Cultural Identity Integration and Frame Switching:
Evidence for a Nonconscious Motivated Process

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ABSTRACT

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Bicultural individuals vary in the degree to which their two cultural identities are integrated—Bicultural Identity Integration (BII). Studies of social judgment find that BII affects how biculturals respond to cultural cues. Whereas biculturals with integrated cultural identities (high BIIs) assimilate to cued cultural norms, those with less integrated cultural identities (low BIIs) contrast against it. I investigated this pattern in decision making and behavior. I used different priming methods to elucidate the psychological process underlying the differential shifts to cultural cues. With Asian-Americans, I show that high BIIs shift assimilatively whereas low BIIs shift contrastively on behaviors related to product choice (Experiment 1), information search (Experiment 2), and performance (Experiment 3). I argue that motives, rather than perceived dissimilarity to prime stimuli, drive the contrast responses. Experiments 2 to 3 further suggests that the contrast can arise nonconsciously and automatically. Experiment 4 reveals that low BIIs’ contrast extends to interpersonal behavior. Experiments 5 and 6 investigate whether BII can be implicitly shaped by affect or comparative mindset. Implications for bicultural identity, organizational and consumer behavior are discussed.
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CHAPTER I

INTRODUCTION

"[Obama] has benefited from his chameleon power to make a lot of different people feel he represents them...."

-- Freeland (2009), Financial Times after the inauguration of President Barack Obama

With increasing cultural diversity in society and in employment, leaders face the challenge of managing different cultural expectations. In order to build trust, successful leaders have to adjust their self-presentation, communication style and behavior to fit their cultural audience. For example, President Obama's success in the campaign and in office has been attributed to his chameleon-like ability to communicate in ways that meld his social and cultural experiences with those of his audience. Does identification with multiple cultures give rise to culturally assimilative behaviors, or is it something deeper, such as the way in which individuals structure different identities in their self-concept? I develop the idea that the more a bicultural individual blends or integrates their two cultural identities, the more chameleon-like their responses will be in cultural settings. In contrast, the more difficulty that a bicultural has in integrating or negotiating between their cultural identities, the more likely their behavior will contrast against cultural expectations.

Returning to Obama, a characteristic emphasized by biographers and acquaintances is his intense interest in reconciling and integrating the different strands of
his identity. His journal writing, largely concerned with how his different identities were drawn together, yielded a nuanced autobiography in his early 30s. Describing how his way of managing cultural identities often differed from his peers, he says "I learned to slip and forth between black and white worlds, understanding that each possessed its own language and customs and structures of meaning, convinced that with a bit of translation on my part the two worlds would eventually cohere" (Obama, 2004). Before he was a national figure, Obama produced another autobiography about his early political career.

Obama's "chameleon power" involves assimilating his thoughts and actions to the expectations of a cultural setting. Reflecting on his childhood stay in Indonesia, Obama recounts: "It had taken me less than six months to learn Indonesia 's language, its customs, and its legends. The children of farmers...had become my best friends...I learned how to eat small green chill peppers raw with dinner..." (Obama, 2004). Obama adapted to the local culture so quickly that his mother became afraid that he would not fit back in American culture. She sent him to live with his grandparents in Hawaii, where he quickly adapted back to American culture. Before becoming President, Obama was ready to identify and adjust to his audiences' position. When challenged for not being black enough, Obama appealed to his Kenyan background. When accused of not being American enough, he could appeal to his mother's American roots and speak in the accent of his Kansan grandparents. In his recent speech in Cairo, which sought to mend ties between the U.S. and Muslim communities worldwide, Obama expressed his personal connections to Islam. The story of Obama suggests that being personally integrated and reconciled in one's cultural identities is accompanied by an ease in assimilating to the cultural expectations of a situation.
Conversely, individuals who have not integrated their cultural identities may resist assimilating to cultural settings. David Headley (Daood Sayed Gilani), who has been involved with terrorist attacks, is a Pakistani-American who grew up partly in both societies yet never integrated his bicultural identities. As his uncle describes, "most people have contradictions in their lives, but they learn to reconcile them...but Daood could never do that. The left side does not speak to the right side. And that's the problem" (Thompson, 2009). Headley's conflict between his cultural identities led him to rebel against cultural norms. After a Westernized, cricket-playing childhood in Pakistan, he moved to the U.S. to live with his American mother. He soon became attracted to fundamentalist Islam and became active with an Islamic militant group. Yet, at the same time as he embedded himself in a fundamentalist Islamic community, he also contrasted against it in some ways. For instance, he changed his name from Daood Sayed Gilani to the more American-sounding 'David Coleman Headley'. The example of Daood/ David suggests that biculturals with a conflicted self-concept respond differently to situations cuing their cultural identities. Rather than meshing with the situation like a chameleon, they defy or contradict those expectations, expressing their opposite cultural identity.

The purpose of this dissertation is to reach a greater understanding of how and why cultural identity integration conditions responses to cultural cues. In particular, the tendency for biculturals to carry out culturally iconoclastic behavior remains under-explored and under-explained. I develop a more dynamic and nuanced account of how biculturals adjust to different cultural environments, considering the extent to which their cultural identities are integrated. I propose that highly integrated cultural identities enable moving easily between cultural worlds in a chameleon-like way. Unintegrated cultural
identities gives rise to resisting the cued cultural norm and adopting behavior that is more consistent with one's other cultural identity, clashing with expectations of the current setting.

Psychology of Cultural Chameleons and Iconoclasts: A Brief Review

Due to their familiarity with two cultures, biculturals are commonly assumed to shift their responses to match the norms of a cultural setting. For example, Westernized Chinese exhibit greater extraversion in a Western than an Asian context (Chen, 2007). Early cultural priming studies found evidence for biculturals' assimilation to cultural cues not only in public self-presentations, but also in private social judgments (Hong, Morris, Chiu, & Benet-Martinez, 2000), self-perceptions (Hong, Ip, Chiu, Morris, & Menon, 2001; Ross, Xun, & Wilson, 2002), and decision-making (Briley, Morris, & Simonson, 2005).

In contrast to this initial view of biculturals as cultural chameleons, emerging research documents that biculturals can react against cultural cues (e.g., Kibria, 2002; Liu, 1998). This means that they shift their responses away from normative responses of the salient culture. According to work by Benet-Martinez, Leu, Lee, and Morris (2002), biculturals vary in the extent to which their two cultural identities are experienced as integrated-- Bicultural Identity Integration (BII). In studies of causal attribution, BII was found to moderate the direction of shifts (assimilation or contrast) in response to cultural cues. Whereas biculturals with integrated cultural identities (high BII's) assimilate to cued cultural norms (e.g., make dispositional attributions after American priming), those with
less integrated cultural identities (low BIIs) contrast against it (e.g., make situational attributions after American priming) (Benet-Martinez et al., 2002).

It is puzzling that cultural contrast occurs given biculturals identify with both their cultures. Acting in ways that flaunt cultural expectations could be detrimental in personal or work settings (Earley & Ang, 2003; Francis, 1991). Consider, for example, bicultural managers in cross-cultural negotiations. Managers who embrace the local cultural norms in their judgments and behaviors are likely to mesh and build rapport with others, whereas managers who defy these norms (despite having an association with the culture) could confuse and alienate their counterparts.

It is unclear what mechanisms underlie the contrastive tendencies of biculturals. One prior explanation in the psychological literature can be referred as the perceptual dissimilarity account. As stimuli perceived as self-dissimilar induce contrast (Wheeler, DeMarree, & Petty, 2007), researchers have tried to explain the contrast effects of low BIIs as resulting from perceived self-discrepancy to the cultural cues. Specifically, Cheng, Lee, and Benet-Martinez (2006) argued that the effect hinges on perceived self-discrepancy in terms of valence. Cultural primes in past studies were typically positive in valence (e.g., Mickey Mouse; Benet-Martinez et al., 2002). Low BIIs have more negative acculturation experiences (e.g., discrimination; Benet-Martinez & Hartiatos, 2005). Hence, low BIIs may perceive the (positive) primes as self-discrepant and contrast against them for this reason. This perceptual dissimilarity account assumes that the contrast effect arises through conscious processing of valenced cues.

In my research, I challenge the perceptual dissimilarity account and propose that the cultural contrast is not simply a conscious reaction to cue valence. I demonstrate that
low BIIs exhibit contrast effects even when the cultural stimuli are evaluatively neutral and even when not consciously perceived. I propose a motivational mechanism for the differential responses of low and high BIIs. High BIIs with blended/integrated identities can assimilate to a cultural setting without leaving behind their other cultural identity. Yet, low BIIs with separate/unintegrated identities cannot fully enter a cultural setting without checking their other cultural identity at the door, so to speak. I propose that this experience of identity neglect gives rise to counteractive control strategies, that is, low BIIs reject the invitation of the cultural situation by espousing their other cultural identity. Repeated conscious attempts to defy or embrace cued cultural norms could develop into automatic and nonconscious responses, such that biculturals shift contrastively or assimilatively to cultural cues without awareness of its influence or effects.

In support of this argument, I provide many new empirical findings. Using the method of cultural priming, I show that in decision making and behavior, high BIIs assimilate to the cued cultural norm, whereas low BIIs contrast against it. I document that cultural primes perceived as self-similar trigger contrast effects, which implies it is not a matter of perceived self-discrepancy. Furthermore, contrast effects can arise implicitly, after subliminal cultural priming. My research suggests that biculturals differ in motives to follow versus defy cultural expectations, and that biculturals with low BII have developed an automatic tendency to contrast from salient cultural norms. I also explore multiple means to influence BII with implications for reducing cultural contrast.

This paper is organized as follows. First I introduce cultural frame switching and BII and review past evidence of its impact on judgments and perceptions. I propose that
motives contribute to the assimilative versus contrastive responses to cultural cues; two studies test the interaction of cultural priming and BII on behavioral decisions using primes designed to avoid the perceptual account of prime-self dissimilarity. Moreover, I propose that the contrast process can be implicit. I examine whether BII interacts with subliminal cultural cues to influence behavior, and tap which cultural frame is activated in biculturals after priming (prime-congruent versus incongruent). I also investigate whether cultural contrast is motivated, can manifest in public, and potentially yield positive social outcomes. Given my findings that BII impacts decision making and performance, I identify situational ways to influence BII, which could encourage biculturals to assimilate versus contrast from cultural expectations. I propose and show that BII can be manipulated implicitly by affect and cognitive mindsets. Last, I discuss the theoretical and practical implications of the findings.
CHAPTER II

NEGOTIATING CULTURAL IDENTITIES

An important question of acculturation is how the host culture shapes the cultural identity of ethnic minorities or immigrants. Early theories of immigrant adjustment (e.g., Warner & Stole, 1945) proposed that each ethnic generation would progressively assimilate, orienting themselves toward ways of the host culture and shedding their heritage cultural identity to achieve social success. The “melting pot” image of the U.S., for example, suggests that individuals typically absorb the norms of American culture and loosen connections to their ethnic culture.

Yet, recent acculturation theories challenge the notion that assimilation is a necessary outcome of the immigrant experience. Current immigrants in the U.S. find ways to embrace the host culture while retaining their ethnic culture. For example, with technological advancement fostering modern communication and cheap transportation, it is common for individuals to remain socially connected to their home communities abroad (e.g., Levitt & Waters, 2002). Hence, they navigate between two cultural systems. Similarly, individuals can preserve their ethnic heritage through strong kinship ties or involvement in ethnic organizations within the American society (Portes & Zhou, 1993). Moreover, many immigrant children are taught traditional values in the home while they are exposed to American norms at school. In sum, connections to both host and ethnic-culture communities increase the ability for immigrants to acculturate to the mainstream culture while preserving their ethnic heritage.
According to a framework proposed by Berry (1990), individuals navigating between two cultural systems have four distinct acculturation strategies: 1) assimilation (identification mostly with the mainstream culture), 2) separation (identification largely with the ethnic culture), 3) marginalization (low identification with both ethnic and mainstream cultures), and 4) biculturalism (high identification with both cultures). A bicultural individual, for example, identifies with both their ethnic culture (e.g., Asian, Mexican) and the mainstream culture (e.g., American). My focus is on this final category, biculturals, who identify strongly with both cultures.

Biculturals switch between cultural frames. Qualitative studies of biculturals’ experiences show that some individuals exhibit chameleon tendencies. For example, a Latino-American participant in Kasinitz, Mollenkopf, Waters, and Holdaway's (2008) study describes: “Every time I hear a good salsa or a good merengue, it just brings out the Spanish person in me” (p. 256).

However, other biculturals show contrastive reactions to situations with cultural expectations. A Chinese-American, for example, felt more identified with American culture when asked about Chinese culture: “I’m American. People from Hong Kong, their mentality is very traditional… I’m not… I’m just like the opposite of them” (Kasinitz et al., 2008, p. 263). Contrast from cultural cues also appears in behavior. Liu's (2002) autobiography, "The Accidental Asian", for example, describes cultural contrast tendencies during his college years: “If Asians were feeble subalterns, I’d lift weights and go to Marine officer candidate school… If Asians were shy and retiring, I’d try to be exuberant and jocular…” (p. 50-51). Such evidence suggests the dynamics involved in managing multiple cultural identities. Bicultural individuals navigate between ethnic and
host culture contexts and they negotiate their cultural identities in different ways. Identifying with a culture implies that individuals adopt associated norms as guidelines for their behavior. Less well understood, however, is the process underlying cultural contrast for biculturals who are otherwise strongly identified with their two cultures (see Benet-Martinez et al., 2002).

