Assessment of Anxiety with Asians

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Assessment of Anxiety with Asian Clients

Anxiety and the Asian Client

The Asian population in the USA has rapidly grown to 12 million (US Department of Homeland Security, 2010) and Asian-born immigrants are the country's second-largest population behind those from Latin America (US Census Bureau, 2011). In 2009, their share increased to 28 % of the foreign-born population, up from 5 % in 1960 (US Census Bureau, 2011). In addition, the composition of the Asian population is constantly changing. The Asian-American population today is primarily born overseas, contrary to the situation three decades ago (Lee, Lei & Sue, 2000). Furthermore, the Asian population in the USA is extremely diverse and includes Indians, Chinese, Filipinos, Japanese, Koreans, Thai, Vietnamese, Pacific Islander Americans, and people from other heritages (Lee et al., 2000). Thus, it is important to be aware of the composition of Asian-Americans and their heterogeneity in the USA in order to understand them better and not simply group them as "Asians."

The prevalence of anxiety disorders among Asian-Americans has risen from 5.75 % (Gee, Spencer, Chen, & Takeuchi, 2007) to 11.8 % (Gonzalez et al., 2010). Asian-Americans are less likely to meet the diagnostic criteria for generalized anxiety disorder, posttraumatic stress disorder, social anxiety disorder, and panic disorder than other ethnic groups (e.g., Hispanics White Americans; Asnaani, Richey, Dimaite, Hinton, & Hofmans, 2010). The specific prevalence rate for social anxiety disorder is 5.3 %, generalized anxiety disorder is 2.4 %, and panic disorder is 2.1 % among an Asian sample consisting of Chinese, Filipino, Vietnamese, or other Asian ancestry (Asnaani et al., 2010). These rates are lower than those of White Americans, whose rates are 12.6 % for social anxiety disorder, 8.6 % for generalized anxiety disorder, and 5.1 % for Panic Disorder (Asnaani et al., 2010). The lifetime prevalence of posttraumatic stress disorder (PTSD) was also lowest among Asians (4.0 %) compared to African Americans (8.7 %), Hispanics (7.0 %), and White Americans (7.4 %) (Roberts, Gilman, Breslau, Breslau, & Koenen, 2010). However, Asian immigrants in the USA report a higher rate of mental health problems compared with individuals in their native countries, although this is less studied (Tiwari & Wang, 2006). For example, the 12-month prevalence rate of social anxiety disorder based on East Asian surveys is much lower in the native countries compared to Asian-Americans in the USA, in the range of 0.4 % in Taiwan (Hsu & Alden, 2008), 0.2–0.6 % in Korea (Kung & Lu, 2008), 0.2 % in China (Roy-Byrne et al., 2005), and 0.8 % in Japan (Matsunaga, Kiriike, & Matsui, 2001).

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Considering that immigrants tend to have better health compared to those who remain in their home country, the higher prevalence of anxiety disorders in foreign-born Asian immigrants supports the hypothesis that acculturation and adjustment issues may contribute to acculturative stress, which has been associated with depression, anxiety, and other health outcomes (Woodward et al., 2011).

