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Acculturation and Culture: A Critical Factor for Asian Americans' Health

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Yijie Wang and Su Yeong Kim

Ting is a 24-year-old who immigrated to the U.S. from China when she was 8 years old. Two months ago, she was diagnosed with bipolar disorder at the only bilingual mental health center in her city. Her parents communicated with staff members in Chinese, explaining that Ting had suffered from severe mood swings since college. She had barely managed to graduate, and had not held a job ever since. Although they knew that something was wrong with her, Ting's parents never talked about her problem with anyone outside their own family. They were ashamed that Ting was unemployed and sometimes manic; they also did not know where to ask for help. It was not until Ting went a whole week with only 10 hours of sleep that her parents finally took her to a local hospital and asked for treatment. At the hospital, they experienced great difficulty trying to communicate with the hospital staff in English. Finally, Ting was referred the local bilingual mental health center. However, even with professional help, Ting's parents have not accepted the idea that Ting needs medication to control her condition, and are insisting that acupuncture is a better choice.

The example of Ting and her family illustrates many of the cultural and acculturative factors that are typically associated with Asian American health problems. First of all, Ting's family did not seek professional help until after Ting had already been suffering from bipolar disorder for several years. Asian Americans are less likely than other Americans to utilize mental health services or communicate about their problems with people outside their families (Zhang, Snowden, & Sue, 1998). One reason is that a mental health problem is considered a sign of weakness in traditional Asian cultures, and families do not want to be stigmatized (Kim, Atkinson, & Umemoto, 2001). Interestingly, when Ting's family finally sought professional help, they focused on her insomnia rather than her mood swings. Even after Ting was diagnosed with a mood disorder, they preferred traditional Chinese treatment over medication. Asian cultures tend to hold a holistic view of mind–body relationships, which may explain why Asian Americans with mental health problems are likely to report somatic symptoms and prefer traditional treatments that target both mind and body (Chun, Enomoto, & Sue, 1996). Finally, Ting's family experienced a lot of difficulties communicating with the staff members at the hospital, where there were no bilingual services available for them. The lack of multicultural expertise in the mainstream U.S. culture is another reason for Asian Americans' underutilization of health services. To address this issue, much needs to be done to increase multicultural competency in health services (Hwang, 2006).

In this chapter, we highlight aspects of the acculturation process that are important in gaining a better understanding of Asian Americans' mental and physical health. We will first discuss

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the concept of acculturation, including a review of various acculturation strategies, dimensions, and measures. Then, we will examine cultural forms of expressing distress, and discuss the relationship between acculturation and health, both mental and physical. After summarizing the current research findings on acculturation and heath, we will discuss future directions for research.

Conceptualizing Acculturation

Concept of Acculturation

A classic definition of acculturation was proposed by Redfield, Linton, and Herskovits (1936): "Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact with subsequent changes in the original culture patterns of either or both groups" (p. 149). Although this definition suggests possible changes in both groups, it is often the minority group who is expected to change and adapt to the mainstream culture in order to survive and succeed, as opposed to the other way around (Yoon, Langrehr, & Ong, 2011). Therefore, in the literature on minority adjustment in the U.S., "acculturation" is mainly used to describe the changes taking place within ethnic minority groups, even though some changes may also occur in the mainstream group.

For immigrants, there are two aspects to the process of acculturation: participating in the mainstream culture and retaining the heritage culture. These two aspects used to be considered as two extremes on a continuum. In this view, becoming oriented to the mainstream culture means simultaneously relinquishing the heritage culture. This unilinear framework appears often in the sociological literature, which uses the term "assimilation" to describe the process through which immigrants, their children, and their children's children gradually lose their culture of origin and become an indistinguishable part of the mainstream society. In contrast, a bilinear model, which appears more often in the recent psychological literature, conceptualizes acculturation as two separate processes. In this view, an individual who is highly oriented towards the mainstream culture may also be highly oriented towards his/her heritage culture.

Empirical studies that directly compare the two models suggest that it is important to consider immigrant generational status in providing support for each of the two models. For example, Tsai, Ying, and Lee (2000) compared the relationship between the meanings of "being Chinese" and "being American" in a sample of 122 U.S.-born Chinese, 119 immigrant Chinese who arrived in the U.S. before age 12, and 112 immigrant Chinese who arrived in the U.S. after age 12. They found that "being Chinese" was unrelated to "being American" among U.S.-born Chinese, whereas "being Chinese" was negatively related to "being American" among immigrant Chinese, whether they had arrived before or after age 12 (Tsai et al., 2000). These findings suggest that for U.S.-born Chinese, how they feel about "being Chinese" develops separately from how they feel about "being American." For foreign-born immigrants, however, feeling more American goes hand-in-hand with feeling less Chinese. In other words, Tsai and colleagues' research suggests that a unilinear framework may best explain the acculturation process for foreign-born immigrants, whereas the bilinear framework is a more accurate explanation of the acculturation process for U.S.-born Asian Americans.

We have chosen to adopt the bilinear model of acculturation in this chapter, which discusses the effects of both participating in the mainstream culture and retaining the heritage culture on Asian Americans' health. Not only does the bilinear model better capture the complexity of the acculturation process, but it can also accommodate the linear perspective within the bilinear model. This inclusiveness is helpful, since some studies referenced in the current chapter still use a unilinear model.

Acculturation Strategies and Adjustment

Berry (1980) proposed four different acculturation strategies, based on various levels of orientation towards the mainstream and heritage cultures: integration, assimilation, separation and

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marginalization. Each strategy is related to a specific adjustment outcome. Immigrants who choose the strategy of integration are highly oriented towards both the mainstream and the heritage culture. Integrated individuals usually exhibit a high level of participation and proficiency in the mainstream culture; at the same time, they maintain the heritage culture to a great degree. Such individuals are considered to be well adjusted, and their health status generally supports this view. It is likely that they experience better health because they are more flexible in personality, have more social support, and experience mutual acceptance from peers in two different cultures, both mainstream and heritage (Berry, 1997).