Cultural Priming

In addition to qualitative evidence from interviews with biculturals, researchers have used priming experiments to study frame switching (Hong et al., 2000). Culturally associated sounds and sights elicit culturally normative characteristics. For example, Chinese-Americans make more dispositional attributions after exposure to American versus Asian cultural images (Hong et al., 2000). Biculturals assimilate to different kinds of cultural primes (e.g., cultural icons, language spoken in the culture, experimenter's cultural background; Hong et al., 2000; Ramirez-Esparza, Gosling, & Benet-Martinez, Potter, & Pennebaker, 2004; Verkuyten & Pouliasi, 2002). This suggests that cultural cues raise the cognitive accessibility of norms associated with the culture, increasing the likelihood that they guide behavior (Hong et al., 2000).

Bicultural Identity Integration

Not all biculturals experience dual identification in the same way. Biculturals vary in the structure of their cultural identifications. For example, some biculturals integrate
their two cultures ("I am Mexican American"), whereas others find it hard to be both at the same time ("you have to choose one or the other") (Phinney & Devich-Navarro, 1997). Bicultural Identity Integration (BII) measures the degree to which biculturals experience their two cultural identities as integrated and compatible versus separated and conflicting (Benet-Martinez et al., 2002). BII has been related to different acculturation and social experiences. Biculturals with low (vs. high) BII are more likely to experience culture-related stress, such as being negatively perceived because of their cultural values, practices, and language abilities (Benet-Martinez & Haritatos, 2005). Research on social networks finds that low BIIs are less likely to have large and richly connected circles of non-co-ethnic friends compared to high BIIs (Mok, Morris, Benet-Martinez, & Karakitapoglu-Aygun, 2007). A bicultural's sense of identity integration could be reinforced by the nature and pattern of social interactions in their cultural environments.

Research finds that BII is relevant to the priming effects that tap frame switching. Benet-Martinez et al. (2002) found that BII moderates the effects of cultural cues in social judgments. Whereas high BII Asian-Americans made more dispositional attributions after American versus Asian priming (assimilation effects), low BIIs made more situational attributions after American versus Asian priming (contrast effects). My research takes this initial puzzling finding as a point of departure, examining the scope of this phenomenon and investigating the psychological mechanisms that underlie it.
CHAPTER III

MOTIVATED CONTRAST VERSUS PERCEIVED SELF-DISCREPANCY

The differential priming effect as a function of BII has been explained in terms of perceived discrepancy between the self and the cultural cues (Cheng et al., 2006). Self-discrepant primes engender contrast effects. For example, Dijksterhuis et al. (1998) found that university students primed with professor (vs. supermodel) scored higher on a knowledge test (assimilative response), whereas priming Einstein (vs. professor) led to the opposite pattern. When a prime appears dissimilar to the self, people tend to lean away from the prime rather than towards it in their response.

Drawing on this notion, Cheng and her colleagues (2006) argued that since the stimuli in early cultural priming studies were highly positive in valence (e.g., Statue of Liberty; Benet-Martinez et al., 2002), they were likely to be perceived as self-similar by high BIIrs (who have more positive experiences with culture) yet self-discrepant by low BIIrs (who have more negative experiences with culture; see Benet-Martinez & Haritatos, 2005). Manipulating the valence of cultural primes, Cheng et al. (2006) found that the interaction of cultural cues and BII could be reversed; with negative-valence stimuli, low BIIrs exhibited assimilation effects. This suggests that the contrast effects of biculturals may arise from the cognitive mechanism of perceived self-discrepancy from the prime (unless valence has its effect through motivational processes).

However, recent evidence suggests that valence self-discrepant primes are not necessary for the contrast effects. In the initial studies of this research program, which are
already published, I observed contrast effects for low BIIIs when the cultural primes were relatively neutral (vs. positive) in valence. Table 1 summarizes these studies examining different dependent measures relevant to culture. My results imply that contrastive shifts away from cultural cues do not depend on perceived valence dissimilarity to primes.

The current research proposes that cultural contrast results when biculturals experience distance or conflict between their two cultural identities. This thesis has some empirical and qualitative support. For example, in experiments manipulating language, Yang and Bond (1980) found that Hong Kong Chinese endorsed Chinese values less when responding in Chinese rather than English, perhaps because political dynamics at the time left individuals torn between Chinese and Western identities. Similarly, autobiographies and ethnographic studies document deviance tendencies in biculturals who are conflicted about their cultural identities, such as a Chinese-American student who cultivates his persona as the opposite of his Chinese schoolmates (Kibria, 2002; Liu, 1998), or a Chinese-American employee who feigns ignorance when asked about Chinese cuisine at work (Kibria, 2002).

I propose that the critical mechanism for cultural contrast is motivational. Developmental theories hold that when individuals experience identity conflict, they are inclined towards norm deviance (e.g., Erickson, 1950). Research finds that low BIIIs tend to disidentify (i.e., have negatively-tinged identification) with one of their cultures, and disidentification produces contrast to cues of that identity (Zou, Morris, & Benet-Martinez, 2008). Disidentification is not a lack of identification but is a motive to act contrary to the salient cultural norms (Goffman, 1963).
Self-control research has found that people develop inhibitory responses to cues that they do not want to follow. For example, dieters respond to the situation of tempting food by resisting the temptation and instead exercising (e.g., Fishbach & Shah, 2006). Likewise, the behavioral contrast of low BII s may reflect a counteractive control strategy of resisting the invitation of a cultural cue in order to not neglect their other cultural identity. Such strategies may not develop for high BII s, who can accept the invitation of a cultural cue without leaving out their other cultural identity. Habitual behavior that contrasts or assimilates to cued cultural norms as a function of BII could affect the accessibility of cultural knowledge after priming. For high BII s, exposure to prime stimuli (e.g., American) might render knowledge about that culture more accessible, whereas for low BII s, the stimuli could make knowledge about their other culture (e.g., Asian) more accessible.

Consequences for Decision Making

In understanding the interaction of BII and cultural primes, it is important to investigate whether it carries through to decision making and behavior. Initial studies of the BII moderation effect focused on perceptions and judgments (Benet-Martinez et al., 2002; Cheng, et al., 2006; Zou et al., 2008). Some recent evidence from studies of managerial reward allocation suggests that the interaction effect of BII and cultural priming extends to decision making. Longstanding evidence shows that Chinese, more than Americans, favor equality rather than equity as a rule for distributing rewards within the ingroup (Leung & Bond, 1984). Studying this decision making task with Taiwanese
managers who had previously worked in the West, Friedman, Liu, Chi, Hong, and Sung (2008) found that those with high BII (integrated Taiwanese and American identities) prefer using an equity-based rule in an American setting and an equality-based rule in an Asian setting (assimilative shift). Conversely, those with low BII prefer using an equality-based rule in an American setting and an equity-based rule in an Asian setting (contrastive shift).

Likewise, this pattern extends to managerial decisions about performance. In a scenario study, Mok, Cheng, and Morris (2010) found that Asian-Americans with high BII evaluate employees less situationally, or give less weight to situational factors on their observed outcome in an American versus Asian setting (assimilation effects). Conversely, low BII evaluate employee outcomes more situationally, or give more weight to situational factors on their observed outcome in an American versus Asian setting (contrast effects). Ratings of reward, besides appraisal were affected by this bias. In sum, these reward allocation findings suggest that interaction effect of BII and cultural primes on person perception (e.g., Benet-Martinez et al., 2002) extends to the decisions that follow from them.

The next question which has not yet been tested is whether the BII moderation effect on self-perceptions extends to ensuing decisions. Recent research shows that BII moderates cultural priming effects on self-perceived personality (Mok & Morris, 2009). Whereas integrated biculturals shift assimilatively (e.g., high BII Asian-Americans perceive the self as more uniqueness-seeking after American versus Asian priming), less integrated biculturals shift contrastively (e.g., low BII Asian-Americans perceive the self as less uniqueness-seeking after American versus Asian priming).
Shifts in self-perceived personality may come with attendant shifts in behavior. Individuals who strive to be different and independent from others tend to make more varied and unique choices (McAlister & Pessemier, 1982; Simonson & Nowlis, 2000; Snyder & Fromkin 1977). It is well documented that people in Western (vs. East Asian) cultures are more uniqueness-seeking and individualistic (Markus & Kitayama, 1991). I investigate whether in behavioral decisions, BII moderates the effects of cultural cues. I focus on consumption choice (Experiment 1) and information search (Experiment 2), with important managerial and marketing consequences. With East Asian-American participants, I hypothesize that high BIIs will choose more variety and individuality after American versus Asian priming (assimilative shifts), whereas low BIIs will choose less variety and individuality after American versus Asian priming (contrastive shifts). To obtain support for a motivated process, I sought valence-neutral cultural stimuli to avoid the perceptual account of valence self-discrepancy.

Experiment 1: Shifts in Consumption Choice

I examine whether BII moderates the effects of cultural cues on consumption of variety. Drawing on research that Westerners make more varied choices than Asians (Kim & Drolet 2003), I hypothesize that high BIIs will seek more variety in their choices after American versus Asian priming (assimilative shift), whereas low BIIs will seek less variety after American versus Asian priming (contrastive shift).

To demonstrate that the BII moderation effect does not depend on valence self-discrepant primes, I used cultural cues with no obvious valence. I also explored an
alternative account related to self-discrepancy. A general tendency to perceive oneself as
different from others could drive the contrast priming effects (Mussweiler, 2001a). If
identity-related motives and not social comparison processes drive the contrast responses,
the BII moderation effect should remain robust after controlling for perceived social
dissimilarity.

Another account related to perceptions is that the contrast response derives from
how others perceive one’s cultural identifications. Low BII, which has been linked with
more experiences of discrimination (Benet-Martinez & Haritatos, 2005), may be
associated with being often denied of an American identity in the U.S. (e.g., others
consider them as belonging to Asia, even if American-born), or denied of an Asian
identity in Asia (e.g., others consider them as “too American”, thus belonging to the
West). Others’ perceptions of where one belongs—in the mainstream culture or
otherwise, could affect how the individual responds. Feeling rejected by members of the
mainstream culture could make the bicultural more ready to disengage from that culture
or embrace their other cultural identity as a self-protective strategy. If a perceived (lack
of) acceptance by others engenders the BII moderation effect (i.e., culturally contrastive
or assimilative shifts to primes), these perceptions should relate to individuals’ level of
BII, even when considering other factors such as the individuals’ own inclinations to
belong to the culture.

Empirical research has typically assessed BII after cultural priming (e.g., Benet-
Martinez et al., 2002; Mok & Morris, 2009). To avoid potential priming influences on
BII, I measured BII before the priming task and sought to demonstrate its moderating
influence.
Method

Participants. Fifty Chinese-Americans (24 men; mean age = 26.08, SD = 4.72) participated in a web study on "East Asian-American Consumers" for $5. On average, participants had lived 22.88 (SD = 7.83) years in the U.S. Identification with American and East Asian culture, rated on a scale of 1 (very weak) to 7 (very strong) was 5.26 (SD = 1.01) and 4.82 (SD = 1.17), respectively. Proficiency in English and an Asian language, assessed on a scale of 1 (very poor) to 7 (very fluent) was 6.85 (SD = .55) and 4.12 (SD = 1.64), respectively. Fifteen participants were first-generation (i.e., born in East Asia) and 35 were second-generation biculturals (i.e., born in the U.S.). No effects of immigrant-generation emerged in the analysis below so it is not considered further.

Materials and procedure. Participants received a weblink with instructions to complete the study in one sitting and in a private and quiet location. To assess self-perceptions of distinctiveness, participants indicated on a scale of 1 (strongly agree) to 7 (strongly disagree) the extent to which they felt they had many things in common with others, and whether they felt distinctive from others. Ratings of the items (adapted from Wiekens & Stapel, 2008) were uncorrelated in the present study, r(50) = .10, p > .10. Next, participants rated their BII along 4-items on a scale of 1 (strongly disagree) to 7 (strongly agree). The items tapped the degree of harmony versus conflict in their bicultural identities (e.g., “I don’t feel trapped between the Asian and American cultures”, “I feel conflicted between the Asian and American ways of doing things”; Benet-Martinez & Haritatos, 2005). Then, one of their cultural identities was primed by querying them about Asian [or American] cultures. They rated 10 statements such as “I
am well aware of events in Asia [America]” and “I like to know about Asian [American] news more than world news”.

Next, participants were presented with a shopping choice task, adapted from Levav and Rui (2009). They were asked to imagine they were in a convenience store looking for candy bars and highlighter pens to prepare for an upcoming exam. Participants were asked to choose three candy bars and three highlighter pens based on what was available in the store. There were six types of candy bars (Nestle Aero milk chocolate, Snickers, Kit Kat, Twix, Hershey's Creamy Milk Chocolate with almonds, Reese's Peanut Butter Crunch) and six highlighter colors (purple, orange, blue, pink, green, and yellow). Participants read they could choose three candy bars and three highlighter pens of any kind or combination. Participants made their selection by entering a number next to each available type of candy bar followed by that for highlighter color (possible range: 0 - 3). A variety score was formed by summing the number of different candy bars and different highlighter colors chosen; a higher score denotes more variety seeking. (An initial 2 (domain: candy vs. color; within-subjects) × 2 (cultural prime: Asian vs. American) × BII ANCOVA revealed no significant effects of domain so I collapsed across domain in the analysis.) Last, participants completed a demographic survey.