Cultural Sensitivity

There has been a growing concern among psychologists for awareness of cross-cultural variation in psychopathology. Even though anxiety disorders have been found to exist across cultures (Good & Kleinman, 1985), the symptoms vary considerably cross-culturally (Barlow, 2002). As mentioned above, Asian-Americans are typically less likely to endorse and report symptoms of anxiety disorders than other racial groups including Caucasians, Latinos, and African Americans (Asnaani et al., 2010). Experts hypothesized that this is because language differences may impact the degree to which diagnostic instruments capture the meaning of anxiety symptoms among Asian-Americans (Alegria et al., 2004). Another explanation for the lower prevalence rate is related to culture. In terms of a collectivistic worldview, an emphasis on the importance of maintaining harmonious relationships with other people and overall well-being may explain the lower rate of anxiety symptoms identified among Asian populations (Asnaani et al., 2010). There are, however, some notable exceptions. In fact social anxiety is exceptionally high among this group. Collectivistic countries (e.g., Japan, Korea, and Spain) showed higher levels of social anxiety and more positive attitudes toward socially avoidant behaviors than individualistic countries (e.g., Australia, Canada, Germany, the Netherlands, and the USA; Heinrichs, Rapee, & Alden, 2006). For Asian populations, the strict social norms of collectivist cultures that ensure group harmony (including being submissive and quiet) may increase social anxiety due to the negative consequences when those norms are violated (Rapee & Spence, 2004). When Asians move to the USA, they might be more conscious of other people's feelings and try to avoid situations where they might hurt other people's feelings based on their cultural values (Kleinknecht, Dinnel, & Kleinknecht, 1997). Thus, when assessing Asian clients, researchers and clinicians need to be aware whether culture/heritage-specific issues are influencing their endorsement and report of anxiety symptoms.

This Chapter

This chapter will identify (1) which measures are most commonly used to assess anxiety in English-speaking populations, (2) assessment measures for generalized anxiety disorder, panic disorder, specific phobias (e.g., social phobia and social anxiety), PTSD, and their reliability and validity, (3) different types and symptoms of anxiety disorders and their respective measures depending on each nation and culture (Indian, Chinese, Japanese, Korean, Southeast Asian), and (4) the availability of measures in different languages. In addition, this chapter emphasizes the importance of administrating assessments for somatic symptoms of anxiety as researchers identified that Asians often express mental health symptoms through somatization, and this is a critical cultural consideration when assessing anxiety disorders (Table 13.1).

Assessment of Anxiety as a Domain

Generalized Anxiety Disorder

The *Generalized Anxiety Disorder Questionnaire-IV* (GADQ-IV; Newman et al., 2002) is a nine-item self-report measure that assesses DSM-IV criteria for Generalized Anxiety Disorder (GAD), such as the presence and interference of worry and related physical symptoms. The measure assesses the presence, frequency, and controllability of excessive worry, the number of endorsed worry themes and physical symptoms (e.g., restlessness, irritability, being easily fatigued, difficulty concentrating, muscle tension), and the interference and distress

Table 13.1 Anxiety disorder assessment measures with Asians

Measure	Disorder assessed	Relevant research findings	Available in
Generalized Anxiety Disorder Questionnaire for DSM-IV	Generalized anxiety disorder	1. Good sensitivity and specificity in distinguishing individuals with GAD from those with other anxiety diagnoses 2. A single factor across different racial groups	Japanese
Penn State Worry Questionnaires	Generalized anxiety disorder	1. Good internal consistency when examined for different ethnic groups (Caucasian, Hispanic, Asian)	Chinese, Japanese, Korean
State-Trait Anxiety Inventory	Examines two dimensions of anxiety: state and trait anxiety	1. Most widely used self-report measure in the USA 2. High validity and reliability among Asian-Americans	Chinese, Hong Kong, Japanese, Korean
Beck Anxiety Inventory	Panic disorder	1. Few/no studies for Asian-Americans 2. Excellent reliability and validity among Asians	Chinese, Japanese, Korean
Panic Disorder Severity Scale	Panic disorder	1. Few/no studies for Asian-Americans 2. Validated in different Asian languages	Chinese, Japanese, Korean
Social Phobia and Anxiety Inventory	Social phobia	1. Empirically derived from somatic, cognitive, and behavioral responses to social fears 2. One study reported high reliability for Asian Americans	Chinese, Japanese, Korean
Social Avoidance and Distress Scale	Social anxiety	1. One study published for Chinese Americans 2. High reliability and validity for Japanese and Koreans	Japanese, Korean
Social Interaction Anxiety Scale	Social anxiety	1. Few/no studies for Asian Americans 2. High reliability and validity for different Asian languages	Chinese, Japanese, Korean
Traumatic Life Events Questionnaire	Posttraumatic stress disorder	1. Few/no studies for Asian Americans 2. High reliability and validity for Chinese	Chinese
PTSD Checklist-Civilian version	Posttraumatic stress disorder	1. Few/no studies for Asian Americans 2. Excellent reliability for Cambodian refugees	Chinese

