.1*	1.1
U.S. identification <sup>b</sup>	4.2	1.3	3.5	1.4
Chinese identification <sup>b</sup>	4.5	1.0	5.0	0.9

NOTE:  $N = 35$  first-generation Chinese American bicultural college students.

a. Composite score tapping ability, past and present use, and media exposure (1 to 8 scale range).

b. Composite score tapping ability, past and present use, and media exposure (1 to 6 scale range).

\*Significant mean difference ( $p < .01$ ).

**TABLE 6**  
**Study 3: Attribution Means and Standard Errors of High and Low**  
**Bicultural Identity Integration (BII) Participants**

<i>Dependent Variable</i>	<i>BII</i>	M	SE
Internal	High	4.94	0.54
	Low	5.17	0.63
External	High	6.75	0.59
	Low	6.58	0.56

## GENERAL DISCUSSION

Across three experiments, we demonstrated that Chinese American biculturals possess separate American and Chinese cultural schemas that guide their behavior and that each schema can be activated by situational cues (Hong et al., 2000, 2001). This finding supports the dynamic constructivist perspective on culture, suggesting that dual cultural meaning systems can be mentally represented and integrated by an individual and that these meaning systems are dynamic and responsive to situational cues.

More important, we found evidence suggesting that the effect of situational cues on attributions is moderated by an individual difference variable, BII, or the perceived compatibility or opposition between ethnic and mainstream cultures. High BIIs perceive their two cultural identities to be compatible, and low BII biculturals perceive their cultural identities to be oppositional. We found that biculturals with both low and high levels of BII engaged in cultural frame switching in response to external cues. However, they did so in different ways. Biculturals high on BII exhibited prime-consistent behavior, behaving in a more Chinese way when exposed to Chinese primes and behaving in a more American way when exposed to American primes. Biculturals low on BII exhibited a contrast or prime-resistant effect, behaving in a more American way when exposed to Chinese primes and behaving in a more

Chinese way when exposed to American primes. Low and high BII biculturals behaved differently only in response to culturally meaningful primes and did not behave differently when shown culturally neutral primes. Although many studies have demonstrated contrast effects (Ford & Thompson, 2000; Glaser & Banaji, 1999), these studies have typically manipulated the content of the primes as well as the conditions in which the cues were presented to participants. The present set of studies is among the first to show that a (cultural) individual difference variable, namely, differences in BII, might lead to a contrast or reverse priming effect.<sup>11</sup> At the same time, future studies should replicate this interaction between biculturalism type and cultural cues, given that although the effects for our open-ended dependent variables were in the predicted direction, they did not reach conventional levels of significance.

We argued that low BII biculturals exhibited this contrast effect because they experience their dual cultural identities as distinct and contradictory, leading to a cognitive-affective linkage of the two cultural meaning systems, increased cognitive effort in processing cultural cues in the environment, and perception of cultural cues as highly valenced (Phinney & Devich-Navarro, 1997; Vivero & Jenkins, 1999). Although we argued that low BIIs' perceptions of cultural cues closely resembled the conditions that typically elicit the contrast effect, the present studies did not aim to pinpoint the exact underlying cognitive processes that contributed to the contrast effect among low BIIs. Rather, the main goal of our three studies was to explore the role played by bicultural identity dynamics in the process of cultural frame switching.

Future research is needed to examine the specific cognitive-affective processes that contribute to the contrast effect displayed by low BII individuals. For example, the level of cognitive processing devoted to processing cultural cues can be measured by examining participants' memory of the primes (e.g., Newman & Uleman, 1990). Based on the present results, we would expect low BIIs to pay more attention to cultural cues and thus have higher recall of these cues than high BIIs. Furthermore, we would expect attention to cultural cues to mediate the interaction between the effect of cultural primes and BII on attributions; in other words, the hypothesized interaction might not be apparent when controlling for participants' attention to the cultural cues. Alternatively, the level of cognitive processing participants engage in can be directly manipulated (for example, by introducing a cognitive load). One would expect that low BIIs under a cognitive load would not be able to extensively process the cultural cues, which might also eliminate the contrast effect. Similarly, differences in the valence and distinctiveness biculturals attach to the two cultures could be measured by content-analyzing participants' a priori, spontaneous depictions of each culture.