Results

Preliminary considerations. I computed a BII composite (α = .76), in which higher scores reflect higher identity integration (M = 4.62, SD = 1.29). The variety score was related to BII r(50) = -.34, p < .05, though not to American or Asian identification,
both \( p > .10 \). The self-distinctiveness measures did not correlate with BII or the variety score, \( p > .10 \).

**Hypothesis testing.** I regressed the variety score on cultural prime (Asian vs. American), BII (mean-centered), and the interaction between the two variables. There was a main effect of BII (\( \beta = -.38 \)), \( t(46) = -3.22, p < .01 \). The predicted interaction of cultural prime and BII was significant (\( \beta = .33 \)), \( t(46) = 2.83, p < .01 \). I probed the interaction by plotting high and low BII at one standard deviation above and below the mean. As shown in Figure 1a, high BII sought more variety in the American than Asian prime condition (\( \beta = .42 \)), \( t(46) = 2.03, p < .05 \), implying a culturally assimilative shift. Conversely, low BII sought less variety in the American than Asian prime condition (\( \beta = -.45 \)), \( t(46) = -2.05, p < .05 \), implying a culturally contrastive shift.

**Alternative accounts.** Individual differences in general perceptions of self-distinctiveness did not underlie the differential responses to cultural primes. Controlling for the self-distinctiveness measures in the above analysis did not change the significance of the BII moderation effect. These measures showed no main or interaction effects with cultural priming.

I also tested whether the moderating effects of BII are distinct from effects of cultural identity strength. I conducted a similar regression as above, adding Asian or American identification and its interaction with cultural prime as plausible predictors. I found no main or interaction effects of Asian or American identification. The interaction of cultural prime and BII remained significant. This analysis suggests that biculturals' identity structure uniquely predicts cultural assimilation versus contrastive responses, beyond their strength of cultural identification.
To check that low BIIs contrast against the primes of both their cultures, I collected data with a separate sample of 27 Asian-Americans who were recruited in the same manner yet were not culturally primed prior to completing the shopping task. (For this reason, they also rated their BII after the choice task.) These participants did not differ from the priming sample on BII or any demographic variables except on age, \( M_{\text{priming}} = 26.08, SD = 4.72 \) vs. \( M_{\text{control}} = 23.26, SD = 3.55 \). This control condition allows an assessment of how cultural primes shift biculturals’ responses, relative to their baseline. The results, collapsing across sample, yielded a significant interaction of cultural prime (Asian vs. none vs. American) and BII, \( F(2, 71) = 6.02, p < .01 \), besides a main effect of BII, \( F(1, 71) = 10.06, p < .01 \), and of cultural prime, \( F(2, 71) = 4.96, p < .05 \). The BII moderation effect, displayed in Figure 1b using a median split on BII (low: \( n = 36 \), high: \( n = 41 \)) provides evidence that low BIIs contrast against primes of both their cultures. Variety seeking was higher in the Asian relative to the control condition and variety seeking was lower in the American relative to the control condition. Whereas results of the control condition also suggest that American culture is more salient for high BIIs, it supports the notion that for low BIIs, American culture is more salient after Asian priming, whereas Asian culture is more salient after American priming.

Finally, I sought to gauge whether perceived acceptance by others influences BII and hence shape the direction of shifts to cultural primes. This perceptual account is based on the assumption that low BIIs contrast from culturally cued norms because they perceive that others disapprove of their attempts to mesh with the culture. I explored the relation between BII and others’ perceptions of their belongingness in the culture. I asked 33 Asian-Americans (22 of which were in the control sample described above) to rate
their BII (using the same scale as described above), the degree to which they felt they belonged in America, and the degree to which they thought other Americans felt they belonged in America; the latter two items were rated on a scale of -3 (not at all) to 3 (very much). They also rated on a scale of 0 (not at all) to 3 (very often) how often they were misperceived by other Americans as belonging to another country, and being a non-native English speaker. (Participants could also check “N/A” if they did felt the statement was self-descriptive and hence not a misperception. Two participants endorsed the statement that they were from another country and one endorsed that they were a non-native English speaker.) Research (Cheryan & Monin, 2005) has identified these as common misperceptions that signal to Asian-Americans that they do not belong to the host culture. (Similar questions to measure belongingness and misperceptions in Asia were not included in case participants had never lived in Asia.) As I argue in the present work that the contrast response reflects a process of internal identity management, I expect that others’ evaluation of their cultural identity would be less important to BII relative to how the biculural views their self. To assess this, I regressed BII on self-perceived belongingness, other-perceived belongingness, and misperceptions of being from another country and of being a non-native English speaker. I controlled for immigrant-generation and host culture (American) identification, which have been previously linked with BII (Benet-Martinez & Haritatos, 2005). Self-perceived belongingness emerged as the only significant predictor of BII ($\beta = 1.08$), $t(26) = 4.10, p < .001$. Hence, it is unlikely that contrastive shifts develop from being routinely excluded from the cultural group that the individual seeks to belong.

Discussion
Results demonstrate that BII moderates the effect of cultural cues on decisions relevant to self-perceptions (e.g., uniqueness-seeking). High BIIs assimilated to cultural norms in their choice for variety, whereas low BIIs contrasted against cultural norms. Contrast effects by low BIIs occurred without use of valence self-discrepant primes, and were further unassociated with social comparison processes, cultural identification strength, or perceived rejection by members of the mainstream culture. These findings are consistent with the proposal that the contrast response is motivated.
CHAPTER IV

NONCONSCIOUS VS. CONSCIOUS PROCESSES

If contrast effects reflect motivated identity management tactics, one would expect that they become automatized and can occur without awareness. Low BIIs generally defy situationally salient cultural cues, so this could be overlearned to the point of nonconscious occurrence (e.g., Bargh & Williams 2006, Cohen, 1997). For instance, chronic attempts of low BIIs to act more Asian in an American setting, or more American in an Asian setting, could cause spontaneous activation of the alternative cultural frame (e.g., Asian) whenever the individual is exposed to cues of one of their cultures (e.g., American). Thus, motivation to react against cultural norms could be triggered by cultural cues without conscious awareness.

In Experiments 2 to 3, I propose and document that culturally contrastive responses can occur nonconsciously and automatically in low BIIs. Specifically, I examine whether the subliminal presentation of cultural cues can trigger alternative cultural frames for low BII individuals. Experiment 2 illustrates that subliminal cultural primes interact with BII to affect decision making— in this case, search for individualistic or collectivistic information. Experiment 3 examines the BII moderation effect on performance in a culturally stereotypical or non-stereotypical domain.

Experiment 4 attempts to directly assess whether low BIIs have motives to resist influences of the primed culture, which could explain their contrast. It also examines whether in public, BII influences cultural contrast. I find that low BIIs are more likely to
defy the consensus in their cultural in-groups, yet they appear oblivious of their contrastive behavior.

Experiment 2: Shifts in Information Search

I examined whether the BII moderation effect on behavioral decisions holds when cultural cues are presented subliminally. I assessed preference for advertising appealing to individualistic or collectivistic ideals. I predict that high BIIs will seek more individualistic information and less collectivistic information after American (vs. Asian) priming (assimilative shift), whereas low BIIs will show the opposite pattern, seeking less individualistic information and more collectivistic information (contrastive shift) after American (vs. Asian) priming. Evidence that BII moderates effects of subliminal cultural cues would reveal the implicit nature of the contrast effects, relatively independent of conscious awareness or deliberate processing.

Method

Participants. Fifty Chinese-Americans (16 men; mean age = 23.18, SD = 3.86) at Columbia University were recruited and paid $7. Average years lived in the U.S. was 13.35 (SD = 8.81). Participants identified with both American (M = 4.98, SD = 1.08) and East Asian culture (M = 5.08, SD = 1.35), and proficiency in English and an East Asian language was 6.46 (SD = .86) and 5.34 (SD = 1.80), assessed on the scales used in the prior experiments. No immigrant-generation differences emerged on the independent and dependent measures so immigrant-generation is not considered further.
Materials and procedure. On arrival, participants were randomly assigned to the Asian or American priming manipulation. The manipulation was embedded in a lexical decision task administered on the computer. The ostensible goal of the study was to assess their reaction times. Specifically, as a cover story participants were told that in today’s fast paced world, organizations seek to hire individuals who are attentive, reliable, and efficient. The following computer task was designed to gauge this potential. Participants were told that strings of letters would appear on the screen. They were instructed to press the letter “z” when the string was a word and the letter “m” when the string was a nonword. Participants were told that their goal was to respond as quickly and as accurately as possible as if it were part of a job interview screening process. Participants then completed 4 practice trials and 72 lexical decision trials. Each trial included a 250 ms premask (XXXXXXX), a 15 ms exposure to the prime (the word “Asian” or “American”), a 50 ms postmask (XXXXXXX), followed by the target letter string (Dijksterhuis, Preston, Wegner, & Aarts, 2008). The target words remained on the screen until a response was made. The trials were evenly divided between letters strings that were words and nonwords. The (real) words were not specific to Asian or American culture (e.g., design, locate, inform). The practice trials did not contain the prime words.

Immediately following this task, participants were administered a paper survey asking about their decisions in consumer situations. Participants were asked to imagine they were browsing the main web page of Mercedes-Benz. It contained a new press release which read:

PRNEWSWIRE- Today, the Chairman and CEO of Mercedes-Benz announced that Mercedes-Benz will launch a new automobile line, named Ultraline which will include a 2-door and 4-door sedan. Shipments will begin at the end of the year.
The caption was adapted from Monga and John (2008). Below this were two options for learning more about Ultraline, presented side-by-side in separate text boxes, labeled A and B. Participants were asked which box, A or B, they would click to find out more information.

The two kinds of information were designed to tap individualistic versus collectivistic ideals, modifying the advertising appeal in Torelli and Kaikati (2009). The individualistic appeal read:

The Ultraline is designed for unique individuals like you who want to go where others cannot. Click here for information about how stylish and unique the design is, and to show you how the product surpasses the competition in those features to help get you to the top.

The collectivistic appeal read:

The Ultraline is designed for spending quality time with those you care for. Click here for information about design features to provide excellent comfort for rear passengers, and to show you how the product surpasses the competition in security and ergonomic features to provide a better experience for those riding with you.

Whether the individualistic or collectivistic appeal was displayed on the left versus right was counterbalanced across participants, and it did not affect the results.

Participants were asked to rate “how likely would you be to click the hyperlink in Description A [B]?” on a scale of 1 (very unlikely) to 7 (very likely), and “how important would it be for you to find out about the product features in description A [B]” on a scale of 1 (not at all important) to 7 (very important) (Torelli & Kaikati, 2009). The two items were significantly correlated (individualistic: \( r(50) = .71, p < .001 \); collectivistic: \( r(50) = .60, p < .001 \)) and were averaged to form an index of information search. Afterwards,
participants completed the BII measure as in the prior experiment on a scale of 1
(strongly disagree) to 7 (strongly agree) and also a demographic survey. Last,
participants were probed for suspicions. No participants reported seeing a word repeated
throughout the lexical decision task, suggesting they were unaware of the priming.

Results

Preliminary considerations. BII (α = .82; M = 4.32, SD = 1.42) was uncorrected
with American or Asian cultural identification (both p > .10), indicating that the cultural
primes are self-similar to both high and low BIIs. BII was uncorrelated with the search
for individualistic or collectivistic information, both r(50) < .10, p > .50. Search for
individualistic information was unrelated to that for collectivistic information, r(50) >
.10, p > .88. Whereas American identification was uncorrelated with the search for
individualistic or collectivistic information, both r(50) < .05, p > .75, Asian identification
was related to the search for collectivistic information, r(50) = .45, p < .01, but not
individualistic information, r(50) = .15, p = .29.

Hypothesis testing. I first regressed the search for individualistic information on
cultural prime (Asian vs. American), BII (mean-centered), and the interaction between
cultural prime and BII. The predicted interaction of cultural prime and BII was significant
(β = .52), t(46) = 3.20, p < .01. I decomposed the interaction term at one standard
deviation above and below the mean to observe the simple effect of cultural priming for
high versus low BII participants. As predicted, and shown in Figure 2, high BIIs sought
individualistic information more after American versus Asian priming (β = .77), t(46) =
2.42, p < .05, whereas low BIIs sought it less (β = -.67), t(46) = -2.09, p < .05.
I conducted a similar regression analysis predicting the search for collectivistic information. Asian identification was included as a covariate. Apart from a main effect of Asian identification ($\beta = .50), t(45) = 3.41, p < .01$, no other effects emerged.

**Discussion**

Results further demonstrate that BII moderates the effects of cultural primes on decisions relevant to the self (e.g., seeking information about individualism-relevant features). The use of subliminal and self-similar primes lends support for the prediction that it is an unconscious and motivated process. Cultural cues appear to trigger conformity motives in high BIIIs whereas contrast motives in low BIIIs, and these can operate nonconsciously and automatically.

No effects of cultural priming or of BII emerged on the search for collectivistic information. A possible explanation is that the collectivistic appeal primarily tapped concerns about one's family as the rear passengers. Such familial concerns may be less relevant to urban college students, and perhaps other collectivistic themes would resonate better. Future research could explore this possibility.