Those who choose the strategy of assimilation are oriented towards the mainstream culture rather than towards the heritage culture. Assimilated individuals participate fully in the mainstream culture, and refuse to maintain their heritage culture. However, as Asian Americans are often perceived as "perpetual foreigners," they may not be able to participate fully in the mainstream culture (Kim, 2009).

Separation is the strategy of maintaining a high orientation towards one's heritage culture at the cost of orienting towards the mainstream culture. Separated individuals do not have contact with the mainstream culture, choosing instead to focus on their heritage culture. They may experience rejection from the mainstream group, yet they often benefit from social support within their close-knit heritage group.

Marginalization happens when immigrants have low orientations towards both cultures. Marginalized individuals do not participate in the mainstream culture, yet they also lose connection with their heritage culture. Such individuals are considered to be at highest risk for adjustment problems. This is probably because they are likely to experience both rejection from the mainstream group and loss of social support from the heritage group (Berry, 1997).

In sum, among the four acculturation strategies, integration represents the most adaptive strategy, marginalization represents the least adaptive strategy, with assimilation and separation being intermediate (Berry, 1997).

Measures of Acculturation

Acculturation encompasses a broad spectrum of changes in the lives of ethnic minorities. Accordingly, there are various approaches to measuring acculturation. In the sociological literature, indirect measures such as generational status, age of arrival and length of residency in the U.S. are frequently used as proxies of acculturation. Sociological theories of immigrant assimilation hypothesize that a longer exposure to the mainstream culture results in a higher level of acculturation. Individuals who have been in the U.S. for a longer period of time are considered more acculturated than those who have recently immigrated; another assumption is that each successive generation will naturally become more acculturated (Gordon, 1964). However, some scholars have questioned the use of generational status as a measurement of acculturation among Asian Americans. Waters and Jimenez (2005) noted that for early European immigrants, the hiatus of immigration during the Great Depression caused some cultural distance between generations, such that being in a later generation was usually synonymous with being more acculturated. For post-1965 Asian immigrants, on the other hand, immigration has been more or less constant, which means that belonging to a later generation does not guarantee distance from, or higher levels of acculturation than, first generation Asian immigrants.

Instead of the proximal measures of acculturation that commonly appear in the sociological literature, the psychological literature gives greater emphasis to an individual's behavioral and psychological dimensions of acculturation. Kim and Abreu (2001) reviewed the content of acculturation measures currently being used, and summarized four basic dimensions: cultural behavior, cultural values, cultural knowledge, and cultural identity. Cultural behavior includes "friendship choice, preferences for television programs and reading materials, participation in cultural activities, contact with the heritage culture, language use, food choice and music preference." The cultural values dimension includes "attitudes and beliefs about social relations,

cultural customs, cultural traditions, gender roles, and health and illness". Cultural knowledge includes "culturally specific information such as names of historical leaders in the heritage and mainstream cultures, and the significance given to culturally specific activities." Cultural identity refers to "attitudes towards one's cultural identity, attitudes toward mainstream and heritage groups, and level of comfort towards people from mainstream and heritage groups."

Different dimensions of acculturation tend to develop at different rates (Kim & Abreu, 2001). For example, behavioral acculturation may proceed faster than value acculturation, as individuals may feel compelled to adopt certain behaviors, but not values, in order to survive in the mainstream society (Szapocznik & Kurtines, 1980; Szapocznik, Scopetta, Kurtines, & Arandale, 1978). In a similar vein, Kim, Atkinson, and Yang (1999) found that the increase in mainstream cultural behaviors proceeded faster than the decline in heritage culture values. Even within each dimension, different sub-dimensions might change at various rates. For example, the acquisition of language proceeded faster than the increase in mainstream social interactions (Lee, Goldstein, Brown, & Ballard-Barbash, 2010). These findings suggest that it is important to examine the acculturation process by looking separately at each dimension, along with its subdimensions, in addition to developing more effective ways to measure overall levels of acculturation.

A single measure of a specific dimension may not provide a complete picture of the acculturation process. It is important to recognize this point, as some studies have assessed acculturation with a single indicator, such as language use, which is considered a proximal measure of acculturation by some scholars but not others (Chun, Organista, & Gerardo, 2003). Kim and Abreu (2001) state that language use is in fact an indicator of behavioral acculturation rather than a proxy measure for acculturation in general. For our purposes, language use alone will be considered as a proxy measure only if it is the sole measure of acculturation in a given study. This is because that a single indicator such as language use cannot fully capture the range of psychological experience associated with the complex process of acculturation.

The following review of the literature on acculturation and health will examine various dimensions of acculturation. It is important to note that although many theories of acculturation posit behavioral and psychological dimensions of the process, many of the studies we review employ a proximal measure, such as generational status, length of residency or language use, as the sole measure of acculturation.

Acculturation, Culture and Mental Health

Acculturation and Psychological Well-being

Most research on the relationship between acculturation and psychological well-being has focused on a specific mental health problem, such as depression and anxiety, or on a global index of various mental health symptoms referred to as "psychological distress." When indices of psychological well-being are examined in the same study, they are often shown to be related to acculturation in similar ways. However, researchers do not agree on whether acculturation enhances or detracts from psychological well-being. This debate is especially apparent in epidemiological studies, which usually employ standardized clinical diagnostic interviews and evaluate them alongside proxy measures of acculturation, such as generational status, age of immigration and length of stay in the United States (Hwang, Chun, Takeuchi, Myers, & Siddarth, 2005; Takeuchi et al., 1998, 2007). Although such studies generally take the perspective that immigrants are at greater risk for negative outcomes as they acculturate and live in United States into later generations (Takeuchi et al., 2007), research findings are not always consistent with this perspective. Study findings can contradict each other, depending on the measure of acculturation used.