The present results demonstrate that individual differences as measured by BII moderate the acculturation process in general and bicultural frame switching in particular. Given the controlled nature of our experimental studies, future observational and ethnographic studies are needed that examine the effects of BII on biculturals' response to cultural cues in real-life situations (e.g., when being with Chinese or American friends). Specifically, it is important to examine whether low BIIs actually behave in nonculturally congruent ways in their normal, everyday lives and the possible social functions and consequences of such behavior. For example, by behaving in an American manner in response to Chinese cues in the environment, does noncongruent or resistant frame switching protect low BIIs against cultural stereotyping (Kray, Thompson, & Galinsky, 2001)? Alternatively, does this behavior prevent them from reacting to external cues in adaptive ways? In short, it is important to examine how cultural frame switching—either in culturally congruent or incongruent ways—facilitates or hinders the process of negotiating a dual cultural membership.

Although our results emphasize how high and low BII's respond to cultural cues in different ways, we also found interesting similarities between individuals with high and low BII. For instance, although high and low BIIs differed in some cases in their levels of cultural competence (e.g., English and Chinese language usage and proficiency) and identification with Chinese and American cultures, they tended to have equal levels of cultural exposure (years lived in the United States and a Chinese country) and very similar acculturation attitudes (see Tables 1, 3, and 5).

Given the exploratory nature of the present studies, our preliminary single-item measure of BII, although useful in identifying variations of perceived opposition (vs. compatibility) between two cultures among biculturals, provides only a limited and perhaps unreliable assessment of the various psychological processes that may underlie BII. Specifically, our operationalization of BII mixes perceptions of cultural distance or compartmentalization (e.g., keeps American and Chinese cultures separate) with cultural conflict (e.g., feels conflicted about these two cultures). However, these two types of perceptions may be somewhat independent (Benet-Martínez & Haritatos, 2002). Questions also remain as to the unique role cultural distance and conflict may play in predicting cultural frame-switching behavior.<sup>12</sup> Future work should examine to what extent BII, and its possible components, is related to (a) contextual factors, such as intercultural role, value conflict, and acculturation stressors (e.g., discrimination); (b) sociocognitive and personality variables, including cognitive styles (see Benet-Martínez & Haritatos, 2002); and (c) other cultural- and ethnic-related identity constructs such as those proposed by Hutnik (1991), Marcia (2002), and Tajfel and Turner (1979).

Future research should also examine the relationship between BII and psychological/social adjustment, specifically bicultural competence (LaFromboise et al., 1993; Taylor, 1994). Indeed, researchers in clinical, educational, and counseling psychology have been increasingly interested in how the integration of different sets of cultural demands and interpersonal expectations among biculturals affect psychological well-being (LaFromboise et al., 1993). If, as we proposed, low BII biculturals perceive the demands from their different cultural environments to be largely oppositional, they may be more prone to the stresses that accompany the acculturation process (Inman, Ladany, Constantine, & Morano, 2001). Furthermore, if low BIIs consistently behave in a prime-resistant manner, they may receive negative feedback regarding the cultural appropriateness or adeptness of their behavior, which in turn accentuates their perceptions of the oppositional nature of their dual cultural worlds. Alternatively, we may find that the dissociation between mainstream and ethnic cultures characteristic of low BII biculturals is an adaptive strategy; by compartmentalizing different aspects of self-knowledge systems, individuals with low BII may be able to better protect their self-esteem and positive mood (Linville, 1985; Pelham & Swann, 1989; Showers, 1992).

Although the present studies focus on the effects of BII and cultural priming on attributional behaviors, we suspect that these findings can be replicated with other types of behaviors and processes that have been shown to differ across cultures. For instance, there is considerable research showing that people from East Asian and Western cultures differ in their conceptualizations of the self (Heine & Lehman, 1997; Markus & Kitayama, 1991). Indeed, recent research suggests that Chinese American biculturals emphasize collective duties in their spontaneous self-concepts when primed with East Asian cues and emphasize individual rights when primed with American cues (Hong et al., 2001). Thus, we would expect individual differences in BII to affect the self-concepts of biculturals as well. For example, high BIIs would show prime-consistent behaviors (emphasizing collective duties

when primed with Asian cues and emphasizing individual rights when primed with American cues), but low BIIs would show a reverse priming effect. Furthermore, the present study examined one group of biculturals—Chinese Americans. Clearly, there are many other groups of biculturals, and the current results should be replicated among other bicultural ethnic groups as well.

