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Cross-Cultural Aspects of Anxiety Disorders

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Abstract

A person's cultural background influences the experience and expression of emotions. In reviewing the recent literature on cross-cultural aspects of anxiety disorders, we identified some culturally related ethnopsychology/ethnophysiology factors (the culture's conceptualizations of how the mind and body function) and contextual factors that influence anxiety disorders. Ethnopsychology/ethnophysiology factors include the person's ideas about the mental and bodily processes (and their interaction), whereas contextual factors are associated with the social norms and rules that may contribute to anxiety, including individualism vs. collectivism and self-construals. From the perspective of ethnopsychology/ethnophysiology and contextual factors, we will discuss "*khyâl cap*" ("wind attacks"), *taijin kyofusho*, and *ataques de nervios*, three prominent examples of culture-specific expressions of anxiety disorders that have all been included in the DSM-5 list of cultural concepts of distress,

Keywords

Culture; anxiety disorders; DSM-5; cross-culture; taijin kyofusho; ataques de nervios

Introduction

Anxiety disorders are some of the most prevalent mental disorders [1]. These disorders are strongly influenced by ethnic, racial, and cultural factors, in part because of culturally dependent variations in the beliefs about the underlying physiology of the illness syndromes [2] and the social context and norms a person is exposed to [3].

For the following discussion, we use the term "race" to describe the broad differentiations based on physiognomy (e.g., White), the term "ethnicity" when for "common descent" and affiliation with a historically continuous community (e.g., Latino), and the term "culture" to describe social groups with specific or homogenous attributes. In this article, we will

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Compliance with Ethics Guidelines

Human and Animal Rights and Informed Consent

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primarily concentrates on culture and anxiety disorders. Specifically, we will examine the ethnopsychology/ethnophysiology and contextual factors that contribute to the cultural variations in the experience and expression of anxiety.

Prevalence of Anxiety Disorder in Different Cultural Groups

A direct comparison in prevalence rates between different cultures is difficult because of differences in language, assessment instruments, political, geographic, and sociodemographic context. A more meaningful estimate of the difference in prevalence rates between different cultural groups may be derived by comparing these groups within the same, multicultural country. One such study assessed the prevalence rates of anxiety disorders within a large representative sample of the United States population, while over-sampling of Hispanic Americans ($N = 3,615$), Asian Americans ($N = 1,628$), and African Americans ($N = 4,598$) to counter the methodological problems of unequal sample sizes typically encountered with research on minority racial groups [4]. The results showed that Asian Americans consistently endorsed symptoms of all four major anxiety disorders (social anxiety disorder, generalized anxiety disorder, panic disorder, and post-traumatic stress disorder) less frequently than any of the other racial groups. White Americans ($N = 6,870$) consistently endorsed symptoms of social anxiety disorder (12.6%), generalized anxiety disorder (8.6%) and panic disorder (5.1%) more frequently than African Americans (8.6%, 4.9%, 3.8%, respectively), Hispanic Americans (8.2%, 5.8%, 4.1%, respectively), and Asian Americans (5.3%, 2.4%, 2.1%, respectively). African Americans more frequently met criteria for post-traumatic stress disorder (PTSD) (8.6%) as compared to the White American subgroup (6.5%), Hispanic Americans (5.6%), and Asian Americans (1.6%).

Even when controlling for demographic variables, such as gender, age, and socioeconomic status, White Americans were significantly more likely to endorse symptoms of anxiety disorders than any of the three minority racial groups, with the exception of PTSD. African Americans had a significantly higher chance of being diagnosed with PTSD than the Asian-American or Hispanic sample. Moreover, Asian Americans were less likely to be diagnosed with generalized anxiety disorder and PTSD than the Hispanic sub-group.

The perception of racial discrimination was associated with the endorsement of various anxiety disorders, including panic disorder with agoraphobia, agoraphobia without history of panic disorder, and post-traumatic stress disorder. However, this effect could also be observed for major depressive disorder and substance use disorders, independent of the socioeconomic status, level of education, age, and gender of participants [5].

These results might be a reflection of the sociopolitical history of ethnic groups in the United States. For example, the African American community has shared a longstanding battle with racism in the history of the nation with significant change in this experience over several centuries. In contrast, Hispanic and Asian Americans have immigrated relatively recently but have faced their own individual challenges with integrating into mainstream society. It is very likely that reactions to discriminatory events are likely to differ on a broader level between ethnic minority groups within a multicultural society. Therefore, for

the remainder of our discussion, we will examine the unique factors that might explain the cultural differences in anxiety disorders within each homogenous cultural group.

Cultural Factors Influencing Anxiety Disorders

A number of factors need to be considered when evaluating the relationship between culture and anxiety disorders. These factors may relate to ethnopsychology/ethnophysiology or contextual factors.