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Using a large-scale sample of 1,747 Chinese Americans between the ages of 18 and 65 living in the Los Angeles area (the Chinese American Psychiatric Epidemiological Study, or CAPES), Hwang and colleagues (2005) found that individuals who immigrated at younger ages were more likely to experience depression than those who immigrated at older ages. However, the likelihood of experiencing a first onset of depression decreased as the length of time an individual stayed in the U.S. increased. Using the same CAPES dataset, Takeuchi and colleagues (1998) found that among highly acculturated individuals (as indicated by language use, ethnicity of the workplace and food choices), women were twice as likely as men to experience depression, whereas among less acculturated individuals, there was no gender difference in depression. Using a nationally representative sample of Asian Americans from the National Latino and Asian American Study (NLAAS), Takeuchi et al. (2007) found that U.S.-born Asian American women experienced higher rates of lifetime depression and anxiety disorders than did foreign-born Asian American women, and that Asian American men who were more fluent in English experienced lower rates of depression and anxiety disorders during both a particular 12-month period and over the course of their life. In other words, although current research findings indicate possible gender and generational differences in the relationship between acculturation and psychological wellbeing, the direction of such relationships is not yet clear. While the CAPES and NLAAS datasets suggest that some proxy measures of acculturation (younger age at immigration, being in the U.S.-born second generation) are risk factors for clinically significant levels of depression, other proxy measures (English language fluency, when it is the only indicator of acculturation in a study) may protect individuals from experiencing clinically significant mental health problems.

In comparison, smaller-scale studies have yielded more consistent results using depressive symptoms scales and psychological measures of acculturation, such as behaviors, values and identities. Such studies suggest that a high level of acculturation is related to a lower risk of developing mental health problems. For example, using a sample of 107 Asian American college students, Hwang and Ting (2008) measured behavioral and value dimensions of acculturation and explored their relationships to mental health. Results showed that individuals who identified with American culture to a greater degree reported lower levels of psychological distress and depressive symptoms, whereas identification with the heritage culture was not significantly related to psychological wellbeing. Similarly, in a study of 104 Chinese international graduate and undergraduate students in the United States, Wang and Mallinckrodt (2006) found that higher behavioral and value acculturation towards American culture, as opposed to behavioral and value acculturation towards the heritage culture, was related to experiencing lower levels of psychological distress.

Stress that is related to the process of adapting to a new environment, or acculturative stress, is considered to be a primary risk factor for decreased psychological wellbeing (Berry, Kim, Minde, & Mok, 1987). Acculturative stress can be the result of a wide range of difficulties, such as those presented by the language barrier, challenges in new jobs, discrimination, or disruptions in family functions (Hwang & Ting, 2008). A lower level of acculturation to the mainstream culture is related to increased acculturative stress. For example, in a sample of 118 Korean Americans, Shim and Schwartz (2007) found that individuals who had lived in the U.S. for less time were less oriented towards the mainstream culture and adhered more strongly to the heritage culture; these individuals were also more likely to experience cultural adjustment difficulties, or in other words, acculturative stress. Unfortunately, a higher level of acculturative stress is related to poorer psychological wellbeing. In a sample of 319 Chinese, Japanese and Korean immigrant adolescents, Yeh (2003) found that those with lower cultural adjustment difficulties, or low acculturative stress, reported fewer problems with their mental health. Finally, Hwang and Ting (2008) directly tested the potential mediating effect of acculturative stress in the

relationship between acculturation and psychological wellbeing. They found that a low level of acculturation was related to more acculturative stress, which in turn was associated with more psychological distress and a higher incidence of clinical depression.

Based on the above findings for Asian American adults, orientation towards the mainstream culture seems more important than orientation towards the heritage culture for psychological wellbeing. However, the pattern for adolescents seems to be the opposite: for them, orientation towards the heritage culture seems to be more important for psychological well-being. Kim, Gonzales, Stroh and Wang (2006) examined the relationship between behavioral and value dimensions of acculturation and depressive symptoms in a sample of Korean American, Chinese American, and Japanese American parents and adolescents. Results showed that adolescents with a lower orientation towards Asian culture reported more depressive symptoms, and parents with a lower orientation towards American culture reported more depressive symptoms. Using a sample of Chinese Canadian families, Costigan and Dokis (2006) found that only the difference between parents' and adolescents' orientations toward Chinese culture (and not the difference in their mainstream orientations) was related to adolescents' depressive symptoms. Specifically, when their parents were strongly oriented towards Chinese culture, adolescents with a low level of Chinese orientation reported more depressive symptoms.

Although the different effects of acculturation on individuals of various ages is a topic that needs further research, it is possible that there are age-specific acculturative stressors. To illustrate, a major stressor for adults in immigrant families is learning how to participate in the mainstream culture, as adults need to succeed in a career that most likely puts them in daily contact with the mainstream culture. In comparison, a major stressor for adolescents in immigrant families may be discrepant acculturation levels between them and their parents, since a gap between them and their parents can lead to disrupted family functioning and poorer adolescent mental health (Crane, Ngai, Larson, & Hafen, 2005). A low level of orientation towards the heritage culture may be especially problematic for adolescents, as this can cause their parents to feel dismayed or even betrayed (Ying, 1999). At the same time, immigrant parents usually want their children to be oriented to the mainstream culture, believing that this is necessary in order to succeed in mainstream society (Costigan & Dokis, 2006).