Although the present studies and Hong et al.'s (2000) work on cultural frame switching apply mainly to biculturals, monoculturals may also engage in frame-switching behaviors. Indeed, individuals have multiple, opposing identities across dimensions other than culture. For example, Shih, Pittinsky, and Ambady (1999) found that when given a gender prime, U.S.-born Asian women did more poorly on math tests, reflecting the common stereotype of women as being less proficient in math. However, when given a culture prime, they did better on math tests, reflecting the common stereotype of Asians as being more proficient in math. Similar to the immigrant Chinese American samples in the present studies, these Asian American women embodied multiple identities based on their gender and ethnic groups. It is possible that some Asian American women might see their ethnic and gender identities as compatible, whereas others perceive the two identities as oppositional. In this sense, biculturalism is not a phenomenon that is relevant only to immigrants or people with multiple ethnic identities. Gender and ethnicity aside, race, religion, occupation, political affiliation, sexual orientation, and peer group can all create important sources of social identity, and each can create oppositional demands that individuals have to negotiate and integrate in their socially categorized lives (Baumeister, 1999; Fordham & Ogbu, 1986; Kray et al., 2001).

The present article suggests several important implications for research and theory in cross-cultural psychology. First, individual differences in cultural identity are important for understanding the effects of culture on individual behaviors. Clearly, there are strong and compelling cross-cultural differences in meaning systems. Yet how these meaning systems are integrated, expressed, and used may vary greatly between individuals (Triandis, Leung, Villareal, & Clack, 1985). Indeed, this article demonstrates that individual differences such as degree of BII play a critical role in whether, how, and when cultural meaning systems are used in everyday life.

Second, a lot of cross-cultural research promotes an understanding of culture as a uniform and domain-general worldview. Individuals are categorized into one group or another, and one's membership in the group presumably does not change (see Wallace, 1961, for a classic discussion of this issue). In the present studies, we demonstrated that biculturals possess dual cultural perspectives, which can be "tried on" and applied at different situations and times. They are independent under some situations, and interdependent under other situations; they are individualistic at certain times and collectivistic at other times. Rather than an unmalleable characteristic, cultural meaning systems may be better conceived as a set of tools individuals have available to use in different situations according to their identity dynamics and situational relevance. This perspective creates a more dynamic view of how culture and mind are mutually constituted across and within national boundaries.

## NOTES

1. Other constructs in the literature that capture elements similar or related to this continuum are fusion (Birman, 1994; Chuang, 1999), blendedness (Padilla, 1994; Phinney & Devich-Navarro, 1997), or bicultural competence (LaFromboise & Rowe, 1983) versus cultural homelessness (Vivero & Jenkins, 1999), alternating biculturalism (Phinney & Devich-Navarro, 1997), and oppositional identities (Ogbu, 1993).

2. Similar to past research on attributions (see Hong et al., 1997, 2000), internal and external attributions about the behavior of the single fish are conceptualized throughout our studies in terms of individual- versus group-based agency, respectively.

3. English and Chinese language proficiency and usage were measured separately using the following items: (a) language ability (e.g., rate your Chinese speaking ability), 1 item; (b) past and present language usage (e.g., how much do you use/have you used Chinese to speak with your parents?), 4 items; and (c) media exposure (e.g., how often do you read Chinese newspapers?), 2 items. The language-ability items were answered on 8-point scales ranging from 1 (*very little ability*) to 8 (*very high ability*); the rest of the items were answered on 8-point scales ranging from 1 (*almost never*) to 8 (*very often*).

4. For a subsequently developed multi-item measure of bicultural identity integration (BII), see Benet-Martínez and Haritatos (2002).

5. In a pilot study conducted prior to the present study, the above statements describing opposition between Chinese and American cultures were tested with other statements describing compatibility between the cultures. Ratings on these two sets of statements were highly and negatively correlated, indicating that measures of cultural opposition and compatibility were largely interchangeable. At the same time, statements describing opposition were normally distributed, whereas the statements describing compatibility were skewed to the right (this might have been caused by the higher social desirability of these statements). Thus, the statements describing opposition were used to measure BII in the present studies.

6. Identification with American or Chinese cultures is not identical to acculturation, a psychological construct that also encompasses cultural values and practices, types of relationships, and language. It is important to note that the present article focuses on biculturals' level of integration between cultural identities, and as such, we focus on identification rather than acculturation.