Experiment 3: Shifts in Math Performance

The purpose of Experiment 3 was to provide further evidence that cultural cues can trigger contrast nonconsciously in low BIIIs. I studied Asian-Americans' performance on an academic quiz after subliminal exposure to cultural primes. There is considerable evidence for an emphasis on math achievement among Asians in the U.S. (e.g., California Assessment Program, 1980, 1982) and abroad (cross-cultural comparisons, e.g., Stigler,
Lee, Lucker, & Stevenson, 1982). For Asian-Americans, implicit activation of their Asian mindset could come with enhanced accessibility of the social norm to perform well on math tasks. The increased norm accessibility could then motivate math performance. As the previous experiments imply that cultural cues activate culturally congruent mindsets for high BII, whereas culturally alternative mindsets for low BII, Asian primes should facilitate math performance for high BII Asian-Americans, whereas American primes should facilitate math performance for low BII.

Prior evidence shows that identity salience can shift math performance. Shih, Pittinsky, and Ambady (1999) found that Asian-American women whose Asian identity was activated displayed superior math performance than those whose female identity was activated. This finding likely involves the activation of stereotypes of Asians as strong in math and women as weak in math, respectively.

Another finding in this literature is that people act in line with stereotype primes that are presented subtly or implicitly, but not those presented blatantly or explicitly (Greenwald & Banaji, 1995). For instance, female negotiators who were explicitly told that their gender would hinder their ability to succeed exhibited stereotype reactance—they engaged in behaviors less consistent with the traditional female stereotype than when exposed to the gender stereotype implicitly (Kray, Thompson, & Galinsky, 2001). This echoes findings in the priming literature that individuals made explicitly aware of the connection between the priming task and their judgment engage in overcorrection for the biasing influence, and hence display contrast effects (Wheeler, DeMarree, & Petty, 2007). Low BII may be more likely to detect a priming influence, as they are higher in neuroticism or emotional sensitivity (Benet-Martinez & Haritatos, 2005). This is an
alternative account of their contrast effects to cultural primes, yet it can be ruled out by using subliminal priming in which individuals are unaware of being exposed to cultural stimuli.

The present research differs from prior studies of stereotyping priming in several ways. First, the manipulation focuses on two cultural identities, Asian and American. Second, I predict and test an interaction of cultural prime and BII, not just a main effect of the identity primed. Third, subliminal priming is used to rule out accounts in terms of low BIIs’ detection of a priming influence. Fourth, I did not simply use a standard academic test (e.g., Shih et al., 2009), as performance on tests can reflect demand characteristics, self-presentation motives, and cultural norm accessibility. My goal was to isolate the effects of BII on cultural norm accessibility. Hence, I borrowed the random answer paradigm developed by Wegner, Sparrow, and colleagues (Wegner, Fuller, & Sparrow, 2003; Sparrow & Wegner, 2006). It is difficult for people to answer simple true-or-false questions randomly (i.e., without trying to be correct or incorrect), because of deeply established social norms to provide correct answers to questions. Despite an explicit goal to answer randomly, the implicit performance goal intrudes as participants typically answer at correctness levels greater than chance (.50) (e.g., Sparrow & Wegner, 2006).

I presumed that activation of Asian cultural norms would amplify the implicit math performance goal. Hence, I expect that high BIIs would exhibit elevated correctness after Asian than American priming. Low BIIs, given their implicit motive to defy the situationally salient cultural norm, should exhibit decreased correctness after Asian than American priming.
Further, to check that this dynamic is specific to the culturally-laden domain of math, I subsequently presented a quiz of questions that tapped general knowledge. On general knowledge questions, I expected that the difficulty of random answering would not differ by cultural condition or BII, as accuracy in general knowledge should not differ across cultures.

**Method**

**Participants.** Thirty-two East Asian-Americans (18 first-generation, 14 second-generation; 12 males; ethnicity: Chinese, \( n = 24 \), Korean, \( n = 6 \), Japanese, \( n = 2 \); mean age = 21.53 years, \( SD = 3.39 \)) at Columbia University participated in exchange for $7. Mean years lived in U.S. was 13.43 years (\( SD = 8.10 \)). Level of identification with American and East Asian culture was 4.88 (\( SD = 1.16 \)) and 5.09 (\( SD = 1.30 \)), respectively, and proficiency in English and an East Asian language was 6.69 (\( SD = 0.64 \)) and 5.13 (\( SD = 2.06 \)), respectively, rated along the scales in the prior experiments. There were no effects of immigrant-generation, sex, or ethnicity on the results below, so these variables are not discussed further.

**Materials and procedure.** I adapted the task in Sparrow and Wegner (2006). Participants were seated in individual cubicles with a desktop computer. The study was administered using Direct RT. First, participants were subliminally primed with Asian (\( n = 15 \)) or American culture (\( n = 17 \)) in a lexical decision task similar to the previous experiment. The only difference from Experiment 2 was the number of lexical decision trials (increased from 48 to 64) and the keys pressed to indicate whether a string of letters displayed was a "word" or "nonword" (the arrow keys "↑" or "↓" were used, as opposed to the letters "z" or "m").
Next, participants completed the random answering task. Participants were told that they would be presented with a series of questions that would be presented visually on the screen and heard through the headphones at the same time. (The aural procedure was developed by Sparrow and Wegner (2006) to prevent a strategy of answering randomly by not reading the questions. In the present study, the questions were read by a generic computer-generated voice). The questions would require yes or no responses and these would be made by pressing the "z" and "m" key respectively. Participants were asked to provide a random response to each question. By random, they should provide correct answers to half of the questions, and incorrect answers to half of the questions. All the questions were easy. There were 2 practice trials ("Are there 10 months in a year"; "Does 1/2 dozen = 6"?), followed by 20 math questions (e.g., "Does a triangle have 3 sides?", "Does 7 - 2 = 4"?), and 20 general knowledge questions (e.g., "Are dinosaurs extinct?", "Is ice cold?"). The correct answer was "yes" for half of the total questions and "no" for the other half, pseudo-randomized within participants.

Afterwards, participants rated their BII along the same items and scales as in the prior experiment, and they completed a demographic survey.

Dependent measures. The main dependent variables were the proportion of correct answers for the i) math and ii) general knowledge questions. For ease of interpretation of the results, I used a median split to divide participants into low and high BII (both groups, n = 16) to compare their mean correctness by question type and cultural condition with a test value of .50 (the mean proportion expected from random answering).

Results
Preliminary considerations. I formed a BII composite, as in the prior experiment ($\alpha = .68$, $M = 4.40$, $SD = 1.16$, Median = 4.63). Neither BII nor any demographic variables was related to the dependent measures. The correctness level for math and for general knowledge questions was uncorrelated, $r(36) = -.07$, $p = .72$. A 2 (question type: math vs. general knowledge; within-subjects) $\times$ cultural prime (Asian vs. American) $\times$ BII (low vs. high) ANOVA revealed only a main effect of question type, $F(1, 28) = 5.79$, $p < .05$, suggesting that participants were more correct on math ($M = .60$, $SE = .20$) than general knowledge questions ($M = .51$, $SE = .03$). Also, correctness levels for math questions was significantly greater than .50, $t(31) = 4.83$, $p < .001$, but not for general knowledge questions, $t(31) = .58$, $p = .57$. Comparable to past research (Sparrow & Wegner, 2006), mean correctness collapsing across question type exceeded chance levels ($M = .56$, $SE = .09$), $t(31) = 3.67$, $p < .01$, suggesting that a correct answering process was activated in the present study.

Math quiz. To explore whether correctness levels varied as a function of cultural condition or BII, I submitted the proportion of correct answers to a cultural prime (Asian vs. American) $\times$ BII (low vs. high) ANOVA. The interaction was marginally significant, $F(1, 28) = 3.96$, $p = .06$. As shown in Figure 3, low BIIs were more correct after American versus Asian priming ($M = .66$, $SE = .04$ vs. $M = .54$, $SE = .04$), $F(1, 28) = 5.03$, $p < .05$. This is initial evidence that American cues activate Asian frames for low BIIs. High BIIs showed a non-significant trend towards being more correct after Asian than American priming ($M = .61$, $SE = .04$ vs. $M = .58$, $SE = .04$), $F(1, 28) = .32$, $p = .58$.

To test the hypothesis that high (low) BIIs are less able to produce random responses after Asian (American) priming, I compared the mean correctness for each BII
group in each priming condition to a test statistic of .50. For high BIIs, random responses were significantly more correct than a test value of .50 after Asian priming, \( t(7) = 2.43, p < .05 \), but not after American priming, \( t(7) = 1.93, p > .05 \). For low BIIs, correctness levels were significantly greater than the test value of .50 after American priming, \( t(8) = 4.59, p < .01 \), but not after Asian priming, \( t(6) = .92, p > .05 \). Hence, Asian cues automatically activate Asian cultural norms for high BIIs, whereas American cues automatically activate Asian cultural norms for low BIIs. Results are consistent with the notion that cultural cues invoke different cultural frames (assimilative vs. contrastive) as a function of BII.

**General knowledge quiz.** An ANOVA predicting the proportion of correct answers by cultural prime (Asian vs. American) and BII (low vs. high) yielded no significant effects. That is, there were no effects of cultural priming or BII on correct answering. Moreover, mean correctness levels were not significantly different from .50 for low or high BIIs in each prime condition, all \( p > .22 \). These results shed light that the cultural primes do not elicit correct answering in general.

**Discussion**

This study provides further evidence that the effects of cultural cues are moderated by BII, nonconsciously and automatically. High BIIs adhere to the performance norms of the primed culture, whereas low BIIs defy these norms and adhere to those of their nonprimed identity. Results suggest that these effects were specific to the performance domain (math) where cultural norms diverge, as they did not extend to general knowledge. That said, it is possible that the non-effects of the latter quiz reflect decay of the prime, so replication with order counterbalancing is worthwhile.
Experiment 4: Contrast as Constructive Conflict

In Experiments 2 and 3, I demonstrated that cultural cues can trigger contrast implicitly in low BII. Experiment 4 aimed to test that the contrast behavior is motivated. Moreover, I examined the implications of cultural contrast in a public domain. This goes beyond the earlier investigations in private responses.

I studied biculturals' contrast (vs. conformity) in group decision-making. I propose that lower BII engenders more contrasting behavior in response to group judgments perceived as incorrect but not to those perceived as correct. According to theories on motivated reasoning, people reach wished-for conclusions provided they can construct a suitable justification for it (Kunda, 1990). While individuals with low BII may have the impulse to contrast from salient cultural norms, it need not imply that they do so indiscriminately. When the group consensus is inaccurate, low BII is more likely to contrast because their wished-for behavior can also be justified in terms of accuracy. Yet, when the group consensus is accurate, low BII should fail in justifying their desired contrast so they are compelled to conform. The present study would inform whether the contrast of low BII is motivated.

I examined this dynamic in a social conformity paradigm (Berns et al., 2005). Bicultural Asian-Americans were asked to judge as part of a team, whether pairs of three-dimensional objects were the "same" or "different" after mental rotation. Peer pressure was induced by presenting participants with the responses of three "teammates" who gave right or wrong answers roughly half the time. The cultural background of the in-group
was varied, such that teammates had Asian or American surnames. Prior studies found that low BII is contrast against the norms of both of their cultures (Benet-Martinez et al., 2002). Hence, I expected that low BII would be more likely to challenge the group consensus regardless of the group’s culture and that contrast would be more prevalent when the group consensus was incorrect. In this sense, the current study investigates whether low BII can yield beneficial consequences, such as resisting groupthink in cultural in-groups. Previous studies have highlighted contrastive behavior only in contexts where it seems perverse and dysfunctional (e.g., Mok et al., 2010), so it is important to show that it is not inherently so.

Furthermore, to the extent that low BII may contrast against cultural norms without their awareness (see Experiment 2 and 3), implying it is an overlearned response, I expected that low BII’s contrast behavior would not correspond with their explicit reports of defying the in-group consensus.

Apart from BII, general individual differences may affect cultural conformity. Agreeableness (John, 1990) or need for closure (Kruglanski & Webster, 1996; Fu et al., 2007) could drive individuals to think in consensus with their in-group. To provide a stringent test of the hypothesis, I assessed the effect of BII beyond that of agreeableness or need for closure.

Method

Participants. Fifty Asian-Americans (ethnicity: Chinese, n = 39, Korean, n = 11; 15 men; 25 first-generation, 25 second-generation; mean age: 22.92 years, SD = 5.58) at Columbia University participated for $7. Average years lived in the U.S. was 15.61 (SD = 8.22). Identification with American and East Asian culture, rated on a scale of 1 (very
weak) to 7 (very strong) was 5.28 ($SD = 1.14$) and 4.94 ($SD = 1.43$), respectively.

Ethnicity and sex did not affect the results, so they were dropped in the analyses.

*Materials and procedure.* Participants were seated in individual cubicles with a computer. The study was administered using Media Lab. Participants were first asked to type their first initial and last name. Then they read the following study description:

In organizations, work assignments are often complex and require team effort and collaboration. We are interested in how people work in teams on complex tasks. To simulate complex assignments, you will be presented with pairs of 3-dimensional objects. Your task is to judge whether the objects can be rotated to match each other (hence called "same") or no rotation can make them match (hence called "different").

Then, participants were presented with two examples of object pairs that were the "same" or "different" after rotation. The 3-dimensional objects were from Shepard and Metzler (1971). Participants were asked to contact the researcher if they needed clarification of the answers or the instructions.