In short, the current literature has reached no consensus on the relationship between acculturation and psychological well-being. Sociological studies using proximal measures of acculturation usually argue that Asian Americans who immigrated at a younger age or who belong to a later generation (and who are thus presumably more acculturated to the mainstream culture) are at increased risk for maladjustment, while psychological studies using behavioral and value measures of acculturation usually find that individuals with a low level of acculturation are at increased risk for maladjustment, possibly due to increased acculturative stress. To further complicate matters, the relative importance of mainstream versus heritage cultural orientation may not be the same for children and adults, given that some acculturative stressors seem to be age-specific.

Culture and Somatic Symptoms

When considering the relationship between culture and mental health among Asian Americans, it is important to address the mental health problems that are rooted in Asian cultures. One example of this kind of culturally distinctive problem is somatization. Somatization refers to the tendency to experience, communicate and seek medical help for physical distress due to psychological stress (Lipowski, 1988). Somatic distress may include "headaches, stomach pains, inability to concentrate, chronic fatigue, sleep difficulties, or loss of sensory functioning" (Chun et al., 1996, p. 348).

Although somatic symptoms seem to be co-morbid with affective disorders across cultures (Gureje, Simon, Ustun, & Goldberg, 1997), Asians are more likely than Westerners to experience, or at least to communicate, somatic

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symptoms (Lin & Cheung, 1999). For example, in an initial attempt to examine cross-culture differences in somatization, Kleinman (1977) found that 88% of 25 Taiwanese patients with depressive symptoms initially reported somatic symptoms without dysphoric affect, whereas only 20% of 25 western patients reported somatic symptoms. Similarly, in a sample of 85 Chinese American and 85 European American patients referred for psychiatric consultation, Hsu and Folstein (1997) found that 28.6% of Chinese American patients and 9.5% of European American patients reported somatic suffering, persisting in attributing their problems to physical causes even when no such cause was found. Waza, Graham, Zyzanski, and Inoue (1999) compared the medical records of 104 patients in Japan and 85 patients in the U.S. with a diagnosis of depression, and found more somatic complaints in Japanese patients' records. In a study of anxiety disorder in Nepal and the U.S., Hoge and colleagues (2006) found that although patients from the two countries had similar overall anxiety scores, Nepali patients scored higher on the somatic subscale, whereas American patients scored higher on the psychological subscale. High rates of somatic symptoms among Asians and Asian Americans appear to be consistently supported by the literature.

Scholars have proposed several explanations for the high levels of somatization observed in the Asian population. One explanation is related to the fact that distress is often presented in culturally specific ways. In other words, every culture has its "idiom of distress" (Nichter, 1981). Specifically, individuals in Asian culture prefer to communicate physical discomfort rather than emotional pain when they discuss their psychological distress, even though they are fully aware that emotional stressors may be responsible for triggering their somatic symptoms (Cheung & Lau, 1982). In a longitudinal study on Vietnamese refugees in the U.S., Lin and colleagues found that although most of the participants reported only somatic symptoms in the initial interview, they reported both psychological and somatic symptoms when they were asked specifically about their psychological symptoms in later interviews (Lin, Masuda, & Tazuma, 1982; Lin, Tazuma, & Masuda, 1979; Masuda, Lin, & Tazuma, 1980). In a study comparing 175 Chinese and 107 Canadian outpatients with depressive symptoms, Ryder and colleagues (2008) found that the Chinese reported more somatic symptoms, whereas the European Canadians reported more psychological symptoms; they suggest that the tendency among Chinese outpatients to report more somatic symptoms was due to the devaluation of emotional expression in this group.

Kirmayer (2001) further proposed that, since psychopathology is associated with social stigma in Asian culture, communicating psychological distress in a somatic form is a culturally appropriate way of expressing psychological distress, as it enables individuals in Asian culture to seek professional help without being stigmatized. Several studies support this notion, which seems especially salient when it comes to individuals who have already reached clinically significant levels of psychological distress. For example, in a sample of 224 outpatients with depressive symptoms and individuals without any history of mental health problems in China, Yen, Robins, and Lin (2000) found that after controlling for depression levels, Chinese outpatients were more likely to report somatic symptoms than were Chinese individuals without any history of mental health problems. Similarly, Weiss, Tram, Weisz, Rescorla, and Achenbach (2009) compared somatic and psychological symptoms of depression between children in the U.S. and Thailand. They found that in the clinic-referred sample, Thai children reported higher levels of somatic versus depressive symptoms compared to U.S. children. Collectively, these findings suggest that the Asian preference for expressing psychological distress in somatic terms may be more operative when individuals are experiencing severe mental health problems, or among those who have already sought out professional help to deal with their psychological distress.

There may, however, be a more fundamental reason why Asians and Asian Americans are more likely than their Western counterparts to report somatic symptoms. Somatization represents

not just a culturally specific way of expressing psychological distress, but also a way of conceptualizing it. Rather than making a distinction between psychological and physical experience, as Western culture tends to do, most Asian cultures hold a holistic view of the relationship between mind and body (Tseng, 1975). Traditional Chinese medicine emphasizes that both mental and physical health depend on the balance of two energy forces, *yin* and *yang*, and that when this balance is disrupted, the imbalance should be treated in both the mind and body (Chun et al., 1996). In this view, it follows that manifestations of psychological distress in Asian individuals would include not only psychological symptoms but also somatic symptoms.