7. Despite its widespread use, Rosenthal and Rosnow (1992) argued that the traditional method of interpreting interaction effects using means is misleading (see also Levin & Marascuilo, 1972). Because the means include both main effects and an interaction (in a  $2 \times 2$  design), an experimenter can accurately understand the interaction only after removing the main effects from the means (and plotting these interaction residuals). For instance, a plot of the means from Study 1 seems to suggest that the cultural priming affected the attributions of only high BIIs (and in the hypothesized direction) when in fact, as the residual plot indicates, the priming also influenced the attributions of low BIIs but in the reverse direction (also supporting our hypothesis).

8. Given the acculturation differences between low and high BIIs reported in Table 1 for Chinese proficiency, English proficiency, and Chinese cultural identification, it is important to examine if these variables mediate our Bicultural Type  $\times$  Priming Condition interaction effects. Results from three separate  $2 \times 2$  ANCOVAs (Bicultural Type  $\times$  Priming Condition), in which each of the previous acculturation variables was entered as a covariate, failed to support such mediational effects. We further tested the contrast that the interaction effect was driven primarily by a strong prime-consistent effect among the high BIIs and no priming effect among the low BIIs. The contrast was not significant,  $F(1, 61) = 1.92, p = .17$ .

9. Intercorrelations for these four types of attributions are available from the authors upon request.

10. As we did in Study 1, we examined the possible mediational role of years lived in the United States and China, age of migration, English and Chinese language proficiency, and U.S. and Chinese cultural identification on our Bicultural Type  $\times$  Priming Condition significant interaction effects. None of these variables significantly mediated the predicted interaction effect. We also tested the contrast that the interaction was driven primarily by a prime-consistent effect among high BIIs and no priming effect among low BIIs: The contrast effect for all four dependent variables was not significant ( $p > .15$ ).

11. See Chiu, Morris, Hong, and Menon (2000) for an additional study in which an individual difference variable, need for closure (Kruglanski, 1989), moderates cultural effects.

12. Benet-Martínez and Haritatos's (2002) recent study shows that independently measured perceptions of cultural distance and conflict correlate .56 and .64 with the single-item measure of low versus high BII (Bicultural Identity Integration Scale–Pilot Version [BIIS-P]) used in the present study. Although these associations do not shed light on the issue of which components (conflict, distance, or both) are responsible for the contrast effects reported in the present study, they suggest that the BIIS-P measures variations in both components.

## REFERENCES

Antin, M. (1912). *The promised land*. New York: Penguin.