caused by worry and its symptoms. It has good psychometric properties being sensitive and specific for distinguishing individuals with GAD from those with other anxiety disorders (Newman et al., 2002). A recent factor analytic study has supported a one-factor model of the GADQ-IV (Rodebaugh, Holaway, & Heimberg, 2008). Based on this factor analysis, there is a single factor across all racial groups including African American, Caucasian, Hispanic/Latino, and Asian groups, and this result was consistent with a previous factor analysis conducted on a primarily Caucasian sample (Robinson et al., 2010). Another study found out that Asian-Americans do not have the variations in intensity of worry depending on the circumstances while Caucasians and African Americans do (Scott, Winnie, & Heimberg, 2002). Other than those two studies, there are little/no recent studies published regarding this measure for Asian-Americans in English-language journals for the past 5 years. However, it has been translated and used in China (e.g., Wang, Wang, & Jiang, 2007) and Japan (e.g., Takebayasi, Koki, & Thugiura, 2012) and it appears this is appropriate for individuals of Chinese and Japanese origin.

The *Penn State Worry Questionnaire* (PSWQ; Meyer, Miller, Metzger, & Borkovec, 1990) is a 16-item self-report questionnaire that measures an individual's tendency toward excessive worry. Each item is rated on a 1 ("not at all typical of me") to 5 ("very typical of me") Likert-type scale.

Eleven items ask individuals to endorse worry items, with higher numbers meaning more worry (e.g., "My worries overwhelm me"; "I worry all the time"). Five items include items asking respondents to rate a lack of worry (e.g., "I find it easy to dismiss worrisome thoughts"; "I never worry about anything") and the items are reverse-scored before computing the total score. The questionnaire has strong psychometric properties with clinical populations (Brown, Antony, & Barlow, 1992) and has been shown to distinguish patients with GAD from those with other anxiety disorders and healthy controls (Brown et al., 1992). The PSWQ has excellent psychometric characteristics and there are studies comparing those characteristics across diverse groups of ethnic backgrounds. The directly worded items demonstrated good reliability when examined collectively or separately by different ethnic groups including Caucasian, Hispanic, and Asian groups in a community sample (all Cronbach's as >0.90; Gillis, Haaga, & Ford, 1995). In addition, the PSWQ has been translated into Chinese (e.g., Zhong, Wang, Li, & Liu, 2009), Japanese (e.g., Matsumi, 2009), and Korean (e.g., Lim, Kim, Lee, & Kwon, 2008) and used pervasively in Asia.

The *State-Trait Anxiety inventory* (STAI; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983) is a self-report measure with 40 items that assesses two dimensions of anxiety: state and trait anxiety (Virella, Arbona, & Novy, 1994). State anxiety refers to nervousness or worry that is highly relevant to situational factors. Trait anxiety is considered to be more stable and dispositional anxiety. The STAI is one of the most commonly used measures of anxiety in the USA. It has been used in clinical settings to diagnose anxiety and to distinguish it from depressive symptoms. The STAI-X is a previous form of the STAI-Y. The STAI-Y uses 20 items to assess trait anxiety and 20 items to evaluate state anxiety. State anxiety items (how one feels at a particular moment in time) include "I am tense; I am worried; I feel calm; I feel secure." Trait anxiety items (how the individual generally feels over an indefinite period of time) include "I worry too much over something that really doesn't matter," "I am content," "I am a steady person." The responses are on a four-point Likert scale, such that higher scores indicate greater anxiety. The scale has high internal consistency from 0.86 to 0.95 (Spielberger et al., 1983).