Studies on culture-bound syndromes provide evidence for the holistic view of mind and body common among Asian cultures. For example, ethnic Koreans who are seeking professional help often report that they suffer from *hwa-byung*, a culture-bound syndrome that includes both psychological and physical symptoms (Lin, 1983). *Hwa-byung* means, literally, "fire sickness," which includes "a multitude of somatic and psychological symptoms, including constricted, oppressed, or 'pushed-up' sensations in the chest, palpitations, 'heat sensation,' flushing, headache, 'epigastric mass (lump in epigastrium),' dysphoria, anxiety, irritability, and difficulty in concentration" (Lin et al., 1992, p. 386). Individuals suffering from *hwa-byung* believe that their problems are caused by "chronic unresolved anger that led to the imbalance of the body by the excessive accumulation of the fire element, as conceptualized in Oriental medicine theories" (Lin & Cheung, 1999, p. 777). In a community sample of 109 Korean Americans, Lin and colleagues (1992) found that individuals who reported suffering from *hwa-byung* were more likely to be diagnosed with Diagnostic and Statistical Manual of Mental Disorders-III (DSM-III) major depression, to have had a history of depression diagnosis, or to report more depressive symptoms, which suggests that *hwa-byung* may be a culture-bound form of depression. More recently, in a sample of 1,352 individuals in Korea, Ketterer and colleagues (2010) found that *hwa-byung* is characterized by general health problems, gastrointestinal symptoms, hopelessness, and anger, which suggests that *hwa-byung* may not have an exact counterpart in Western culture.

Another example of a culture-bound syndrome is neurasthenia, *shenjing shuairuo*, in Chinese culture. It is "an ailment with vague, protean signs and symptoms due to weakness of the nervous system, the brain and the body generally," accompanied by "bodily weakness, fatigue, tiredness, headaches, dizziness, and a range of gastrointestinal and other complaints" (Kleinman, 1982, p. 122). In a sample of 100 patients diagnosed with neurasthenia in China, Kleinman (1982) found that 83% of them could also be diagnosed with major depression. More recently, in a community sample of 1,610 Chinese Americans, Takeuchi, Chun, Gong, and Shen (2002) found that life stressors (e.g., financial stress) were related to neurasthenia but not to depressive symptoms. This evidence suggests neurasthenia may be a better indicator than depression for psychological distress in Asian Americans (Chun, Moos, & Cronkite, 2006).

To summarize, the literature shows that Asian Americans are more likely than European Americans to express their psychological problems in physical terms. A good explanation for this phenomenon may be the fact that Asian cultures emphasize the connection between mind and body. This culturally specific view of health may also contribute to culture-bound syndromes such as *hwa-byung* and *shenjing shuairuo*, which encompass both psychological and physical forms of discomfort.

Acculturation, Culture and Counseling

Asian Americans tend to underutilize mental health services compared to European Americans. In a randomly selected sample of 161 Asian Americans and 1,332 European Americans in the Los Angeles area (Epidemiologic Catchment Area study, ECA), Zhang and colleagues (1998) found that Asian Americans were less likely than European Americans to disclose their mental

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health problems to others, including friends or relatives, religious figures, psychiatrists or mental health specialists, and physicians. In addition, Asian Americans were less likely to use mental health facilities, including mental health centers, psychiatric outpatient clinics at a general hospital or university hospital, hospital emergency rooms, crisis centers or hotline programs, self-help groups, spiritualists, herbalists or natural therapists. Perhaps a more serious problem is that, although Asian Americans tend to underutilize counseling services, they may be more likely than European Americans to experience severe disturbances in their mental health. In a sample of 3,729 Asian American and 3,553 European American outpatients, Durvasula and Sue (1996) found that compared to European American outpatients, Asian American outpatients tended to receive more severe diagnoses, function more poorly and display more psychotic symptoms.

Scholars have proposed several reasons for Asian Americans' underutilization of counseling services. One is that Asian cultures hold a negative view of counseling, which may discourage Asian Americans from seeking professional help (Kim et al., 2001). Asian cultures also value self-control and restraint over emotional expressiveness and expect individuals to solve psychological problems by themselves. Disclosing personal problems to, or seeking help from, people other than one's family members is considered a sign of weakness that brings disgrace to the family (Kim et al., 2001).

From this perspective, a high level of adherence to Asian cultural values is likely to be related to a lower likelihood of seeking professional psychological help. Kim (2007) examined the effects of orientation towards the mainstream and heritage cultures on 146 Asian American college students' professional help-seeking attitudes. The study reported that individuals with a higher orientation towards the heritage culture were less likely to recognize the need for psychological help and were less tolerant of stigma; additionally, they were less open to, and less confident about, consulting mental health professionals. However, higher acculturation towards the mainstream culture was not significantly related to attitudes about seeking professional psychological help. Using a sample of 242 Asian American college students, Kim and Omizo (2003) found additional support for the idea that individuals with a higher adherence to Asian values hold more negative attitudes toward seeking professional help and are therefore less willing to see a counselor.

Another reason for Asian Americans' underutilization of counseling is that mainstream counseling is often lacking in multicultural sensitivity and competency, which discourages Asian Americans from consulting mental health professionals about their psychological problems (Hwang, 2006). Sue and Sue (1999) proposed three strategies to improve multicultural counseling effectiveness: counselors need to be aware of their own cultural values and potential biases, counselors need to understand their clients' cultural values and potential differences between the counselors' and clients' cultural values, and counselors need to use culturally appropriate interventions. Supporting Sue and Sue's recommendation, in a sample of 146 Asian American college students, Kim, Ng, and Ahn (2005) found that Asian American students perceived greater alliance and empathy from their counselors when counselors expressed agreement with students' opinions on the cause of their problems. Further, in a sample of 116 Asian American college students, Li and colleagues (2007) found that when counselors did express culturally inconsistent statements during the counseling process, students perceived these counselors to be more competent if they acknowledged potential inconsistencies and encouraged clients to express their own opinions.

In sum, the literature shows that although Asian Americans tend to underutilize counseling services, they may actually be more likely than European Americans to experience severe mental health problems. Asian Americans may be reluctant to use counseling services due to culturally specific attitudes that discourage individuals from seeking professional help, or because there is a lack of competent multicultural counseling services currently available.