Next, participants learned they would be assigned to work as a team on the task. They were told their teammates were students who had previously participated in the study, and who had already viewed the objects and made their response. Before engaging in the task with their team, participants were asked to do five practice questions on their own. This was designed to exercise their accuracy in decision-making. In each question, participants were presented with a pair of objects and asked, "Are the objects below the same (can be rotated to match) or different (no rotation can make them match)?". Participants indicated their answer by clicking a box marked "same" or "different", and were allowed as much time as they needed. Afterwards, the team assignment was made.
Participants were told, "Please wait while we access the server for your teammates' information."

To enhance the credibility of the team assignment, a delay of 10-seconds was programmed before the process was completed. Half of the participants were randomly assigned to the Asian or American condition. In the Asian [American] condition, participants read that their teammates were "T Chung", "j. lee", and "P. Hong" ["T Collins", "j. lewis", and "P. Holt"]. Participants were instructed to work with their team on the next 30 questions.

In each question, participants judged whether a pair of objects was the "same" or "different" as in the practice questions. An important modification was that the responses of teammates appeared next to the objects, along with participant’s name, as recorded at the beginning of the study. This was to enhance the realism of the group manipulation, such as one's responses being accountable to the team.

I used object pairs with angles of disparity ranging from 100 to 180 degrees (mean 137 degrees) for moderately difficult stimuli (Berns et al., 2005). Thus, incorrect responses by teammates would not appear strongly contrived. Out of the 30 questions, there were 12 trials in which the team was unanimously incorrect, 14 trials in which the team was unanimously correct, and 4 split-decision trials which were inserted as fillers to maintain believability about the team (e.g., 2 teammates answered "same", whereas 1 answered "different"). Unanimous team answers were evenly split between "same" or "different".

Afterwards, participants rated their task performance and that of their teammates on a scale of 1 (very poor) to 7 (very good). They also rated their own overall accuracy
and that of their teammates' on a scale of 1 (extremely inaccurate) to 7 (extremely accurate). Ratings of self-accuracy and performance were correlated, $r(50) = .78$, $p < .01$, and averaged to measure perceived self-competence. Ratings of teammates' accuracy and performance were correlated, $r(50) = .82$, $p < .01$, and averaged to assess perceived team competence. Participants also indicated how much effort they exerted and how difficult the task was on a scale ranging from 1 (not at all) to 7 (very much). To tap whether the contrast reflects deliberate reactance against the group, participants reported how often they went against the answer of their team members. Responses were made on a 5-point scale (never, seldom, sometimes, often, always).

Then, participants completed the Ten-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003) using a scale of 1 (strongly disagree) to 7 (strongly agree); agreeableness was calculated by reversing and averaging the appropriate items. They also completed the 42-item Need for Cognitive Closure Scale ($\alpha = .84$; NFCC; Webster & Kruglanski, 1994) on a scale of 1 (strongly disagree) to 6 (strongly agree). To assess BII, participants rated on the same scale as the prior experiments 4-items that tapped the degree of harmony versus conflict in their cultural identities. A BII composite was formed with higher scores reflecting higher BII ($\alpha = .83$; $M = 4.36$, $SD = 1.29$; median = 4.25). Lastly, participants completed a demographic survey.

**Dependent measure.** I focused on participants' response to unanimous team answers. Contrast (vs. conformity) was assessed by the number of trials in which participants went against their group. I distinguished contrast to incorrect versus correct team responses. Corrective contrast was inferred from the total number of trials on which participants opposed an incorrect team answer (maximum 12); see Figure 4 for a
screenshot. Obstructive contrast was inferred from the total number of trials in which participants opposed a correct team answer (maximum 14).

**Results**

*Preliminary considerations.* Table 2 displays the descriptive statistics and correlations among the study variables. Ratings of task effort and difficulty were 5.10 ($SD = 1.11$) and 4.82 ($SD = 1.14$), respectively, suggesting that participants took the task seriously. Ratings of team competence ($M = 4.51$, $SD = .87$) was above the scale midpoint, $t(49) = 4.16$, $p < .01$, suggesting that teammates' answers were considered reasonable. Perceived self- or team competence, task effort or task difficulty did not vary by cultural condition or BII. Hence, task ability or motivation is unlikely to explain the results below.

BII was marginally related to American identification, $r(50) = .27$, $p = .06$, although not to Asian identification. As cultural identification in general may influence the extent to which individuals are willing to incur negative personal outcomes to benefit the group (confronting incorrect group consensus), I controlled for American identification in subsequent analyses.

*Corrective contrast.* A regression analysis examined the prediction that low BII are more likely to contrast to incorrect group consensus. Supporting my prediction, there was a main effect of BII, such that individuals with lower BII contrasted from incorrect team answers more often. The effect of BII emerged, despite controlling for the culture of the group and American identification ($\beta = -.43$), $t(46) = -2.98$, $p < .01$. (Culture of the group did not interact with BII or American identification.) No other differences
emerged. Figure 5 displays the results using a median split on BII (high: $n = 23$; low: $n = 27$).¹

**Obstructive contrast.** A separate regression analysis examined whether low BIIs are more likely to contrast from correct group consensus. I controlled for culture of the group, American identification, and immigrant-generation, which related to contrast to correct (though not incorrect) team answers. Results showed only a main effect of generation ($\beta = .35$), $t(45) = 2.34, p < .05$. Thus, BII does not influence indiscriminate contrast, such as contrast when the group is correct (see Figure 5).

**Awareness of contrast.** BII was uncorrelated with explicit reports of going against the team answers, $r(50) = .12, p = .41$, suggesting that low BIIs did not experience their contrastive impulses at a conscious level. Also, behavioral contrast did not correspond with explicitly reported attempts to resist the group consensus. If anything, corrective contrast was related to reports of less contrast against the group, $r(50) = -.40, p < .01$. These results complement those of the previous experiments that low BII need not influence contrast against cultural norms at an explicit level.

**General conformity motives.** Finally, I examined whether contrast was influenced by agreeableness or NFCC. These variables had no effects as predictors or covariates in the regression analyses above. This speaks to the robustness of BII in influencing contrast and from incorrect group judgments only.

**Discussion**

This study reveals that biculturals’ contrast tendencies are motivated and bounded by justification processes. Also, whether biculturals defy cultural norms in public, such as in their in-groups, depends on their BII and the group’s accuracy. Lower BIIs were more
likely to contrast, and only when the group was incorrect. This response was unaffected by the culture of the in-group, or by general conformity motives, such as agreeableness or need for closure. Furthermore, low BIIIs seemed unaware of their contrast behavior. However, norms concerning social desirability may have contributed to their explicit ratings of conformity. This notion that might be profitably explored in future research.
CHAPTER V

INFLUENCING IDENTITY INTEGRATION

The studies, thus far, demonstrates that lower BII engenders contrast responses to situationally salient cultural norms. While adaptive in some contexts, such as resisting groupthink that results from cultural homogeneity, reflexive tendencies to defy cultural expectations doubtlessly creates misunderstanding and conflict in many other contexts. Hence, it is important for managers and counselors to know whether a person’s level of BII can be changed, at least temporarily. Complementing the prior experiments demonstrating implicit effects of BII, I explored implicit means to change BII, such as through affective states and cognitive mindsets that can be induced experimentally.

BII has been primarily studied as a chronic individual difference and little is known about its malleability. Experiments 5 and 6 tested whether BII can be a state. Using an implicit affect induction procedure, Experiment 5 revealed that positive affect can increase one’s level of BII. Experiment 6 showed that BII can be shaped by two types of comparative mindset: evaluating similarities between attributes produce higher BII, whereas evaluating differences between attributes yield lower BII. Results of Experiment 6 also suggest that contrast no longer results for low BII after their BII is situationally enhanced.

Experiment 5: Inducing Affect through Facial Muscle Contraction
In the present study, I examine whether positive affect is a means of enhancing BII. Research has found that positive feelings foster more global processing than negative feelings (Gasper & Clore, 2002). For example, positive moods promote more integrative thinking (Isen, Daubman, & Norwicki, 1987). Similarly, individuals induced with positive affect used more global trait information in person-perception and focused less on specific behaviors (Isbell, 2004). Hence, positive affect could elicit a global focus on one’s cultural identities, such as viewing bicultural identities as more integrated versus differentiated.

I examined whether affect can implicitly influence BII, that is, independent of mood judgments. I adapted the physiological approach by Strack, Martin and Stepper (1988) where participants were either induced to contract facial muscles associated with smiling, or they were prohibited from contracting these muscles. This procedure has been shown to induce or inhibit positive affect, respectively, without requiring recognition of the emotion associated with one's facial expression (e.g., Ekman, Levenson, & Friesen, 1983; Strack et al., 1988). In my design, I assessed BII before and after the facial muscle manipulation. I hypothesized that contraction of the zygomaticus major muscles used in smiling (positive affect) would lead to increased BII, whereas preventing this muscle from contracting would have no effect on BII. I tested this in different cultural contexts.

Method

Participants. Seventy-six Chinese-Americans (36 first-generation, 40 second-generation; 31 males; mean age = 27.42, SD = 8.73) participated in exchange for $5. Participants were recruited from Columbia University (n = 41) and community centers in New York City (n = 35). Participants lived, on average, 20.95 years (SD = 11.53) in the
U.S. Participants identified with both American ($M = 5.15$, $SD = 1.00$) and East Asian culture ($M = 4.97$, $SD = 1.31$), and proficiency in English and an East Asian language was 6.47 ($SD = .81$) and 4.76 ($SD = 1.79$), respectively, using the scales in the prior experiments. No sample or immigrant-generation differences emerged on any of the independent or dependent variables so they are not considered further.

**Materials and procedure.** Participants received a paper survey on “Personal Experiences” and first rated how they currently felt along 8 items. There were 4 positive feelings (happy, calm, relaxed, cheerful) and 4 negative feelings (disappointed, tense, discouraged, worried); ratings were made on a scale of 1 (not at all) to 7 (extremely). Then, participants rated their BII along 8-items (4 items tapped identity blendedness, e.g., “I feel Asian-American”, “I feel part of a combined culture”, and 4 items tapped identity harmony; Benet-Martinez & Haritatos, 2005), using the scale as in the previous experiments. Next, participants were randomly assigned to a facial condition— holding an object with either their teeth or lips, which was designed to induce or inhibit a happy expression. As a cover story, participants were told:

> We are interested in task performance while eating. For example, many people have lunch at their desks so they could continue working; we are interested to see whether eating versus refraining from eating affects mental performance.

In the teeth condition, participants were asked to “simulate eating” by holding a popsicle stick tightly with their teeth and that the stick should not touch their lips. This position tensed the facial muscles associated with a smile (e.g., Strack et al., 1988). In the lip condition participants were asked to “simulate refraining from eating” by holding a popsicle stick tightly with their lips and that the stick should not touch their teeth. This position inhibited contraction of facial muscles associated with smiling (e.g., Niedenthal,
2007; Foroni & Semin, 2009). The researcher gave the participant the stick and made sure they held it in the right position, correcting them if necessary. Participants were told to hold the stick in this position for the next few (filler) tasks until they received explicit instructions to release it.

To examine any effects of the cultural setting, participants in each facial condition were randomly assigned to view an icon from Asian or American cuisine, which was a bamboo dim sum basket or an apple pie, respectively. This icon appeared on the page with the cover story and also on each page of the filler tasks that followed.

After the filler tasks (e.g., rating preferences for shapes) which lasted about 4-mins, participants rated their current mood and BII on the same items and scales as in the beginning of the study. The items for each measure appeared in a different order than previous, and participants kept the stick in their mouth during all this time. Afterwards, participants were told to release the stick and they filled out a demographic survey. Participants were interviewed at the end to probe if they saw through the cover story. None did.

Results

Preliminary considerations. I computed indices for positive and for negative mood. Positive and negative mood was correlated, $r_{pret}(76) = -.32, p < .01$, $r_{post}(76) = -.43, p < .01$, so I formed a mood composite by subtracting the mean ratings for negative mood from that for positive mood for each participant ($a_{pret} = .77$, $a_{post} = .83$); higher scores denote more positive mood.

I also computed BII, before and after the facial manipulation (identity blendedness, $a_{pret} = .68$, $a_{post} = .64$; $r(76) = .90, p < .01$; identity harmony, $a_{pret} = .86$, $a_{post}$
= .78; \( r(76) = .89, p < .01 \). The correlations between the two BII subscales was significant for this sample on both the pre and post measurements, \( r_{pre}(76) = .29, p < .05 \) and \( r_{post}(76) = .26, p < .05 \). Therefore I conduct analysis below for the BII subscales and also for overall BII (\( \alpha_{pre} = .78, \alpha_{post} = .72 \)). BII and mood was not correlated.

**Hypothesis testing.** I conducted a 2 (time: pre vs. post; within-subjects) x 2 (facial condition: teeth vs. lip) x 2 (cultural context: Asian vs. American) ANOVA on mood, identity blendedness, identity harmony, and overall BII. For the dependent variable mood, there was a main effect of time, \( F(1, 73) = 17.87, p < .001 \), suggesting that mood decreased after the facial manipulation (\( M_{pre} = 2.78, SE_{pre} = .18 \) vs. \( M_{post} = 2.11, SE_{post} = .22 \)). There was also a main effect of facial condition, \( F(1, 73) = 5.18, p < .03 \). Surprisingly, those in the teeth condition (\( M = 2.03, SE = .26 \)) reported more negative mood than those in the lip condition (\( M = 2.86, SE = .26 \)). The interaction of time and facial condition was not significant. These results suggest that the cover story was plausible and it directed participants’ attention away from their facial expression. Specifically, participants did not recognize the emotions that it was intended to induce.