- Baumeister, R. (1998). The self. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (Vol. 1, pp. 680-740). New York: McGraw-Hill.
- Benet-Martínez, V., & Haritatos, J. (2002). *Bicultural identity integration (BII): Components, dynamics, and socio-personality correlates*. Unpublished manuscript, University of Michigan, Ann Arbor.
- Berry, J. (1990). *Psychology of acculturation*. Paper presented at the Nebraska Symposium on Motivation: Cross-Cultural Perspectives, Lincoln, NE.
- Berry, J., & Sam, D. (1996). Acculturation and adaptation. In J. Berry, M. Segall, & C. Kagitcibasi (Eds.), *Handbook of cross-cultural psychology: Social behavior and applications* (Vol. 3, pp. 291-325). Boston: Allyn & Bacon.
- Berry, J. W., Kim, U., Power, S., Young, M., & Bujaki, M. (1989). Acculturation attitudes in plural societies. *Applied Psychology: An International Review*, 38, 185-206.
- Birman, D. (1994). Acculturation and human diversity in a multicultural society. In E. Trickett, R. Watts, & D. Birman (Eds.), *Human diversity: Perspective on people in context* (pp. 261-284). San Francisco: Jossey-Bass.
- Camilleri, C., & Malewska-Peyre, H. (1997). Socialization and identity strategies. In J. W. Berry, P. R. Dasen, & T. S. Saraswathi (Eds.), *Handbook of cross-cultural psychology: Vol. 2, Basic processes and human development* (pp. 41-67). Needham Heights, MA: Allyn & Bacon.
- Chavez, D. (1994). *Face of an angel*. New York: Farrar, Straus, and Giroux.
- Chiu, C., Morris, M. W., Hong, Y., & Menon, T. (2000). Motivated cultural cognition: The impact of implicit cultural theories on dispositional attribution varies as a function of need for closure. *Journal of Personality and Social Psychology*, 78, 247-259.
- Choi, I., & Nisbett, R. (1998). Situational salience and cultural differences in the correspondence bias and actor-observer bias. *Personality and Social Psychology Bulletin*, 24, 949-960.
- Chuang, Y. (1999). *Fusion: The primary model of bicultural competence and bicultural identity development in a Taiwanese-American family lineage*. Unpublished doctoral dissertation, Stanford University, Palo Alto, CA.
- D'Andrade, R. G. (1984). Cultural meaning systems. In R. A. Shweder & R. A. LeVine (Eds.), *Cultural theory: Essays on mind, self, and emotion* (pp. 88-119). Cambridge, UK: Cambridge University Press.
- Du Bois, W. E. B. (1990). *The souls of black folk*. New York: Vintage.
- Durczak, J. (1997). *Selves between cultures: Contemporary American bicultural autobiography*. San Francisco: International Scholars Publications.
- Ford, T. E., & Thompson, E. P. (2000). Preconscious and postconscious processes underlying construct accessibility effects: An extended search model. *Personality and Social Psychology Review*, 4, 317-336.
- Fordham, S., & Ogbu, J. (1986). Black students' school success: Coping with the "burden of 'acting white.'" *The Urban Review*, 18, 176-206.
- Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.
- Gil, A. G., Vega, W. A., & Dimas, J. M. (1994). Acculturative stress and personal adjustment among Hispanic adolescent boys. *Journal of Community Psychology*, 22, 43-54.
- Glaser, J., & Banaji, M. (1999). When fair is foul and foul is fair: Reverse priming in automatic evaluation. *Journal of Personality and Social Psychology*, 77, 669-687.
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2001). *A five-item measure of the Big-Five personality domains*. Unpublished manuscript, University of Texas, Austin.
- Gurin, P., Hurtado, A., & Peng, T. (1994). Group contacts and ethnicity in the social identities of Mexicanos and Chicanos. *Personality and Social Psychology Bulletin*, 20, 521-532.
- Heine, S. J., & Lehman, D. R. (1997). The cultural construction of self-enhancement: An examination of group-serving biases. *Journal of Personality and Social Psychology*, 72, 1268-1283.
- Hong, Y. Y., Chiu, C. Y., & Kung, T. (1997). Bringing culture out in front: Effects of cultural meaning system activation on social cognition. In K. Leung, Y. Kashima, U. Kim, & S. Yamaguchi (Eds.), *Progress in Asian social psychology* (Vol. 1, pp. 135-146). Singapore: Wiley.
- Hong, Y. Y., Ip, G., Chiu, C. Y., Morris, M., & Menon, T. (2001). Cultural identity and dynamic construction of the self: Collective duties and individual rights in Chinese and American cultures. *Social Cognition*, 19, 251-268.
- Hong, Y. Y., Morris, M., Chiu, C. Y., & Benet-Martínez, V. (2000). Multicultural minds: A dynamic constructivist approach to culture and cognition. *American Psychologist*, 55, 709-720.
- Hutnik, N. (1991). *Ethnic minority identity: A social psychological perspective*. New York: Clarendon Press/Oxford University Press.
- Inman, A. G., Ladany, N., Constantine, M. G., & Morano, C. K. (2001). Development and preliminary validation of the Cultural Values Conflict Scale for South Asian women. *Journal of Counseling Psychology*, 48, 17-27.
- Kashima, Y. (2000). Conceptions of culture and person for psychology. *Journal of Cross-Cultural Psychology*, 31, 14-32.
- Kibria, N. (2000). Race, ethnic options and ethnic binds: Identity negotiations of second-generation Chinese and Korean Americans. *Sociological Perspectives*, 43, 77-95.
- Kitayama, S., Markus, H. R., Matsumoto, H., & Norasakkunkit, V. (1997). Individual and collective processes in the construction of the self: Self-enhancement in the United States and self-criticism in Japan. *Journal of Personality and Social Psychology*, 72, 1245-1267.
- Kray, L. J., Thompson, L., & Galinsky, A. (2001). Battle of the sexes: Gender stereotype confirmation and reactance in negotiations. *Journal of Personality and Social Psychology*, 80, 942-958.
- Kruglanski, A. W. (1989). *Lay epistemics and human knowledge: Cognition and motivational bases*. New York: Plenum.