There is one study that validated the STAI for Asian/Pacific-Islander adolescents in the USA, and it showed that the scale had high reliability and concurrent validity (Hishinuma et al., 2001). Although there are few/no other studies published using the STAI with Asian-American populations, a lot of efforts were made to translate it into Asian languages, and there are several studies published in English-language journals. Shek (1988) conducted a number of studies to validate the Chinese translation of the STAI–X. He reported that the translated scale was valid and could be a reliable assessment instrument to measure anxiety in Chinese populations. Lee and Oei (1994) used a Chinese version of the revised STAI–Y in their research for 226 college students in Hong Kong. The Cronbach's alpha for the STAI-Y Chinese was 0.90 in that study. Psychometric data on the Japanese version of the STAI suggest that it has satisfactory reliability and validity for assessing anxiety in Japanese populations (Iwata et al., 1998). In one cross-cultural study for Koreans, Youn, Knight, Jeong, and Benton (1999) translated the STAI–Y into Korean and then back-translated it into English. Cronbach's alpha for the Korean translation was 0.94 in that study, which suggests that this measure is appropriate for individuals with Chinese, Japanese, and Korean origin.

Panic Disorder

The *Beck Anxiety Inventory* (BAI; Beck, Epstein, Brown, & Steer, 1988) is a reliable 21-item self-report measure useful in the assessment of panic symptomatology rather than for anxiety, and it has been shown to discriminate the construct of anxiety from depression (Beck et al., 1988). It is one of the most frequently used measures to assess the current level of various anxiety symptoms. Among the 21 items, 14 reflect somatic symptoms (e.g., numbness or tingling, feeling hot, dizzy or lightheaded) and the remaining

seven items refer to specific aspects of cognition related to anxiety and panic symptoms (e.g., fear of the worst happening, fear of losing control, and fear of dying). The BAI asks individuals to endorse their symptoms during the past week by using a four-point severity scale with responses ranging from "Not at all" to "Severely-I could barely stand it" (Steer, Ranieri, Beck, & Clark, 1993). The BAI has demonstrated excellent reliability and validity in clinical samples (Creamer, Foran, & Bell, 1995). Unfortunately, there are few/no studies published in English-language journals regarding the psychometric properties of the BAI for Asian-Americans. There is one study on using the BAI for outpatients attending the Neuroscience Psychiatric Clinic at a tertiary referral hospital in Singapore, which was published in an English-language journal (Luo, Fones, Thumboo, & Li, 2003). The participants were fluent in either English or Chinese, and they used identical English or Chinese questionnaires according to each individual's preference. However, the study did not report on the reliability and validity of the Chinese BAI. Other Asian countries have been pervasively using the BAI, but the resulting studies have not been published in English journals. An examination of Chinese (e.g., Li et al., 2008) and Korean (e.g., Han, Cho, Park, Kim, & Kim, 2003) translations of the BAI in Asian journals, revealed numerous studies using these translated measures strong psychometric properties of the translated measures. From these results, it appears that translated BAI version is appropriate for individuals with Asian origins (e.g., Chinese and Korean) or who are not fluent in English. At the same time, original English version of BAI is fine for Asian-Americans who prefer English.

The *Panic Disorder Severity Scale* (PDSS; Houch, Spiegel, Shear, & Rucci, 2002) is a self-report measure with seven items assessing the overall severity of panic disorder. It evaluates the frequency of panic disorder, perceived distress, social and occupational interference, anticipatory anxiety, and avoidance of agoraphobic situations as interoceptive cues (e.g., (1) how many panic and limited symptoms attacks did you have during the week, (2) during the past week, how much have you worried or felt anxious about when your next panic attack would occur or about fears related to the attacks?). Respondents rate each question from 0 to 4 on a five-point Likert scale, and the total score ranges from 0 to 28. The scale has comparative reliability and validity when the measure is used for panic disorder patients, and it is sensitive to change with treatment (Houch et al., 2002). Thus, the PDSS is a useful tool in clinical and research settings. There are few/no studies published using this measure for Asian-Americans in the English journals. However, it has been translated and used pervasively in Asian countries including China (e.g., Hu, Cui, & Li, 2012), Japan (e.g., Dakasi et al., 2004), and Korea (e.g., Lim, Yu, & Kim, 2007) to measure panic disorder symptoms.