Ethnophysiology/ethnopsychology factors arise from ideas about bodily systems or symptoms, including psychological signs (e.g., forgetfulness or poor concentration), whereas contextual factors relate to the social context and norms that govern the social structure. Contextual and ethnophysiology/ethnopsychology factors are not independent, but are in a complex interactive relationship in different cultures. Nevertheless, we will discuss them separately in order to isolate the various aspects that are most pertinent to our discussion.

Ethnopsychology/ethnophysiology Factors

Beliefs about the human body's biology—and the nature of psychological process—are closely linked to culture-specific disorders [6]. In the United States, the fear of a heart attack is commonly associated with the catastrophic cognition during a panic based on a layperson understanding of the heart, heart attacks, their symptoms, and risk factors for heart attacks. Similarly, other social and cultural groups express mental disorders according to their own understanding of the body's functioning. These culture-specific meanings differ from those in Western medicine. For example, most US Americans know that fatty foods and cigarettes predispose the person to a heart attack and that chest tightness can signal a heart attack. In contrast, Cambodians typically show multiple anxiety-related syndromes that are based on fears of disturbed “inner wind” and blood flow. These events are called “wind attacks” (see the DSM-5 for a description, “wind attacks” being one of the cultural concepts of distress described in the cultural section of the volume). These events are thought to have many causes: worry, anxiety, fear, depletion, poor sleep, standing up.

Cambodians, for example, believe that tightness and soreness in the legs, especially at the knees and elbows, result from blockage of “tubes” (*sāsai*) that carry blood and “wind” (an air-like substance, called *khyâl*) along the limbs, and that coldness in the feet and hands indicates poor blood perfusion [7]. This is thought to have various catastrophic events, signaled by what in the West would be called anxiety symptoms. They fear “limb blockage” syndrome (*slap day slap ceung*), literally “death of the arms and legs,” indicated by cold hands and feet or numbness in those areas. This blockage of the flow of “wind” and blood may result in the “death” of the limb, owing to the lack of blood flow, what a Westerner would call a “stroke,” and this blockage may cause the ascent of “wind” and blood. This inner wind is then feared to cause asphyxia and cardiac arrest, rupturing of vessels in the neck and, once it reaches the cranium, multiple symptoms (e.g., tinnitus, blurry vision, and dizziness) and multiple adverse events such syncope, blindness, or death.

Owing to these beliefs about the physiology associated with somatic symptoms, and the dangers of an upsurge of “wind” and blood, many Cambodian patients are greatly concerned about a sore neck, because they attribute neck soreness to excessive “wind” and blood pressure at the neck that may rupture vessels at that location. Other symptoms associated with “sore neck” episode include tinnitus and blurry vision due to the general upward rising of “wind” and blood. Catastrophic cognitions related to this “*sore neck syndrome*” often lead to neck-focused panic attacks. In a neck-focused panic attack [7], Cambodians fear death from rupture of the neck vessels. Aside from a sore neck (*rooy kâ*), other prominent symptoms of this attack include head symptoms (e.g., headache, tinnitus, blurry vision, and dizziness) and autonomic arousal (e.g., cold extremities, palpitations, and shortness of breath).

Cambodians may also experience an “abdominal wind syndrome” [8]. This syndrome gives rise to catastrophic cognitions about gastrointestinal sensations, and these beliefs may lead to a GI-focused fear attack. In a GI-focused attack, Cambodians worry that the “inner wind” will move upward into the body and cause bodily harm. Whereas North Americans often complain of butterflies in the stomach when anxious, Cambodians worry that these abdominal sensations indicate the occurrence of an “upward hitting wind” (*khyâl theau laeung leu*), leading to catastrophic consequences: syncope, cardiac arrest, bursting of the neck vessels.

Finally, Cambodians fear “wind overload” (*khyâl ko*), a syndrome that produces catastrophic cognitions about any sensations (e.g., dizziness, palpitations, cold extremities) that are felt upon standing, which leads to frequent episodes of orthostatic panic, that is, panic upon rising from lying or sitting to standing. Standing up is thought to provoke an upsurge of wind and blood in the body among those who are vulnerable (e.g., owing to poor sleep, worry, and other processes that deplete the body and increase inner wind), and this dangerous surge of “wind” and blood upward in the body and toward the head may occur upon standing, a condition called “wind overload.”