For the dependent variable identity blendedness, results showed a main effect of BII, \( F(1, 73) = 5.65, p < .05 \), which was qualified by an interaction with facial condition, \( F(1, 73) = 5.08, p = .03 \). No other effects were significant. The interaction is displayed in Figure 6. Whereas the lip manipulation did not affect BII (\( M_{pre} = 4.87, SE_{pre} = .18 \), vs. \( M_{post} = 4.87, SE_{post} = .17 \)), \( F(1, 73) = .01, p = .93 \), BII increased with the teeth manipulation (\( M_{pre} = 4.99, SE_{pre} = .18 \), vs. \( M_{post} = 5.25, SE_{post} = .17 \)), \( F(1, 73) = 10.72, p < .01 \), supporting predictions. The increase in BII affected 63.2% of participants in the
teeth condition, and was not limited to low BII individuals (BII\textsubscript{pre} did not interact with facial condition to affect a net increase in BII.)

When using identity harmony as the dependent measure, no main or interaction effects emerged. In the analysis with overall BII as the dependent variable, results showed an interaction of BII and facial condition, $F(1, 73) = 4.38, p < .05$. Whereas BII did not vary significantly in the lip condition ($M_{\text{pre}} = 4.73, SE_{\text{pre}} = .17$, vs. $M_{\text{post}} = 4.70, SE_{\text{post}} = .15$), $F(1, 73) = .24, p = .63$, BII increased significantly for participants in the teeth condition ($M_{\text{pre}} = 4.75, SE_{\text{pre}} = .17$, vs. $M_{\text{post}} = 4.92, SE_{\text{post}} = .15$), $F(1, 73) = 6.11, p = .02$ (see Figure 6). Cultural context had no effect in any of the above analyses.

**Discussion**

The results show that individual differences in identity integration can be implicitly influenced by affect. Inducing contraction of the zygomaticus major, associated with smiling, significantly enhanced BII, whereas inhibiting contraction of this muscle showed no reliable effect on BII. Transient mood did not explain these effects. The cover story minimized demand characteristics or suspicion. I provide the first empirical evidence, to my knowledge, of physiological and/or affective influences on biculturals’ identity integration. This effect generalized across cultural contexts.

Results shed light on the malleability of BII (see also Cheng & Lee, 2009). Also, my results are consistent with research (Strack et al., 1988) that mood judgments are not required for facial feedback to occur.

A limitation of the procedure is that I assumed but did not directly test that a global focus was activated by the positive affect manipulation, which led participants to
construe their bicultural identities as more integrated. Future research should address whether level of focus is the mediating mechanism.

Experiment 6: Comparison Mindset Manipulation

Alternative cognitive processes besides a global focus could influence BII. I draw on the psychological paradigm of comparison mindset. In this paradigm, developed by Mussweiler (2001a), individuals are induced to focus on similarities or dissimilarities and are then asked to evaluate their current self in relation to their past self. Participants who focused on similarities viewed their adjustment to university as similar to a target student, whereas participants who focused on dissimilarities distanced their self-evaluations from the target (Mussweiler, 2001a). The effects of comparison focus also extend to self-evaluation. Participants who were primed to focus on similarities aligned their current self-evaluations to the past self, whereas participants primed to focus on dissimilarities distanced their current self-evaluations from the past self (Hanko, Crusius, & Mussweiler, 2009).

To the extent that comparison focus affects judgments of similarity or discrepancy between self-aspects (i.e., the current self relative to a past/future self), I expect it would influence evaluations of high versus low integration between self-identities. Specifically, a similarities focus should lead biculturals to see their two cultural identities as more integrated or compatible. However, a dissimilarity focus should lead individuals to see their bicultural identities as less integrated or more conflictual. Thus, I expect that one's comparison focus can influence BII. Past research has focused on how comparison focus
shapes self-evaluations from a temporal perspective (i.e., the current self in relation to the past/future self, Hanko et al., 2009), whereas I investigate the effect of comparison focus on how individuals compare their cultural identities.

The following studies sought to provide evidence that BII can be implicitly influenced by one's comparison focus. Participants were induced to focus on either similarities or dissimilarities, following the approach of Mussweiler (2001a), and BII was assessed prior to and after the mindset manipulation. I hypothesized that a similarity focus would increase BII, whereas a dissimilarity focus would decrease BII. I tested this in a pilot study. The main study moreover tested whether a similarity focus helps reduce contrastive shifts to cultural primes, to the extent that it increases BII.

Pilot Study

Method

Participants. Seventy-one self-identified Asian-American biculturals (24 men; mean age = 26.61, SD = 4.52; 21 first-generation, 50 second-generation) were recruited from online forums in NYC in exchange for $5. Participants had parents from East or Southeast Asia (49 Chinese, 14 Korean, 2 Japanese, 2 Filipino, 2 Thai, 1 Vietnamese). Average number of years in U.S. was 23.56 (SD = 7.43). Participants identified with both American (M = 5.23, SD = 1.10) and Asian (M = 4.82, SD = 1.25) culture, rated on the same scales as in the prior studies. No effects of sex or ethnicity were found on BII so these categorical variables were dropped from the analysis. BII (identity harmony) was
lower among first- versus second-generation participants ($M = 3.91$ vs. $M = 4.86$), $t(69) = -2.91, p < .01$, so the analysis controlled for immigrant-generation.

**Materials and procedure.** In a web survey, participants first rated their BII along the same items and scales as in the prior experiment. Then, to explore whether the hypothesis generalizes across cultural settings, participants rated their attitudes towards Asian or American culture along the same statements and scales as in Experiment 1 (e.g., “I am well aware of events in Asia [America]”; this task was shown to activate participants' cultural frames. Afterwards, participants completed a number of personality scales, which served as filler tasks and lasted roughly 7 minutes.

Participants then engaged in an allegedly unrelated task on "object perception", which was intended to induce a focus on similarities or differences. Participants viewed three pairs of pictures: two bunches of keys, two arrays of socks, and two toothbrushes; see Figure 7. In the similarity [dissimilarity] focus condition, participants were asked to list three similarities [differences] for each pair of pictures. After this task, participants re-rated their BII along the items and scale as in the beginning of the study, with the items presented in a randomized order. Last, they completed a demographic survey. No participants guessed the purpose of the task to list similarities or differences.

**Results**

**Preliminary considerations.** I computed BII before and after the comparison mindset manipulation (identity blendedness, $\alpha_{\text{pre}} = .34$, $\alpha_{\text{post}} = .55$; $r(71) = .76, p < .01$; identity harmony, $\alpha_{\text{pre}} = \alpha_{\text{post}} = .76$; $r(71) = .84, p < .01$). Because the identity blendedness subscale was unreliable, the identity harmony subscale was used. The two BII subscales were uncorrelated, $r(71) = -.05, p = .69$. 

Hypothesis testing. I submitted the BII ratings to a 2 (time: pre vs. post; within-subjects) $\times$ 2 (focus condition: similarity vs. dissimilarity) $\times$ 2 (cultural context: Asian vs. American) $\times$ 2 (immigrant-generation: 1st vs. 2nd) mixed-factors ANOVA. Results showed a main effect of cultural context, $F(1, 67) = 4.97, p < .05$, immigrant-generation, $F(1, 67) = 9.45, p < .01$, and an interaction of BII and comparison focus, $F(1, 67) = 5.05, p < .05$. Consistent with the prediction, BII decreased for participants who were induced to focus on dissimilarities ($M_{\text{pre}} = 4.66, SE_{\text{pre}} = .21$ vs. $M_{\text{post}} = 4.40, SE_{\text{post}} = .20$), $F(1, 67) = 4.29, p < .05$. A focus on similarities did not significantly increase BII, although the trend was in the expected direction ($M_{\text{pre}} = 4.13, SE_{\text{pre}} = .22$ vs. $M_{\text{post}} = 4.25, SE_{\text{post}} = .21$), $F(1, 67) = .99, p = .32$.

I checked whether the significant change (decrease) in BII was merely driven by participants with high BII. I submitted the change in BII ($BII_{\text{post}} - BII_{\text{pre}}$) to a comparison focus $\times$ cultural prime $\times$ immigrant-generation ANCOVA, controlling for baseline BII. The interaction of $BII_{\text{pre}}$ and comparison focus was not significant, suggesting that the effects of a dissimilarity focus was not limited to high BII individuals. The decrease in BII was also not driven by a few individuals; BII decreased for 52.8% of participants in the dissimilarity condition.

Discussion

Results provide initial evidence that BII can be implicitly decreased or enhanced depending on one's comparison focus. The main study sought to replicate and extend these findings. Given that lower BII is related to contrast effects to cultural primes, I explored whether the contrast effect becomes nonsignificant after participants are induced with a similarity focus (presuming that contrast is observed before the focus.
manipulation), and that the contrast effect holds for participants induced with a dissimilarity focus.

To test this proposal, I first primed participants with Asian or American culture and then tested for the cultural prime × BII effect on a measure of extraversion. My recent research (Mok & Morris, 2009) found that high BIIs assimilated to cultural primes (i.e., becoming more extraverted after American vs. Asian priming), whereas low BIIs contrasted away from cultural primes (i.e., becoming less extraverted after American vs. Asian priming). I expected to find similar results in the present study. Then, I randomly assigned participants to focus on similarities or dissimilarities, using the procedure in the pilot study. (With random assignment to the focus conditions, BII was presumed to moderate the effects of cultural priming for both the similarity and dissimilarity group prior to the focus manipulation.) Participants then rated their personality, in which the crucial items assessed extraversion. I predicted that contrast effects to cultural priming would be observed in participants with a dissimilarity focus, not in those with a similarity focus.

Main Study

Method

Participants. Fifty-eight East Asian-Americans (45 Chinese, 11 Korean, 2 Japanese; 36 first-generation, 22 second-generation; 19 men; mean age: 21.90 years, SD = 3.26; number of years in U.S.: M = 12.03, SD = 8.20) at Columbia University participated for $7. Participants identified with both American (M = 4.88, SD = 1.17) and
East Asian ($M = 5.12, SD = 1.33$) culture, rated on the same scale as in the prior experiments. No effects of sex or ethnicity were found in the analyses below so they are not discussed further. First- versus second-generation participants had lower BII ($M = 4.43$ vs. $5.20$), $t(56) = -2.64, p < .05$, so I controlled for immigrant-generation in the analysis.

**Materials and procedure.** Participants were subliminally exposed to Asian or American cues in a lexical decision task (similar to Experiment 3), and then rated on a scale of 1 (*not at all like me*) to 7 (*very much like me*) how well a series of traits described them. Of the 15 traits, taken from Mok and Morris (2009), 5 tapped extraversion (*active, energetic, outgoing, assertive, talkative*) and 5 tapped introversion (*shy, reserved, unadventurous, timid, quiet*). An extraversion index was formed by averaging the extraversion ratings and the reverse-scored introversion ratings; higher scores on this index reflects higher extraversion ($\alpha = .88, M = 4.74, SD = .99$). Next, participants rated the 8-item BII measure as in the prior experiment using the same scale.

The "object perception" task to manipulate comparison focus appeared next. Participants were randomly assigned by the computer to the similarity ($n = 26$) or dissimilarity ($n = 32$) condition, using the same procedure and materials as the pilot study. Then, participants completed the Ten-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003) along a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). Extraversion was computed by averaging the extraversion (*extraverted, enthusiastic*) and the reverse-scored introversion (*reserved, quiet*) item ($r(58) = -.52, p < .01; M = 4.73, SD = 1.22$). Participants then re-rated their BII along the same items and scale as earlier in
the study (the items appeared in a different order) and lastly, they completed a
demographic survey.

Results

Preliminary considerations. I computed BII before and after the comparison focus
manipulation (identity blendedness, \(a_{\text{pre}} = .71, a_{\text{post}} = .74, r(58) = .95, p < .01\); identity
harmony, \(a_{\text{pre}} = .58, a_{\text{post}} = .62; r(58) = .83, p < .01\)). Participants assigned to the different
focus conditions did not differ on BII or extraversion to start, all \(p > .05\).

Change in BII. I submitted the BII ratings of identity blendedness to a 2 (time: pre
vs. post; within-subjects) \(\times\) 2 (focus condition: similarity vs. dissimilarity) \(\times\) 2 (cultural
prime: Asian vs. American) \(\times\) 2 (immigrant-generation: 1st vs. 2nd) ANOVA. (Analysis
with identity harmony as the dependent variable yielded no effects.) Results showed a
main effect of immigrant-generation, \(F(1, 54) = 5.38, p < .05\). Moreover, the interaction
between time and comparison focus was significant, \(F(1, 43) = 5.28, p < .05\); see Figure
8. Specifically, a focus on similarities enhanced participants' BII (\(M_{\text{pre}} = 4.64, SE = .23
vs. M_{\text{post}} = 4.84, SE = .24\), \(F(1, 54) = 6.82, p < .05\). A focus on dissimilarities
nonsignificantly decreased BII (\(M_{\text{pre}} = 4.95, SE = .19 \) vs. \(M_{\text{post}} = 4.92, SE = .20\), \(ns\). The
results provide convergent support for the notion that BII can be situationally enhanced
or decreased depending on one's comparison focus. Moreover, the effects are robust to
the cultural setting and was not driven by a few participants (e.g., BII increased for
61.5% of the participants in the similarity condition.)