Specific Phobias

The *Social Phobia and Anxiety Inventory* (SPAI; Turner, Beidel, Dancu, & Stanley, 1989) is a self-report measure with 45 items assessing social anxiety and fear. It evaluates specific somatic and affective symptoms, cognitions, and behaviors due to potentially fear-producing situations (e.g., with authority figures, with strangers). The measure was developed on an empirical basis and it has high test–retest reliability and good internal consistency (Turner et al., 1989). The SPAI is known to be an ideal screening tool for social phobia and anxiety in various settings including inpatient and outpatient clinics, residential treatment facilities, prisons, schools, and employment settings (Turner et al., 1989). In addition, the SPAI score has been shown to be sensitive to the distinction between socially anxious and nonsocially anxious populations (Beidel, Turner, Stanley, & Dancu, 1989) and it also distinguishes participants with social phobia and those with panic disorder with or without agoraphobia (Turner et al., 1989). There is one study using the SPAI to understand cultural differences between European Americans and Asian-Americans regarding social anxiety in anxiety-provoking situations. Asian-Americans reported higher average number on negative emotions in social situations than European Americans. The Cronbach's alpha

coefficient for Asian-Americans was 0.97 in that study (Lee, Okazaki, & Yoo, 2006). Although there are few studies regarding the SPAI in English-language journals, the measure has been translated and used frequently in Asian countries including China (e.g., Chin & Zhang, 2010), Japan (e.g., Okajima, Yoshihiro, & Sasagawa, 2008), and Korea (e.g., Kim, 2004). Studies on its use in these countries have been published in Asian journals in the respective languages. Thus, it is appropriate to use a translated version of measure for individuals of Asian origin who do not speak English or prefers their native languages (i.e., China, Japan, and Korea).

The *Social Avoidance and Distress Scale* (SADS; Watson & Friend, 1969) is a self-report measure with 28 items evaluating the affective and behavioral components of social anxiety including distress, discomfort, fear, anxiety, and the avoidance of social situations. Half of the items assess social avoidance (i.e., the behavioral component of social anxiety) and the other 14 assesses social anxiety (i.e., the affective component of social anxiety). The items include "I feel relaxed even in unfamiliar social situations," "I try to avoid situations which force me to be very sociable," and "It is easy for me to relax when I am with strangers." Respondents answer with either true or false. The SADS has high reliability, with an internal consistency of 0.94 and a test-reliability ranging from 0.68 (Watson & Friend, 1969). There is one study on Chinese Americans using the SADS to examine passivity and nonassertiveness (Sue, Sue, & Ino, 2001). However, the study did not report psychometric properties. Another study using the SADS for Japanese Americans reported high internal reliability, with Cronbach's alpha at 0.91 (Norasakkunkit & Kalick, 2009). The SADS was translated into Chinese (e.g., Peng, Fan, & Li, 2003) and Korean (e.g., Lee & Choi, 1997) and has been used frequently by researchers and clinicians.

The *Social Interaction Anxiety Scale* (SIAS; Mattick & Clarke, 1998) is a self-report measure with 20 items, reflecting anxiety in social interaction situations such as fear of being boring and unclear, or not knowing what to say. The items include anxiety-associated reactions to a variety of social interaction situations, such as "I get nervous if I have to speak to someone in authority" and "When mixing socially I am uncomfortable." Respondents are asked to indicate to what extent the statements describe themselves on a five-point Likert scale ("not at all" to "extremely"). It has good internal consistency and well-established validity in clinical and nonclinical samples (Mattick & Clarke, 1998). There have been few to no studies on the reliability or validity of the SIAS for Asian-Americans. However, the SIAS has been translated into Chinese (e.g., Ye, Qian, Liu, & Chen, 2007) and Japanese (e.g., Ochiai & Matsui, 2009), and it has been used pervasively to measure anxiety in social situations.