Acculturation, Culture and Physical Health

Acculturation, Culture and Smoking Behavior

Smoking is the single leading cause of preventable death in the United States; even exposure to secondhand smoke can cause serious disease, including lung cancer and heart disease (Centers for Disease Control and Prevention [CDCP], 2011c). In national surveys covering the period from 2006 to 2008, the prevalence of smoking among the Asian American population was 21.2% for male adults, 8.8% for female adults, 5.2% for male youth and 2.9% for female youth, rates that are lower than those found among other ethnic groups (CDCP, 2011a). In comparison, the smoking rate in Asian Americans' native countries is usually much higher for men and lower for women. In a recent global report, the current smoking rate is 57.4% for men and 2.6% for women in China, 52.8% for men and 5.8% for women in Korea, 57.0% for men and 10.8% for women in India, 39.9% for men and 10.0% for women in Japan, 40.3% for men and 7.1% for women in the Philippines, 36.6% for men and 1.6% for women in Thailand, and 34.8% for men and 1.8% for women in Vietnam (World Health Organization [WHO], 2009). The data show that Asian American men are less likely to smoke than their ethnic counterparts living in Asia, whereas Asian American women are more likely to smoke than their ethnic counterparts living in Asia.

The difference between smoking rates in the Asian American population and the rates in their native countries may be related to the different views of smoking held by the mainstream American and Asian cultures. Asian cultures have a more positive view of smoking in men but a more negative view of smoking in women. For example, in Korean culture, smoking is a medium for social interaction among males: it is usual for men to initiate a conversation by offering cigarettes to others; when offered a cigarette, men are expected to accept such an offer, as turning it down is interpreted as impolite. In addition, since adult men comprise the group with the highest social status in Korean culture, and since smoking is socially approved only for this group, smoking can become a way for Korean youths to identify themselves with adult men by appearing more mature and masculine. In comparison, smoking is considered to be inappropriate for women in most Asian cultures, due to traditional gender roles. For example, female smokers are perceived as unfit mothers and wives in Korean culture (Kim, Son, et al., 2005). For this reason, even though smoking is considered less acceptable in American culture than it is in Asian cultures, smoking in women is more likely to be tolerated in American culture than it is in Asian cultures (An, Cochran, Mays, & McCarthy, 2008).

As American and Asian cultures hold different views of smoking in men and women, it is possible that acculturation plays an important role in Asian Americans' smoking behavior. In fact, a number of studies have found that a higher level of acculturation is associated with lower smoking rates in Asian American male adults but with higher smoking rates in Asian American female adults (for a review, see Kim et al., 2005; Zhang & Wang, 2008). Almost all the available studies on this topic have used concurrent data and a single proximal measure of acculturation, such as length of stay in the U.S., generational status, or language proficiency. Generally, the smoking rate in Asian American men is lower if they were born in the U.S. (Maxwell, Bernaards, & McCarthy, 2005), have lived longer in U.S. (Juon, Kim, Han, Ryu, & Han, 2003), or are more fluent in English (Tang, Shimizu, & Chen, 2005). These associations are reversed for Asian American women (Ma et al., 2004; Maxwell et al., 2005). A recent meta-analysis of 21 studies published between 1994 and 2005 confirmed that acculturation to the mainstream society is a protective factor for Asian American men but a risk factor for Asian American women in terms of their smoking behaviors (Choi, Rankin, Stewart, & Oka, 2008). The reliance on proxy measures of acculturation in past studies means that more research is needed to examine the

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relationship between smoking behavior and additional domains of acculturation, including the behavioral, cultural values, attitudes and identification domains of acculturation.

However, it seems clear that social support for smoking is implicated in the relationship between acculturation and Asian American smoking behaviors. In Kim et al., (2005) interview with 22 Korean American men about their experiences of smoking in Korea and the U.S., many current smokers reported that they felt "timid" smoking in public places in the U.S., where smoking around people is perceived to be socially unacceptable, and where they were sometimes clearly asked not to smoke, or to stop smoking in public. Hofstetter and colleagues (2007) examined the effect of social support on smoking behavior in a sample of 2,830 Korean Americans. They found that both men and women were more likely to start smoking when they experienced more social support for smoking, and that persistent smokers reported having more social reinforcers than did smokers who quit (Hofstetter et al., 2007).

The possible effect of social support on the relationship between acculturation and smoking behavior seems particularly evident among Asian American youth. Studies have found that acculturation is a risk factor for smoking in Asian American youth (Chen et al., 2009; Chen, Unger, Cruz, & Johnson, 1999). It is possible that when Asian American youth are more acculturated into the mainstream culture, they are more likely to interact with peers who smoke, as there is a higher incidence of smoking in the mainstream culture than among Asian Americans (CDCP, 2011a). Several studies have directly tested the effect of peer group smoking on the smoking behaviors of Asian American youth. In a sample of 3,268 Asian American adolescents from various ethnic backgrounds, Weiss and Garbanati (2006) found that adolescents of both genders and from all ethnic backgrounds were more likely to smoke when they perceived more acceptance of smoking in their peer groups. Moreover, in a sample of 1,248 Asian American adolescents of various ethnicities, Thai, Connell, and Tebes (2010) found a significant mediating effect of peer smoking behavior in the relationship between acculturation and adolescents' smoking behavior. In other words, adolescents who were more acculturated had more friends who were currently smoking, which in turn was related to more smoking behavior among Asian American adolescents.

To summarize, a high orientation towards the mainstream culture tends to decrease the likelihood of smoking in men, but it increases the likelihood of smoking in women and adolescents. This is probably due to the different cultural views of smoking in Asian and American cultures for men, women and adolescents. Special attention needs to be paid to adolescent smokers, as they are greatly influenced by their social environment, especially their peer group.