- Krull, D. (1993). Does the grist change the mill? The effect of the perceiver's inferential goal on the process of social inference. *Personality and Social Psychology Bulletin*, *19*, 340-348.
- LaFromboise, T., Coleman, H., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, *114*, 395-412.
- LaFromboise, T. D., & Rowe, W. (1983). Skills training for bicultural competence: Rationale and application. *Journal of Counseling Psychology*, *30*, 589-595.
- Laroche, M., Kim, C., Hui, M. K., & Joy, A. (1996). An empirical study of multidimensional ethnic change: The case of the French Canadians in Quebec. *Journal of Cross-Cultural Psychology*, *27*, 114-131.
- Laroche, M., Kim, C., Hui, M. K., & Tomiuk, M. A. (1998). Test of a nonlinear relationship between linguistic acculturation and ethnic identification. *Journal of Cross-Cultural Psychology*, *29*, 418-433.
- Lee, F., Hallahan, M., & Herzog, T. (1996). Explaining real life events: How culture and domain shape attributions. *Personality and Social Psychology Bulletin*, *22*, 732-741.
- Levin, J. R., & Marascuilo, L. A. (1972). Type IV errors and interactions. *Psychological Bulletin*, *78*, 368-374.
- Linville, P. W. (1985). Self-complexity and affective extremity: Don't put all your eggs in one cognitive basket. *Social Cognition*, *3*, 94-120.
- Lombardi, W., Higgins, E., & Bargh, J. (1987). The role of consciousness in priming effects on categorization: Assimilation versus contrast as a function of awareness of the priming task. *Personality and Social Psychology Bulletin*, *13*, 411-429.
- Marcia, J. E. (2002). Identity and psychosocial development in adulthood. *Identity*, *2*, 7-28.
- Markus, H., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review*, *98*, 224-253.
- Martin, L., Seta, J., & Crelia, R. (1990). Assimilation and contrast as a function of people's willingness and ability to expend effort on forming an impression. *Journal of Personality and Social Psychology*, *59*, 27-37.
- Mendoza-Denton, R., Shoda, Y., Ayduk, O., & Mischel, W. (1999). Applying cognitive-affective processing system (CAPS) theory to cultural differences in social behavior. In W. J. Lonner, D. L. Dinnel, D. K. Forgas, & S. A. Hayes (Eds.), *Merging past, present, and future in cross-cultural psychology: Selected proceedings of the 14th International Congress of the International Association for Cross-Cultural Psychology*. Lisse, the Netherlands: Swets and Zeitlinger.
- Menon, T., Morris, M., Chiu, C., & Hong, Y. Y. (1999). Culture and construal of agency: Attribution to individual versus group dispositions. *Journal of Personality and Social Psychology*, *76*, 701-717.
- Morris, M., & Peng, K. (1994). Culture and cause: American and Chinese attributions for social and physical events. *Journal of Personality and Social Psychology*, *67*, 949-971.
- Newman, L., & Uleman, J. (1990). Assimilation and contrast effects in spontaneous trait inference. *Personality and Social Psychology Bulletin*, *16*, 224-240.
- Norenzayan, A., & Nisbett, R. E. (2000). Culture and causal cognition. *Current Directions in Psychological Science*, *9*, 132-135.
- Ogbu, J. U. (1993). Differences in cultural frame of reference. *International Journal of Behavioral Development*, *16*, 483-506.
- Ogbu, J. U., & Matute-Bianchi, M. A. (1986). Understanding sociocultural factors: Knowledge, identity, and social adjustment. In California State Department of Education, Bilingual Education Office (Ed.), *Beyond language: Social and cultural factors in schooling* (pp. 73-142). Sacramento: California State University, Los Angeles, Evaluation, Dissemination and Assessment Center.
- O'Hearn, C. C. (1998). *Half and half: Writers on growing up biracial and bicultural*. New York: Pantheon.
- Oyserman, D., Sakamoto, I., & Lauffer, A. (1998). Cultural accommodation: Hybridity and the framing of social obligation. *Journal of Personality and Social Psychology*, *74*, 1606-1618.
- Padilla, A. M. (1994). Bicultural development: A theoretical and empirical examination. In R. G. Malgady & O. Rodriguez (Eds.), *Theoretical and conceptual issues in Hispanic mental health* (pp. 20-51). Melbourne, FL: Robert E. Krieger.
- Pelham, B. W., & Swann, W. B. (1989). From self-conceptions to self-worth: On the sources and structure of global self-esteem. *Journal of Personality and Social Psychology*, *57*, 672-680.
- Phinney, J., & Devich-Navarro, M. (1997). Variations in bicultural identification among African American and Mexican American adolescents. *Journal of Research on Adolescence*, *7*, 3-32.
- Rhee, E., Uleman, J., Lee, H., & Roman, R. (1995). Spontaneous self-descriptions and ethnic identities in individualistic and collectivistic cultures. *Journal of Personality and Social Psychology*, *69*, 142-152.
- Robins, R. W., Hendin, H. M., & Trzesniewski, K. H. (2001). Measuring global self-esteem: Construct validation of a single-item measure and the Rosenberg Self-Esteem Scale. *Personality and Social Psychology Bulletin*, *27*, 151-161.
- Rosenthal, R., & Rosnow, R. (1992). *Essentials of behavioral research: Methods and data analysis*. New York: McGraw-Hill.
- Roth, P. (1969). *Portnoy's complaint*. New York: Random House.
- Rotheram-Borus, M. J. (1993). Biculturalism among adolescents. In M. E. Bernal & G. P. Knight (Eds.), *Ethnic identity: Formation and transmission among Hispanics and other minorities* (pp. 81-102). Albany: State University of New York Press.