Posttraumatic Stress Disorder

The *Traumatic Life Events Questionnaire* (TLEF; Kubany et al., 2000) is a self-report measure evaluating the various types of traumatic events that a respondent has experienced during his or her lifetime with 23 items. Categories of trauma include natural disasters, exposure to warfare, interpersonal violence such as domestic abuse, sexual assault, and child abuse, and robbery involving a weapon. Respondents provide the number of times they experienced such events, ranging from "never" to "more than five times." The TLEQ also assesses whether respondents experienced helplessness, fear, or horror in response to the endorsed trauma exposure with a yes or no response (Kubany et al., 2000). There is one study examining the relationship of PTSD and related perinatal behavioral risk factors among Caucasian, Asian, and Pacific Islander women. However, the study did not report the psychometric properties of the measure (Onoye, Goebert, Morland, Matsu, & Wright, 2009). In Chinese journals, it was observed that the TLEQ has been translated into Chinese (e.g., Huang, Zhang, Liu, & Wei, 2008). The other Asian countries such as Japan and Korea appear to have developed their own measures and use them instead of a translated TLEQ.

The *PTSD Checklist-Civilian version* (PCL-C; Weathers, Litz, Herman, Huska, & Keane,

1993) assesses lifetime and current PTSD symptoms in clients who were exposed to trauma with 17 items through self-report. The PCL-C includes items (re-experiencing, avoidance, arousal) based on the Diagnostic and Statistical Manual of Mental Disorders-IV (American Psychological Association, 1994) criteria for determining PTSD diagnoses. Each item corresponds to 1 of 17 DSM-IV PTSD symptoms on a 1–5 Likert scale from "Not at all" to "Extremely" (Weathers et al., 1993). Example items are "Repeated, disturbing memories, thoughts, or images of a stressful experience from the past," "Feeling very upset when something reminded you of a stressful experience from the past," and "Avoid thinking about or talking about a stressful experience from the past or avoid having feelings related to it." The measure has high internal consistency (alpha = 0.85–0.98) (Wilkins, Lang, & Norman, 2011). There is one study published in an English-language journal on Cambodian refugees with PTSD that uses this measure (Hinton, Rasmussen, & Nou, 2009). The Cambodian version of the PTSD-C has excellent test–retest (at 1 week) and inter-rater reliability ($r = 0.91$ and 0.95, respectively) (Hinton et al., 2009). In Chinese journals, we observe that the PCL-C has been translated into Chinese and used pervasively (e.g., Wang, Sui, Li, & Jie, 2010). However, this measure is not translated into other Asian languages. The other Asian countries such as Japan and Korea have developed their own measures.

Culture/Nation Specific Anxiety Disorder and Symptoms

Asian-Americans tend to report anxiety in terms of physical symptoms (irrespective of the trigger) rather than psychological symptoms, which does not show up very often in Americans. For example, Asian-Americans may express concerns about throwing up or fainting when they are anxious (Gordon & Teachman, 2008). Specifically, there are so-called culture-bound syndromes of Asian populations. For example, Koreans experience *hwabyung*, which literally means fire disease or anger disease. Japanese have been applied the diagnosis of *shinkeishitsu* (indicating a nervous character) and *taijin kyofusho* (meaning fear of interpersonal relations). In Khmer, there is a syndrome of *kyol goeu*, meaning wind overload. There has been debate whether these are cultural variations of Western anxiety disorders (e.g., Hinton, Um, & Ba, 2001; Lin, 1983). Although multiple functional somatic symptoms are common anxiety presentations, there are culture-specific syndromes for each Asian nation with particular cognitions about anxiety-type somatic and psychological symptoms. For clinicians and researchers, it is important to be aware of those race/nation specific syndromes and symptoms when assessing and measuring anxiety symptoms.