These examples are by no means unique. Rather any culture is likely to color the expression of anxiety disorders [9]. In traditional Chinese medicine, for example, anxiety states are often attributed to organ dysfunction, such as to a “weak kidney” (*shen xu*) or a “weak heart” (*xin xu*). The kidney is believed to nurture the brain by producing marrow. People who attribute their anxiety symptoms to a “weak heart,” will be especially hypervigilant to cardiac symptoms, such as dizziness, blurry vision, and tinnitus. Moreover, many Chinese patients believe that the depleted marrow and kidney will cause back pain. These examples illustrate how ethnopsychology/ethnophysiology factors in form of culturally specific beliefs about bodily functioning, shapes, modulate, and even determine, symptoms of anxiety disorders.

Contextual Factors

Whereas ethnopsychology/ethnophysiology factors influence the expression of anxiety disorders based on the person’s understanding of one’s own body (and the nature of psychological process and the effects on the body), contextual factors determine the expression of anxiety disorders due to social context and norms. A concept that has been

given a considerable degree of attention in cross-cultural research is the notion of *individualism/collectivism* [10]. The term *collectivism* refers to the relationship between members of social organizations that emphasize the interdependence of its members. Collectivistic cultures value harmony within the group and the individual gain is considered to be less important than improvement of the social group. In individualistic societies, individual achievements and success receive the greatest reward and social admiration, whereas collectivistic cultures emphasis the maintenance of social harmony.

Because more rules for social behaviors exist in Southeast Asian countries than in Western countries, it is possible that individuals are more easily embarrassed in the former than the latter countries. Therefore, embarrassment may be more common in collectivistic cultures because it is induced by external sanctions, whereas guilt and self-blame are more common in individualistic cultures because they are induced by internal sanctions [3]. This suggests that social contacts serve different purposes in individualistic versus collectivistic cultures. In some countries, especially in Asia, South America, the Pacific Islands, and Southern European, social rules are highly valued and are fairly strict. Individual feelings and thoughts more directly determine behavior in individualistic cultures, whereas harmony within the group is the highest priority in collectivistic cultures. In case members of those groups deviate from these social rules, they face sanctions that are associated with life satisfaction. It is possible that the match between the cultural orientation of a person and the cultural norms that contribute to mental health, especially if the person shows extreme collectivist orientation (allocentric) or extreme individualist values (idiocentric) [11].

Another important aspect of contextual cultural factors is *self-construal*. This term refers to an overarching schema that defines how people relate to others. Some cross-cultural researcher suggests that individuals from the US and other individualistic societies tend to construct and promote *independent* self-construals [12]. This is characterized by one's tendency to view oneself as autonomous and separate from the social context. Individuals with independent self-construals are motivated to uphold and validate their own unique, internal attributes and goals. In contrast, individuals in Asian and other Eastern cultures tend to value and possess *interdependent* self-construals, because they view themselves as being intricately connected and integrated with others in the social group. Interdependent people perceive themselves as being an extension of their social group and strive to maintain harmony in interpersonal relationships. In contrast, individuals from Western countries typically show an independent self-construal.

Although the concept of independent and interdependent self-construals was originally developed in the context of explaining cross-cultural differences in motivation and social behaviors [13], it has also been extended to examine differences between different subgroups of people in the United States. For example, the average American man tends to be socialized to construct an independent self-construal, whereas American woman are more likely to be socialized to construct an interdependent self-construal.

Closely related to self-construal are the concepts of gender role and *gender role identification* (masculinity vs. femininity). In the past, masculinity and femininity were thought to lie on opposite ends of a unitary dimension, with femininity being associated with

shyness and social subordination, and masculinity with social dominance and aggression. This notion has since been refined [14]. Instead, individuals can be classified as *masculine*, *feminine*, *androgynous* (a term that refers to individuals who show both masculine and feminine personality characteristics), or *undifferentiated*, (referring to individuals that belong to neither gender role). There is evidence to suggest that androgynous individuals are more adaptable and flexible in their behavior and perform well across a wide range of tasks. In contrast, sex-typed individuals are motivated to restrict their behavior in accordance with cultural definitions of gender appropriateness, and tend to perform poorly on tasks that require them to act in ways that are incongruent with their self-defined sex-type [14].

Further Examples of Culturally-Specific Anxiety Disorders

Above we described some cultural syndromes, and gave a detailed description of *khyâl* attacks, or “wind attacks,” which were thought by Cambodians to be provoked by worry, exhaustion, standing up and other triggers. Here we turn to a detailed description of two other cultural concepts of distress, which are also described in the cultural section of the DSM-5. *Taijin kyofusho* (TKS) TKS is a culturally specific expression of social anxiety in Japanese and Korean cultures. However, TKS-like presentations have also been reported in other cultures [3]. People affected by this disorder are concerned about doing something, or presenting an appearance, that will offend or embarrass the *other person* (rather themselves, as in social anxiety disorder). A typical expression of TKS is the fear to offend others by emitting offensive odors, blushing, staring inappropriately, and presenting an improper facial expression or physical deformity.