Acculturation, Culture and Chronic Diseases

Chronic diseases, such as heart disease, cancer and diabetes, are the leading causes of death and disability in the U.S. (Kung, Hoyert, Xu, & Murphy, 2008). Generally, the rate of chronic diseases in the Asian American population is lower than, or similar to, that found in other groups. For example, in a recent national health survey, Asian American adults were less likely to be diagnosed with cancer or any type of heart disease than were European American adults (Sondik, Madans, & Gentleman, 2010). The rate of diagnosed diabetes is 8.4% among Asian American adults, compared to 7.1% in non-Hispanic whites, 11.8% in Hispanics, and 12.6% in non-Hispanic blacks (CDCP, 2011b).

Although the rate of chronic diseases in Asian Americans is relatively low, Asian Americans are more likely than those in their native countries to experience chronic disease (Cook, Goldoft, Schwartz, & Weiss, 1999; Flood et al., 2000; Stanford, Herrinton, Schwartz, & Weiss, 1995; Ueshima et al., 2007). This discrepancy suggests a possible effect of acculturation on chronic diseases. Generally, Asian Americans with higher levels of acculturation are more likely to have a chronic disease. For example, Huang and colleagues (1996) examined the

relationship between acculturation and the prevalence of diabetes in a sample of 8,006 Japanese American men in Hawaii. They found that Japanese Americans who were born in the U.S. and those who had stayed in the U.S. for a longer period were more likely to have diabetes (Huang et al., 1996). In another sample of 3,809 Japanese Americans in California, Marmot and Syme (1976) measured the behavior and value dimensions of acculturation and examined their relationships to the prevalence of coronary heart diseases. They found that Japanese Americans who were more acculturated were more likely to have coronary heart disease compared to those who were less acculturated.

Diet habits often change during the process of acculturation, which may explain some of these research findings on chronic disease in the Asian American population. A number of studies have demonstrated that Asian Americans' diet decreases in quality as they acculturate into the mainstream culture. For example, in a sample 486 Korean Americans, Kim and Chan (2004) examined the relationship between the behavioral and attitude dimensions of acculturation and dietary habits. They found that less acculturated Korean Americans tended to consume more traditional Korean food, such as rice, *chigae* (stew) and *kimchi*, whereas more acculturated Korean Americans tended to consume more Western food, such as bread, spaghetti, ham, chocolate, candies and diet soft drinks. In addition, more acculturated Korean Americans tended to take in more sweets and total fat, both of which have been implicated in the development of chronic diseases (Kim & Chan, 2004). In another sample of 243 Chinese Americans in the Philadelphia region, Liu and colleagues (2010) measured acculturation, using English proficiency and social interactions with the mainstream culture as measures, and examined its relationship with diet quality, including dietary variety, adequacy of nutrients, moderation of intake (total fat, saturated fat, cholesterol, sodium, and empty calorie foods), and overall dietary balance. They found that although more acculturated Chinese Americans had diets with more variety and nutritional adequacy, their diets also tended away from moderation (in other words, this group consumed more total fat and calories), which is a risk factor for chronic diseases (Liu et al., 2010).

To summarize, it appears that adopting unhealthy dietary habits, and thus increasing the risk of developing chronic diseases, is currently part of the process of acculturation to mainstream American culture. Many studies cited here used a proximal measure of acculturation, such as generational status and length of residency. Although we did review studies using behavioral measures of acculturation, such as social interaction in the mainstream culture, more research is needed to understand the ways in which additional domains of acculturation relate to chronic diseases.

Acculturation, Health Prevention, Management, and Health Care Utilization

Not only do Asian Americans underutilize mental health services, but they are also less likely to use other health care services. A nationally representative survey on health care quality indicated that compared to the overall American population, Asian Americans are less likely to receive counseling services for smoking cessation (79% of overall U.S. smokers vs. 68% Asian American smokers), healthy diet and weight (49% of overall U.S. population vs. 35% of Asian Americans), and exercise (19% of overall U.S. population vs. 14% of Asian Americans) (Hughes, 2002).

Scholars have proposed several reasons for the underutilization of health care services in the Asian American population. One reason is that Asian Americans might prefer more traditional forms of treatment, such as acupuncture, and are therefore likely to consult traditional healers rather than seeking out Western health care services. A national health care quality survey showed that Asian Americans were two to three times as likely as the overall U.S. population to use the services of traditional healers and acupuncturists (Collins et al., 2002). Among those who used alternative care, 27% of Asian

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Americans reported using alternative care because of cultural or religious beliefs, as compared to 8% of the overall U.S. population (Collins et al., 2002). From this perspective, a higher level of orientation towards the heritage culture may be related to a tendency to seek traditional Asian treatment. However, studies on this issue have used proximal measures of acculturation, such as generational status and length of residency in the U.S. Using a nationally representative sample, Lee and colleagues (2010) examined the relationship between acculturation and the use of complementary and alternative medicine. They found that Asian Americans who had been in the U.S. for a shorter time were more likely to use the services of acupuncturists and traditional Chinese medicine practitioners.

Another possible reason why Asian Americans underutilize health services may have to do with their limited expertise in the mainstream culture. For example, Asian Americans who are not fluent in English may experience difficulties in accessing health care information, which hinders their utilization of health services. In addition, Asian Americans who lack knowledge about mainstream health practices may also underutilize health care services. From this perspective, a lower level of language fluency and a lack of knowledge about the mainstream society may be related to lower use of health care services. In a sample of 380 Cambodian, Chinese, Indonesian, Korean, and Vietnamese American women, Nguyen, Leader, and Hung (2009) found that individuals with lower level of English proficiency were less likely to acknowledge the availability of a cancer vaccine, but more likely to acknowledge, mistakenly, the availability of a vaccine for non-vaccine-preventable cancers. In addition, in a sample of 315 Asian Indian, Chinese, Filipino, Korean, and Taiwanese American women, Wu and Ronis (2009) found that individuals who held inaccurate beliefs and lacked knowledge about mammography screening, as promoted in the mainstream culture, were less likely to have been regularly and recently screened for breast cancer. Relevant knowledge in this case included the recommended intervals for breast exam and mammography, which conditions increase the chances of getting breast cancer, and the recommended frequency for mammograms for women with different backgrounds (Wu & Ronis, 2009). Similarly, in a sample of 1,181 Korean American families, Chen and colleagues (2009) found that parents who received a variety of information on health insurance and assistance on their insurance application were more likely to apply for health insurance for their children, as compared to parents who did not receive any information or assistance in applying for available insurance.