North East Asia

China. In China, patients with anxiety often complain of "neurasthenia" or "weak nerves" (Shen, Zhang, & Huang, 2006); the Western diagnosis of "neurasthenia" was adopted in China at the beginning of the twentieth century. Key features of "weak nerves" include excessive worry, headache, and fatigue. The patient is concerned that worry drains his or her mind and body and results in further fatigue, damaging the soul and the body (Shen et al., 2006). In China, it is believed that neurasthenia produces catastrophic thoughts, and these contribute to the severity and frequency of generalized anxiety disorder and panic disorder. In addition, dizziness is a common complaint among Chinese patients with panic disorder (Park & Hinton, 2002). Due to the influence of traditional Chinese medicine, anxiety states are often attributed to organ dysfunction, especially to a "weak kidney" or a "weak heart" (Park & Hinton, 2002). In China, medical doctors used to attribute panic symptoms to such organ failure. Western doctors may have to be aware of the traditional approaches the Chinese used to have and intervene correctly when Chinese Americans report certain catastrophic cognitions and hypervigilance for certain somatic symptoms.

Japanese. In Japan, as in China, "neurasthenia" refers to common anxiety disorder symptoms (Kitanishi & Kondo, 1994). Neurasthenia is a

term that captures various mental health disorders ranging from social phobia to schizophrenia. Anxiety states in Japan are often diagnosed as "neurocirculatory asthenia" and typical symptoms include palpitations, fatigue, and orthostatically induced dizziness (Hinton et al., 2007). The syndrome of "orthostatic dysregulation" is a common manifestation of panic disorder. Patients with panic disorder have orthostasis-induced symptoms and appear to have various phobias, especially social phobia, which is presented as a syndrome called *taijin kyofusho*, which means literally "fear of people" (Maeda & Nathan, 1999). Patients with *taijin kyofusho* avoid social relationships and social settings due to fears of blushing, being observed, having offensive odors, making inappropriate facial expressions, and offending other people (Kirmayer, 1991). However, *taijin kyofusho* differs from social phobia because there is a greater emphasis on fear of offending others instead of embarrassing oneself (Nagata et al., 2003). *Tajin kyofusho* has been frequently considered as a Japanese culture-specific expression of social anxiety disorder.

Korean. Hwabyung, literally indicating "fire sickness," is a common syndrome in Korea that has also been reported among Koreans in the USA (Lin, 1983). *Hwabyung* occurs in middle-aged Korean women of low socioeconomic status, with symptoms including generalized anxiety, panic, depression, aggression, and persistent sadness. They also report somatic symptoms such as digestive problems, abdominal pain, hot or cold flashes, and sleeplessness. Researchers have remarked that *hwabyung* may result in panic attacks and may also be a presentation of generalized anxiety disorder (Lin et al., 1992).

Indian Americans (*Indian, Pakistani, and Bangladeshi*). Semen-loss syndrome is a well-known and common presentation of anxiety among Indian Americans (Perme, Ranjith, Mohan, & Chandrasekaran, 2005). Semen-loss anxiety involves fears of risky bodily depletion. A sufferer of semen-loss attributes multiple somatic symptoms (weakness, palpitations, aches, and pains) and psychological symptoms (anxiety, fear) to an excessive loss of semen through urination, nocturnal emissions, or excessive masturbation. Semen loss syndrome usually starts with an acute onset characterized by intense anxiety symptoms consisting of high arousal, fatigue, somatic symptoms, and sexual dysfunction (Sumathipala, Siribaddana, & Bhugra, 2004).

Southeast Americans

Cambodia. As in China and Japan, the Western diagnostic category of neurasthenia has been adopted in Cambodia (Hinton, Hinton, Um, Chea, & Sak, 2002). Cambodians have several functional somatic syndromes that overlap with anxiety. Weakness is a common complaint among Cambodians who suffer from anxiety. Based on Cambodian belief, body weakness may result in various anxiety type symptoms including worry, frequent fear, tinnitus, shortness of breath, and a feeling of lightness in the body. Cambodians have a great fear of heart weakness, too (Hinton et al., 2002). Especially among Cambodian refugees, "weak heart" syndrome is a common presentation of generalized anxiety disorder, panic disorder, and PTSD. Specific anxiety symptoms such as palpitations, orthostatic dizziness, cold extremities, and even shortness of breath are attributed to a weak heart. In addition, Cambodian refugees commonly report neck-focused distress often associated with panic attacks, and those panic attacks frequently combine with both panic disorder features (e.g., catastrophic cognitions) and PTSD symptoms (e.g., trauma associations).