This disorder is more common in males than females (at the ratio of 3:2), and the severity varies on a continuum from highly prevalent but transient adolescent social concerns to delusional disorders. The Japanese diagnostic system classifies *taijin kyofusho* into four subtypes, depending on the content of the patient’s fear in respect to displeasing or embarrassing others: *sekimen-kyofu* (the fear of blushing), *shubo-kyofu* (the fear of a deformed body), *jikoshisen-kyofu* (the fear of eye-to-eye contact), and *jikoshu-kyofu* (the fear of one’s own foul body odor). Of these subtypes, *sekimen-kyofu* is most closely associated with the traditional (and Western) DSM-IV definition of social anxiety disorder, whereas *shubo-kyofu* is most closely associated with body dysmorphic disorder. In order to re-conceptualize social anxiety disorder to make it more universally appropriate, the DSM-5 modified the wording about fear of negative evaluation to encompass the concerns of patients with TKS. TKS is an example of a culture-specific form of an anxiety disorder in which contextual factors predominate. It is possible that these symptoms are more likely to be expressed by individuals who construe themselves as low on independence but high on interdependence, whereas Western social anxiety disorder may be more likely to be expressed by individuals who construe themselves as low on interdependence but high on independence.

Ataques de Nervios

Another frequently cited example of a culturally specific syndrome is an *ataque de nervios* (attack of nerves) among Puerto Ricans and Dominicans patients [6]. In this disorder, contextual factors predominate. The typical symptoms of an *ataque* include a sense of

impending loss of control, chest tightness, a feeling of heat in the body, palpitations, shaking of the arms and legs, and feelings of imminent fainting. The person may fear dying from bodily symptoms or fear engaging in behaviors that result from a loss of control, such as committing suicide or hurting others.

Negative affect, especially fear and anger, and fear of arousal symptoms play a prominent role in ataques [15]. Initially, the person may experience negative affect and arousal symptoms due to various reasons, such as hearing upsetting news about a family member or remembering a traumatic memory. This can then lead to a rapid escalation of distress that in turn may then induce various somatic and psychological symptoms, activate catastrophic cognitions about the symptoms and metaphoric networks associated with negative affect and distress, eventuating in an attack [15]. As is true for many disorders, ataques are also idioms of distress, that is, a generally known way of acting and reacting when in a dysphoric state; for example, *ataque de nervios* is a common way of reacting upon hearing bad news or something upsetting, a script of a kind that may be enacted at such times. (Analogously, shell shock syndrome played such a role in previous wars, a sort of known script that could be used when feeling overwhelmed after a bombing or some other horrific event. Or PTSD in the present day in the United States may be enacted in this way, serving as an available model of what happens following trauma.) In this sense, a distress presentation can result from the biology of disorder and/or from the enacting of known cultural models of what happens when distressed for some reason. At the same time, it can be assumed that there are universal criteria sets that are elaborated into local ways of expressing symptoms of a disorder.

Summary and Discussion

Anxiety disorders are some of the most common mental disorders that are associated with negative emotional experiences. In this article, we reviewed the cultural differences in anxiety disorders. Within the US, a multi-cultural country, Asian Americans consistently endorse symptoms of anxiety disorders (social anxiety disorder, generalized anxiety disorder, panic disorder, and post-traumatic stress disorder) less frequently than any of the other racial groups, whereas White Americans consistently endorse more symptoms of social anxiety disorder, generalized anxiety disorder and panic disorder more frequently than African Americans, Hispanic Americans, and Asian Americans. These data point to the strong contribution of culture on anxiety disorders.

In our review, we identified both ethnopsychology/ethnophysiology and contextual factors that might be responsible for the cultural differences the experience and expression of anxiety. Social context and norms contribute together with beliefs about one's body to the experience and expression of anxiety. Specifically, we discussed individualism/collectivism and self-construals as example for those contextual factors.

Three culturally specific expressions of anxiety disorders were discussed, which are also listed in the DSM cultural concepts of distress. These include *khyâl* attacks in the Cambodian population, *taijin kyofusho* of the Korean and Japanese cultures, and *ataques de nervios* of the Puerto Rican and Dominican cultures. Whereas the social norm and context

predominate in the case of TKS, ethnopsychology/ethnophysiology factors predominate in the case of *khyâl* attacks and *ataques de nervios*. These disorders illustrate the profound impact of culture on anxiety disorders, leading to unique expressions. Although the DSM-5 addresses some of these issues, considerably more research is necessary to understand when and how culture impacts disorders. This has obvious implications not only for the classification but also for the treatment of these common disorders.

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