Effects of state BII. Recall the proposal that contrast effects to cultural priming
would be exhibited by low BIIIs prior to the comparison focus manipulation; yet after a
manipulation of a similarity (but not dissimilarity) focus, the contrast effects should be absent.

To test this, I first conducted analyses predicting extraversion from cultural priming and BII (identity blendedness). I used the measure of extraversion and BII taken prior to the focus manipulation. I found support for contrast effects among low BII; surprisingly, it was also limited to participants in the similarities focus condition. An ANCOVA predicting extraversion\textsubscript{pre} showed a significant 3-way interaction between focus, cultural prime, and BII\textsubscript{pre}, controlling for immigrant-generation, $F(1, 49) = 5.64, p < .05$.

I then examined the BII moderation effect for the focus conditions separately, using multiple regression. In the similarity condition, an immigrant-generation (1\textsuperscript{st} vs. 2\textsuperscript{nd}) $\times$ cultural prime (Asian vs. American) $\times$ BII\textsubscript{pre} (mean-centered) regression on extraversion\textsubscript{pre} revealed a significant interaction of cultural prime and BII\textsubscript{pre} ($\beta = .37$), $t(21) = 2.09, p < .05$. I decomposed the interaction at one standard deviation below (above) the mean to observe the simple effect of cultural priming for low (high) BII participants (Aiken & West, 1991). As expected, and shown in Figure 9, low BII exhibited contrast effects by reporting lower extraversion after American versus Asian priming ($\beta = -.79$), $t(21) = -2.72, p < .05$; contrast effects were not observed in high BII ($\beta = .13$), $t(21) = .42, ns$. No effects were significant for participants in the dissimilarity condition.

I expected that a similarities manipulation would reduce the contrast priming effects. Confirming this expectation, no effects were significant in a regression predicting extraversion\textsubscript{post} from immigrant-generation, cultural prime, and BII\textsubscript{post} for participants in
the similarities condition (see Figure 9). Moreover, a similarity focus did not by itself affect extraversion; an ANOVA with time (extraversion: pre vs. post), comparison focus, cultural prime, and immigrant-generation did not show an interaction of time and comparison focus, $p > .75$. Given that a dissimilarities manipulation did not significantly decrease BII in the present study, I was unable to further test whether a dissimilarity focus can produce contrast effects.

**Discussion**

The present study yields two noteworthy results. First, comparison focus can implicitly influence BII. Second, situational enhancement of BII can buffer against contrast from cultural cues. Future research could examine factors that affect biculturals' tendencies to frame-shift, as high BIIIs, for example, did not exhibit assimilation effects, and assimilative effects were not observed after a similarities focus manipulation.

It is possible that the effects of enhanced BII on contrast reduction/inhibition is explained alternatively by goal satiation. Research has shown that when individuals have acted upon a primed goal, subsequent actions are no longer consistent with the prime; the goal is satisfied (e.g., Chartrand, Huber, Shiv, & Tanner, 2008). Applying this conceptualization, low BIIIs may inhibit their contrast tendency after the similarity focus manipulation not because of enhanced BII per se, but because they had prior contrasted against the cultural primes. Further work is required to determine whether contrast responses to primes render prime-incongruent knowledge less accessible. This would distinguish the implicitly enhanced BII from the goal satiation mechanism.
CHAPTER VI

GENERAL DISCUSSION

Main Findings

In my studies, I found that biculturals' identity integration influences their responses to cultural cues. With Asian-Americans, Experiments 1 and 2 examined the effects of BII on decisions related to self-perceptions, finding that high BIIs assimilated to cultural cues (seeking more variety and individuality after American versus Asian priming), whereas low BIIs contrasted against cultural cues (seeking less variety and less individuality after American versus Asian priming). The contrast effects were not attributable to perceived self-discrepancy from priming stimuli, as the primes were not positively-valenced (Experiment 1) or consciously perceived-- the priming was subliminal (Experiment 2). Experiment 3 used a random answering paradigm to further assess whether activation of culturally alternative knowledge underlies the contrast effects. Whereas high BIIs were less able to produce random responses to math questions (Asian culture-related knowledge) after Asian priming, low BIIs showed this pattern after American priming. Hence, cultural primes seemingly activates culturally congruent frames for high BIIs and culturally alternative frames for low BIIs. This process can arise automatically and without awareness of primes.

That low BIIs have motives to oppose cultural norms was investigated and illustrated in Experiment 4. I found that low BIIs are more likely to resist the consensus
of their cultural in-groups. This response was specific to instances where the group is inaccurate, suggesting that low BIIs engage in motivated reasoning, contrasting only when the response is justified. Despite the greater tendency of low BIIs to behaviorally contrast, the cultural influence (of group members) did not similarly engender more explicit reports of contrast. It is thus possible that low BIIs’ contrarian impulses can operate nonconsciously. That the cultural contrast response was observed in public adds confidence to the robustness of low BII in influencing shifts away from cultural norms, and that it impacts interpersonal decisions and behavior.

In Experiments 5 and 6, I examine whether situational interventions can temporarily change BII and its attendant consequences for responses to cultural cues. Experiment 5 showed that variations in positive affect influence BII. Using a facial simulation procedure, I found that contraction of the facial muscle associated with smiling or positive affect led to enhanced BII, whereas inhibition of this muscle contraction did not affect BII. Explicit mood judgments did not affect the results. I provide the first empirical evidence that affective expressions moderate the degree of identity integration. Positive affect is thought to elicit a global focus which led to an increase in BII.

In Experiment 6, I examined whether a focus on similarities enhance BII, whereas a focus on dissimilarities decrease BII. My findings supported this. Moreover, contrast effects to cultural cues was eliminated after a similarities focus. These results suggest that it is important to consider the effects of state BII besides trait BII.

Empirical Contributions
The current findings appreciably add to the evidence about how biculturals are powerfully affected by cultural cues (e.g., Benet-Martinez et al., 2002; Mok & Morris, 2010). I show that the differential effects of cultural primes as a function of BII occurs whether participants are conscious of the prime or not. The effects also appear uncontrollable, as individuals found it hard to refrain from generating correct answers to math questions when their Asian identities were activated.

My research weighs in favor of the proposal that identity motives underlie the differential priming effects. Earlier studies may have confounded the motivational and cognitive mechanisms of the BII moderation effect. For example, past cultural stimuli were highly positive in valence, or featured famous icons or characters (e.g., Benet-Martinez et al., 2002), which could elicit contrast effects through perceived self-discrepancy to primes (Cheng et al., 2006; Wheeler, DeMarree, & Petty, 2007). I show that perceptual processes do not a play a key role in the BII moderation effect by relying on primes that are mundane, have no obvious valence, or are not consciously perceived. Moreover, perceived dissimilarity to others or perceived exclusion by others are not strong alternative accounts. My findings suggest that the cultural assimilation and contrast responses are motivated.

My studies also tested the automaticity of the shifts. Unlike prior findings that biculturals can take an active, deliberate role in conforming to expectations of a cultural audience (e.g., Briley et al., 2005), my research highlights that biculturals can shift automatically (Hong et al., 2000; Fu et al., 2007). My work is the first demonstration of these shifts in response to subliminal cultural primes. In sum, I use a range of explicit and
implicit priming procedures and behavioral measures to provide support for the account of identity-based motives.

My findings in the final two experiments provide support for the conceptualization that BII can be manipulated implicitly. BII appears to be malleable, that is, responsive to temporal variations in affect and comparison focus in the individual. Contrast may be reduced with situationally enhanced BII. This research holds out hope that managers, teachers, and counselors can affect individuals’ identity integration by creating the right ambiance or context.

Theoretical Contributions

My findings are novel in several ways. First, I highlight the interaction between cultural cues and BII on behavior, whereas past work has been limited to judgments (Benet-Martinez et al., 2002; Cheng et al., 2006; Mok et al., 2009). I also demonstrate the automatic nature of the differential shifts, showing that it can be triggered by subliminal cultural cues. My results cannot be explained simply in terms of conscious or deliberate efforts to shift in response to cultural norms (Briley et al. 2005; Wong & Hong, 2005). Such shifts may be overlearned to the point that it occurs nonconsciously (e.g., Bargh & Williams, 2006).

Second, I extend research on the effects of cultural identity on behavioral choice. Researchers have traditionally assumed that cultural cues activate congruent cultural frames or identities to shape choice (e.g., Aaker & Schmitt 2001; LeBoeuf, Shafir, & Bayuk, 2010). Qualifying this view, my findings suggest that cultural cues may activate
congruent or alternative cultural identities as a function of BII, that in turn, guides behavior. My findings are relevant to the identity-based motivation model (Oyserman, 2009), which holds that identities can be situationally cued without awareness and they enact identity-congruent information processing, decision making, and behavior.

Third, I show that perceived dissimilarity to primes is not a key determinant of the contrast effects. My conceptualization is that low BIIIs use counteractive control strategies in cultural contexts to minimize a sense of identity neglect; they contrast or reject the invitation of cultural cues because it neglects their other cultural identity. Conversely, high BIIIs assimilate to cultural cues because it does leave behind their other cultural identity; their two identities are integrated. Conscious strategies for navigating culture-related cues in one’s environment may crystallize into automatized habits of assimilating to non-cued or cued cultural norms.

Fourth, I highlight interpersonal implications of BII, extending past work on private cognitions (e.g., Benet-Martinez et al., 2002). Cultural contrast can occur in public. Moreover, low BIIIs are motivated to contrast within the bounds of reason (Kunda, 1990), for example, not when the cultural in-group norm is accurate. My work also informs the organizational literature on diversity and conformity. Evidence shows that surface-level (e.g., ethnicity) and deep-level (e.g., values) diversity in groups can promote dissent from the majority (Phillips & Loyd, 2006; Phillips, Northcraft, & Neale, 2006). Whereas biculturals are always "half-different" from the two cultural groups with which they are associated, my research implies that not all biculturals resist conformity pressures unless they have low BII. Thus, deeper-level characteristics, such as identity structures can influence contrast from in-group norms.
Fifth, I build on recent work implying that BII is malleable (Cheng & Lee, 2009). I show that BII can be shaped implicitly by affective and cognitive means, and this has implications for shaping responses in cultural contexts.

My work also connects to the sociological literature. Accumulating evidence suggests that immigrants or ethnic minorities do not simply assimilate to the mainstream culture with each generation (e.g., Berry, 1990; Portes & Zhou, 1993). Rather, ethnic cultures are more resilient than previously assumed, and individuals can identify with both their ethnic and host cultures or keep assimilation at bay. Moreover, sociologists have proposed that some ethnic minorities adopt a “reactive ethnicity”, where ethnic identification is strengthened in the face of subordination and disadvantage in the dominant (American) culture. Portes and Rumbaut (2001) observed that “groups subjected to extreme discrimination and derogation of their national origins are likely to embrace them ever more fiercely; those received more favorably shift to American identities with greater speed and less pain” (p. 187).

In this research, I investigated the psychology of biculturals across ethnic and host culture settings using a behavioral domain. My results suggest that assimilation and contrast against cultural influence occurs not only among immigrants across generations (e.g., Portes & Rumbaut, 2001); it also describes the momentary experiences of bicultural individuals. Moreover, low BII's adopt a reactionary stance toward cues from their ethnic culture besides host culture. My research expands on the notion that immigrants do not acculturate in an orderly straight-line pattern (e.g., Portes & Zhou, 1993), but can shift depending on the cultural context and their identity structure. Experiences of integration or conflict) between bicultural identities affects culturally assimilative or contrastive
shifts, even nonconsciously. Barack Obama may have high integration in his multicultural identities which enables him to blend in with culturally diverse audiences. David Headley, in contrast, may have high conflict between his Pakistani and American identity, so he contrasts against the prevailing cultural norms or practices and proclaims his other cultural identity. My findings also extend research of ethnic affirmation in biculturals (e.g., Chen & Bond, 2007; Yang & Bond, 1980). I show that low BII is conducive to cultural contrast to affirm another cherished cultural identity besides the ethnic identity.

Practical Implications

Organizational Implications

My findings suggest that not all bicultural managers are motivated to mesh with the cultural expectations of a setting. Outcomes in negotiation and arbitration settings (e.g., Friedman, Liu, Chi, & Chen, 2007) could vary as a function of cultural cues and BII. For example, high BII Asian-Americans may arrive at more divergent and integrative solutions in an American (vs. Asian) context, whereas low BIIs arrive at more convergent or zero-sum solutions in an American (vs. Asian) context. Likewise, in managing interpersonal conflict (e.g., Friedman, Chi, & Liu, 2006; Kim-Jo, Benet-Martinez, & Ozer, 2010), Asian-Americans with high (low) BII could be less avoidant in an American (Asian) context.

The BII moderation effect also extends to individual performance. For example, research suggests that Western culture motivates creativity more than Asian culture (e.g.,
Niu & Sternberg, 2001). I have documented that BII moderates the effects of cultural cues on creativity (Mok & Morris, 2010): High (low) BII Asian-Americans produce more novel solutions to problems after American (Asian) priming. My research provides novel insights to the consequences of dual cultural identities for workplace decision making and behavior.

**Marketing Implications**

The findings suggest that bicultural consumers’ preferences are influenced by cultural cues and their identity structure. Managers could increase marketing effectiveness by using individualistic, besides collectivistic messages for audiences of a collectivist culture. For instance, I demonstrated that even brands with an individualist and unique personality appeal to Asian-Americans, more for high (low) BIIs in an American (Asian) context. Attractive marketing appeals are likely to lead to purchasing behavior.