Thailand. In northeastern Thailand (where most of the population is Laotian speaking), patients with anxiety, especially panic disorder and PTSD, complain of having a weak heart (Hinton, 2000). They also report an "abdominal wind" syndrome, which is a frequent anxiety presentation (Hinton, 2000). Both Cambodians and northeastern Thais have ethnophysiology-caused catastrophic cognitions resulting in hypervigilance of somatic symptoms (e.g., particularly cardiac and gastrointestinal symptoms). Interestingly, the concept of "abdominal wind" that exists in northeastern Thailand is not reported by people in central Thailand. In addition, the rates of gastrointestinal-focused

panic are much lower in central and Southern Thailand (Hinton et al., 2007).

Vietnam. During French colonial rule, the "neurasthenia" and "cardiac neurasthenia" theories were adopted in Vietnam. As in Cambodia, common symptoms of anxiety disorder including generalized anxiety disorder, panic disorder, and PTSD were viewed as "weakness" and "heart weakness" in Vietnam (Chung & Singer, 1995). In addition, the Chinese diagnosis of "weak kidney" was adopted in Vietnam, which resulted in the fear that weakness may lead to "kidney weakness." Cautious of disordered kidneys, Vietnamese are hypervigilant to back sensations and sometimes experience urination-induced panic attacks. They worry that semen can be lost in the urine (Hinton, Nguyen, Tran, & Quinn, 2005). Vietnamese frequently report headache-focused panic, indicating that a headache to them means serious physiological abnormalities including overly tense nerve fibers that may snap and cause death, insanity, or permanent loss of intelligence (Hinton, Chau, et al., 2001).

Non-English Measures Available to Each of Group

There have been attempts to translate English assessment measures into Asian languages in Asian countries. In the process, those items considered inappropriate were eliminated or revised in accordance with the tester's opinion. Unfortunately, studies on the full array of validated instruments and measures used for Asian-Americans in the USA cannot be found in English-language journals. However, there are lots of instruments that have been translated, validated, and made available in Asian countries, and increasing numbers of publications concerning psychological assessment are appearing in Asian journals. Nevertheless, they are only published in Asian language journals that limit international access to the contents of those articles, and it is difficult to see the psychometric properties of each measure. Some of the Asian countries have developed their own culture-sensitive measures, but these also have limited access for international researchers.

Conclusion

It has been particularly problematic and difficult to conduct valid assessment research due to cultural differences in self-disclosure tendencies and stigma around mental health illness among Asian populations. Culturally, Asians come from an orientation with strong family ties (Fong, 1973) and there is a strong tradition of controlling emotional expression (Lai & Linden, 1993). This makes it hard for researchers to believe the prevalence rates and self-reporting among Asian-Americans. Another major issue in the anxiety assessment of Asian-Americans concerns the adaptation and translation of inventories. The most important question is whether the content of the measure is relevant to Asian-Americans, which is content validity. Another question is whether the test actually predicts the relevant behavior in Asian-Americans, predictive validity.

In this chapter, many measures that are viable for use with Asian populations are presented. In addition, culture-specific anxiety syndromes and symptoms are introduced. It is crucial for clinicians and researchers to keep in mind that psychological symptoms of anxiety may be defined and manifested differently in various countries and cultures. Clinicians and researchers need to be mindful of those culture-bound differences regarding anxiety and utilize those measures carefully when evaluating the presence of an anxiety disorder with Asians. This is to develop correct treatment planning and implementation of high-quality health care based on accurate assessments and understanding.

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