What we know about the effect of acculturation on Asian Americans' health care utilization suggests that it is important to promote culturally competent health care services. Unfortunately, the mainstream health care services currently available may not be ideal for the Asian American population. In a national survey, Ngo-Metzger, Legedza, and Phillips (2004) found that Asian Americans were more likely than European Americans to be unsatisfied with their health care. Compared to European Americans, Asian Americans were more likely to report that their regular doctors were not of the same ethnicity and did not understand Asian Americans' background and values, and that their doctors "did not listen to everything patients had to say," "spend as much time as patients wanted," or "involve patients in decisions about care as much as patients wanted" (Ngo-Metzger et al., 2004). In a qualitative study of type 2 diabetes management experiences among 40 Chinese patients and their spouses, Chun and colleagues (2004) found that culturally competent health care can help improve diabetes management among patients who are dealing with a language barrier. Participants reported that bilingual Chinese medical staff members' knowledge of Chinese diet and food practices and their ability to provide emotional support, in addition to the availability of Chinese-language health education materials, on-site translator services and ethnically-matched health care providers, directly enhanced their diabetes management practices.

In all, the current literature suggests that when providing health care services for Asian Americans, it is important to take into consideration their traditional cultural beliefs and treatment practices, and to develop more culturally competent mainstream health care services by removing language barriers, promoting health management education, and providing emotional support.

Future Directions

In this chapter we have reviewed both the sociological and psychological literature on acculturation and its effect on Asian Americans' mental and physical health. Although much has been accomplished in understanding the link between acculturation and the mental/physical health of Asian Americans, a variety of topics still need further research. It is particularly important to gather more information on the effect of acculturation on health for various dimensions of acculturation, including cultural behaviors, values, knowledge and identity. Most current studies rely on a single proximal measure of acculturation, such as generational status or English language fluency. Such studies sometimes yield inconsistent findings, as we saw in the research on acculturation/assimilation and psychological wellbeing. Different dimensions of acculturation proceed at different rates, which means that they may also have different effects on those who are in the process of acculturating. In addition, some dimensions of acculturation may be more closely related to a specific type of health status or health behavior. Access to health information and knowledge about health insurance are both of great relevance to Asian Americans' cancer management and prevention behaviors, and heritage cultural orientation may play a central role in Asian Americans' utilization of Asian culture-specific services. It is important to examine specific dimensions of acculturation, in addition to measuring the overall level of acculturation, in order to gain a more comprehensive view of Asian Americans' health outcomes.

Research on this topic would also be improved if more studies adopted the bilinear model of acculturation. As we discussed, mainstream and heritage cultural orientations may affect different aspects of Asian Americans' well-being in various ways. It is important to distinguish between the two orientations and to examine both orientations together in future studies. According to Berry's theory of acculturation strategies, each strategy results in a distinctive pattern of adjustment. For this reason, it may also be beneficial to include Berry's acculturation strategies as part of the bilinear model of acculturation.

Another direction for future studies would be to examine the effect of acculturation on health among different age groups. The majority of the current literature focuses on college students and adults, giving less attention to children and elders. There are a few topics, such as alcohol use and risky sexual behaviors that are studied mainly in adolescents. The effects of acculturation on health may be different for people in different developmental stages, as they are faced with distinct acculturative stressors. For children and elders in Asian American families, one crucial task is to handle cultural discrepancies between them and the adults in the family: children tend to be more oriented towards American culture than their parents are (Portes & Rumbaut, 1996), and elders tend to be more oriented towards their heritage culture than their adult children are (Trinh & Ahmed, 2009). In contrast, the most important task for Asian American adults, especially immigrant adults, may be to attain proficiency in the mainstream culture in order to survive and succeed in their career. Therefore, future studies need to explore specific acculturation stressors for diverse age groups in order to gain a more nuanced understanding of the relationship between acculturation and health.

It would also be beneficial to examine different ethnic groups within the Asian American population. Although some epidemiological studies include comparisons of groups from various countries of origin, most of the current literature focuses on East Asians, such as Chinese, Japanese and Koreans. As a group, East Asians

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enjoy higher socioeconomic status than some other Asian subgroups, such as the Hmong, who are far more likely to experience poverty (Reeves & Bennett, 2004). It is important to examine Asian American subpopulations like the Hmong, as they may be more likely than East Asian subgroups to have risk factors for health problems.

Finally, future studies need to examine the underlying mechanisms of the relationship between acculturation and health. As more and more evidence demonstrates that there is a significant link between acculturation and health, it makes sense to investigate the reasons for such a link. The current literature has indicated that acculturative stressors may be a key factor linking acculturation and health outcomes together. More studies are needed to explore specific processes related to various acculturative stressors. For example, discrepant acculturation levels between parents and children in Asian American families may compromise family functioning, leading to poor health outcomes in both children and adults. Similarly, a low orientation towards both the heritage culture and the mainstream culture may weaken marginalized individuals' social networks and diminish their social support, placing their mental and physical health at risk. It is critical to explore these kinds of mediating processes, because having a better understanding of potential mediators between acculturation and health will enable researchers to provide valuable suggestions for interventions aimed at improving the lives of Asian Americans.

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