**Reaping the Advantages of BII**

A way to handle the problem of cultural contrast is to create a positive environment which elicits the experience of positive affect. Positive affect may focus biculturals’ attention on the general coherence of their cultural identities, as opposed to the detailed discrepancies between them. This could help individuals assimilate to the expectations of a cultural setting and build rapport with one’s counterparts. Yet, culturally contrastive responses may prove to be valuable in some cases, and be elicited by a focus on dissimilarities. Lowering BII may make biculturals less susceptible
groupthink that arises from cultural homogeneity (e.g., Janis & Mann, 1977). Low BIIs may be more likely to challenge common assumptions and express divergent ideas, which are vital to enhancing group performance and the quality of decision making in organizations (e.g., Moscovici, 1976; for exceptions, see De Dreu, Nijstad, & van Knippenberg, 2008). I demonstrated that low BIIs are more likely to challenge incorrect group consensus, suggesting that decreasing (vs. increasing) BII may yield constructive behavioral consequences. In organizations, low BIIs could have particular advantages in oversight roles such as compliance and risk control. A chronic problem is that overseers become captured by social ties to the people they monitor. When auditing international offices of a global organization, for example, low BIIs could be less likely to accommodate to local cultural norms, especially when investigating potential wrongdoing.

Managers may be able to use the activation of culturally congruent and incongruent frames to their advantage. Research has identified an array of positive effects when individuals experience “fit” between an activated processing goal and the context (Aaker & Lee, 2001; Kruglanski, Pierro, Higgins, & Capozza, 2007; Shah, Higgins & Friedman, 1998). Low BIIs, who have a cultural contrast goal, may experience a sense of fit when features of their other culture predominate in the present cultural environment (e.g., Asian artifacts, collectivistic framed messages, or an authoritarian leadership style in American contexts). High BIIs may experience a sense of fit when the cultural environment consists of culturally congruent features (e.g., a participative decision strategy is used in American contexts). People attribute more value to objects and activities when there is a fit versus nonfit (Higgins, 2000). This raises interesting
questions for future studies, such as whether low (vs. high) BIIs pay more for Asian products in an American context, whether they are more motivated by a participative leadership style in Asian contexts, or whether they prefer to be around others who behave in culturally counter-stereotypical ways. By understanding what constitutes cultural fit as a function of individual's BII, managers could better influence persuasion, decision and job satisfaction (e.g., Fulmer et al., 2010).

Limitations and Future Directions

*Deactivation and Satiation Effects*

Future research should examine whether once biculturals respond to cultural cues, impulses to assimilate to contrast in subsequent behavior is eliminated. For example, research has demonstrated that knowledge priming effects can be overcome after individuals have expressed this knowledge (Sparrow & Wegner, 2006). Similarly, Chartrand et al. (2008) showed that priming effects were diminished after participants authentically engaged in the primed behavior, although priming effects lingered for those who merely imagined engaging in the behavior. While these findings suggest that initial assimilation or contrast against cued cultural norms might reduce activation of that cultural knowledge, the bicultural individual may need to be outside of, or in a different cultural setting for the knowledge accessibility to be diminished. In addition, cultural contrast might eliminate subsequent contrast in the same domain (e.g., extraversion), yet it is likely to persist in other domains where it was not formerly expressed (e.g., attribution). Research has identified that the accessibility of knowledge is diminished
when individuals have expressed that specific knowledge, and not knowledgeableness in general (Sparrow & Wegner, 2006). In future studies, one could test whether impulses to assimilate or contrast are easily satiated, such as through a single expression of the activated cultural knowledge or in a single domain. If, as conceptualized, low BII is associated with motives to contrast, the impetus to contrast should intensify with time that individuals are required to suppress them (see Chartrand et al., 2008).

Varieties of Motives

There are several variations of the motivational account that could be teased apart and examined in future research. Whereas I have emphasized counteractive self-control, another version is that low BIIs seek to be authentic in cultural contexts by enacting the side of their self that feels left out. Although this is similar to the present identity neglect account, it does not specify motives to counteract the invitation of cultural cues. Results of greater contrast against the in-group consensus by low BIIs in Experiment 4 are not easily predicted from this authenticity account. Thus, the present conceptualization hopes to provide a useful initial framework for understanding biculturals’ contrast effects and inspire future work in this area.

Perceptual Accounts

I established that several cognitive processes are not crucial to the contrast phenomenon. However, results do not firmly rule out the perceptual mechanism of prime-self discrepancy for the contrast effects. One might argue that low BIIs contrast from evaluatively neutral primes because even neutral cultural primes are perceived as self-
discrepant (e.g., low BIIs generally have negative experiences with culture, whereas high BIIs have moderate to positive experiences). Besides valence, I have focused on priming a monocultural context (Asian or American). The effect of such primes may heighten the dissimilarity perceived between the self and the context for low BIIs, leading to contrast (i.e., to minimize identity neglect), whereas priming a mixed or hybrid culture may allay the prime-self discrepancy. Hence, the observed contrast effects might be governed by the interplay of cognition and motivation.

An alternative perceptual mechanism concerns the direction of individuals' social comparison process. Research has demonstrated that individuals assimilate their self-views to a target when asked to compare the target to the self (how similar is Fred to you?), but contrast their self-views when asked to compare the self to the target (how similar are you to Fred?) (Mussweiler, 2000b). The idea is that if the more elaborate object (e.g., the self) is the starting point of comparison, the unique features weigh more heavily and thus triggers higher perceived dissimilarity (Tversky & Gati, 1978). It is worth examining whether low BIIs show contrast because they primarily compare the self to their cultural in-groups, more often than compare their cultural-ingroups to the self. However, given the findings that low BIIs are not more likely to perceive the self as dissimilar to others, and that high (not low) BIIs tend to be more self-conscious (Zou et al., 2008), I expect that the direction of social comparison does not critically determine biculturals' assimilation or contrast responses to cultural priming.

Alternatively, one might infer that low BIIs contrast because they seek more differentiation in their cultural in-groups. Hornsey and Jetten (2004) proposed that a way in which people can achieve distinctiveness in their groups is to perceive the self as
nonconformist yet identified. The question is whether low BIIs apply this perceptual framing. However, I have found that BII is unrelated to self-uniqueness perception (Experiment 1) or motivation (Mok & Morris, 2009). Furthermore, low BIIs' behavior is often nonconformist in cultural in-groups (Experiment 4), rather than a self-imposed illusion of nonconformity (Hornsey & Jetten, 2004). The responses of low BIIs seem incompatible to the need for distinctiveness account.

Community and Work Contexts

My research provides several demonstrations for the moderating role of BII on cultural priming effects. However, previous research on biculturals has mainly documented main effects of cultural priming (e.g., Hong et al., 2000; Hong, Benet-Martinez, Chiu, Morris, 2003), which were not supported in the present studies. Researchers could examine whether the bicultural population or the dependent measures are important to the BII moderation effect. Moreover, bicultural populations might vary in their mean level of BII (e.g., Asian-Americans in Hawaii versus in Tennessee).

Future research should explore the implications of BII in actual organizational settings. To the extent that high BIIs perceive their different cultural identities as compatible, are leaders with high BII more appreciative of diversity within their team and hence serve as better managers of diversity? Or could the reverse be true, that low BIIs hold more pro-diversity beliefs and attitudes, given that they think in more culturally complex ways (Benet-Martinez, Lee & Leu, 2006)?

In addition, high (vs. low) BIIs could benefit more from international work assignments to improve their management skills and performance. If high BIIs have
already resolved conflicts between their cultural identities, they may be more effective in navigating culturally unfamiliar settings. High BIIs might acquire mastery in a new, third culture faster than low BIIs.

Finally, given that the demonstrated effects of identity integration on cognitions and behavior, future work could examine the implications of integration between self- and professional identities. For example, do female lawyers who feel conflicted between their female and professional identity exhibit dominance and competitiveness in female settings, whereas they exude more femininity in legal business settings? High (vs. low) levels of integration between social identities, besides that of culture, could similarly contribute to norm-following versus defiance dynamics.

Conclusion

The present research examines how cultural cues affect behavior for biculturals with high versus low integration between their cultural identities. I examine the mechanism underlying the cultural assimilation versus contrast effects, proposing that it is motivated and can occur implicitly. I also examine how to implicitly manipulate BII. Consistent with past research, I found that BII moderates the effects of cultural priming: Whereas high BIIs assimilate to cultural cues in behavior, such as making decisions that are congruent with salient cultural norms, low BIIs contrast against cultural cues, such as making decisions that are incongruent with cultural norms and congruent with the non-primed culture.
My results suggest that motivation underlies the BII moderation effect, as the cultural manipulations were designed to avoid alternative perceptual accounts such as valence self-discrepant primes. I also provide evidence of contrast responses as automatic and nonconscious by using subliminal priming. Furthermore, I document that BII can be influenced implicitly by affective and cognitive pathways. Overall, my work provides a deeper understanding of how different bicultural identity structures affect cognition, decision making, and behavior, with implications for shaping cultural assimilation or contrast. This may help us understand how to become extreme cultural chameleons (e.g., Barack Obama) versus iconoclasts (e.g., David Headley). Understanding these extremes—transformative bicultural leaders and destructive bicultural terrorists—is important in an increasingly culturally diverse world. At the same time, my research suggests that society needs, at moderate levels, both bicultural chameleons and iconoclasts.
REFERENCES


Snyder, C. R., & Fromkin, H. L. (1977). Abnormality as a positive characteristic: The


FOOTNOTES

1 I address an alternative explanation that low BIIs contrasted more because they felt superior to the team. I calculated a superiority score by taking the difference between perceived self- and team competence. Controlling for superiority did not change the findings.

2 Post interview responses shed light on this result. Some participants complained it was uncomfortable to hold the stick with their teeth for so long.
TABLES

Table 1.

Cultural priming research showing that BII interacts with different priming manipulations designed to avoid the valence self-discrepancy account

<table>
<thead>
<tr>
<th>Research Article</th>
<th>Valence-Neutral Priming Stimuli</th>
<th>Domain</th>
<th>Basic Findinga</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mok &amp; Morris (2009)</td>
<td>Names and location (e.g., ‘J. Williams in North America’ vs. ‘J. Chang in East Asia’)</td>
<td>Self-perceived personality</td>
<td>High (low) BIIs perceived the self as more (less) uniqueness-seeking and extraverted after American versus Asian priming</td>
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<tr>
<td>Study 1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Study 2</td>
<td>Book covers (e.g., American home décor vs. Chinese housewife)</td>
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<td></td>
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<tr>
<td>Mok, Cheng, &amp; Morris (2010)</td>
<td>Names and location (e.g., ‘J. Williams in North America’ vs. ‘J. Chang in East Asia’)</td>
<td>Social judgments</td>
<td>High (low) BIIs were less (more) sensitive to situational constraints on the employee’s outcome after American versus Asian priming in performance appraisals</td>
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<td>Mok &amp; Morris (2010)</td>
<td>Picture of Caucasian vs. Asian businesspersons</td>
<td>Creative generation</td>
<td>High (low) BIIs generated more (fewer) novel ideas after American versus Asian priming</td>
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<tr>
<td>Study 1</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Study 2</td>
<td>Book covers (e.g., borsch soup vs. Chinese herbal soup)</td>
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Note. a Participants were East Asian-American.
Table 2.

Descriptive statistics and intercorrelations (Experiment 4)

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</tr>
</tbody>
</table>

*p < .05.

**p < .01.
FIGURES

Figure 1.

(A) Variety seeking across priming conditions for High and Low BII participants

(Experiment 1)

(B) Variety seeking with priming and no priming for High and Low BII participants

Note. Low and high BII plotted at one standard deviation below and above the mean.

Note. Low and high BII plotted using a median split.
Figure 2.

Information search across priming conditions for High and Low BII participants

(Experiment 2)

Note. Low and high BII plotted at one standard deviation below and above the mean.
Figure 3.

Correct answering by question type across priming conditions for High and Low BII participants (Experiment 3)

Note. Low and high BII plotted using a median split.
Figure 4.

An example question in the mental rotation task with the group (Experiment 4). Participants’ name (e.g., “A. Mok”) was presented with those of teammates to induce peer pressure. In the example shown (American condition), the objects are different but the group has unanimously said they are the same. If the participant responds “different”, it was coded as contrast (here it is corrective). If the participant responds “same” it was coded as conformity.

11. Are the objects below the same (can be rotated to match) or different (no rotation can make them match)?

<table>
<thead>
<tr>
<th>Same</th>
<th>Different</th>
</tr>
</thead>
</table>

Your team's response:
- T Collins: Same
- J. Lewis: Same
- P Holt: Same
- A. Mok: ?
Figure 5.

Contrast (vs. conformity) in participants’ judgment as a function of group consensus and BII (Experiment 4)
Figure 6.

BII ratings by time and facial condition (Experiment 5)
Figure 7.

Pictures for comparison focus task (Experiment 6)

1)

2)

3)
Figure 8.

BII ratings by time and comparison focus condition (Experiment 6, main study)
Figure 9.

Extraversion across priming conditions for High and Low BII participants before versus after the similarity focus manipulation (Experiment 6, main study).

Note. Low and high BII plotted at one standard deviation below and above the mean.