- Ryder, A., Alden, L., & Paulhus, D. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of Personality and Social Psychology, 79*, 49-65.
- Segall, M., Lonner, W., & Berry, J. (1998). Cross-cultural psychology as a scholarly discipline: On the flowering of a culture in behavioral research. *American Psychologist, 53*, 1101-1110.
- Sherif, M., & Hovland, C. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change*. New Haven, CT: Yale University Press.
- Shih, M., Pittinsky, T., & Ambady, N. (1999). Stereotype susceptibility: Identity salience and shifts in quantitative performance. *Psychological Science, 10*, 80-83.
- Showers, C. (1992). Compartmentalization of positive and negative self-knowledge: Keeping bad apples out of the bunch. *Journal of Personality and Social Psychology, 62*, 1036-1049.
- Simon, J. (1995). *The economic consequences of immigration in the U.S.* Oxford, UK: Basil Blackwell.
- Starck, F., Schwarz, N., Bless, H., Kubler, A., & Wanke, M. (1993). Awareness of the influence as a determinant of assimilation versus contrast. *European Journal of Social Psychology, 23*, 53-62.
- Sue, D., Sue, D. W., & Sue, D. M. (1983). Psychological development of Chinese American children. In G. J. Powell, J. Yamamoto, A. Romero, & A. Morales (Eds.), *The psychosocial development of minority group children* (pp. 159-166). New York: Brunner/Mazel.
- Sussman, N. M. (2000). The dynamic nature of cultural identity throughout cultural transitions: Why home is not so sweet. *Personality and Social Psychology Review, 4*, 355-373.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations* (pp. 33-47). Monterey, CA: Brooks/Cole.
- Taylor, E. W. (1994). Intercultural competency: A transformative learning process. *Adult Education Quarterly, 44*, 154-174.
- Triandis, H., Leung, K., Villareal, M., & Clack, F. (1985). Allocentric versus idiocentric tendencies: Convergent and discriminant validation. *Journal of Research in Personality, 19*, 395-415.
- Tsai, J., Ying, Y., & Lee, P. (2000). The meaning of "being Chinese" and "being American": Variation among Chinese-American youth adults. *Journal of Cross-Cultural Psychology, 31*, 302-332.
- Vivero, V. N., & Jenkins, S. R. (1999). Existential hazards of the multicultural individual: Defining and understanding "cultural homelessness." *Cultural Diversity and Ethnic Minority Psychology, 5*, 6-26.
- Wallace, A. F. C. (1961). *Culture and personality*. New York: Random House.
- West, J. O. (1988). *Mexican-American folklore*. Little Rock, AK: August House.
- Williamson, J. A. (1999). In defense of themselves: The Black student struggle for success and recognition at predominantly White colleges and universities. *Journal of Negro Education, 68*, 92-105.

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