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Cultural Aspects in Social Anxiety and Social Anxiety Disorder

Stefan G. Hofmann and Anu Asnaani

Boston University

Devon E. Hinton

Harvard University

Abstract

To examine cultural aspects in social anxiety and social anxiety disorder (SAD), we reviewed the literature on the prevalence rates, expressions, and treatments of social anxiety/SAD as they relate to culture, race, and ethnicity. We further reviewed factors that contribute to the differences in social anxiety/SAD between different cultures, including individualism/collectivism, perception of social norms, self-construal, gender roles, and gender role identification. Our review suggests that the prevalence and expression of social anxiety/SAD depends on the particular culture. Asian cultures typically show the lowest rates, whereas Russian and US samples show the highest rates, of SAD. *Taijin kyofusho* is discussed as a possible culture-specific expression of social anxiety, although the empirical evidence concerning the validity of this syndrome has been mixed. It is concluded that the individual's social concerns need to be examined in the context of the person's cultural, racial, and ethnic background in order to adequately assess the degree and expression of social anxiety and social anxiety disorder. This has direct relevance for the upcoming DSM-V.

The defining feature of social anxiety disorder (SAD) is the fear of negative evaluation by others. Therefore, SAD is directly linked to social standards and role expectations, which are culture dependent. Recognizing the intricate interplay between culture and social anxiety, some research has focused on psychopathologic manifestations of SAD across cultures [1], while in other studies the focus has been on comparing disorder-typical symptoms across cultures [2]. It should be noted that most of the studies on cultural differences in SAD have examined Eastern (especially Japanese, Korean, and Chinese) and Western (US American and European) samples.

The following is a review of the evidence pertaining to the validity of the DSM-IV-TR criteria for social anxiety disorder (SAD) as it relates to culture, race, and ethnicity. We use the term “race” when we refer to broad differentiations based on physiognomy (e.g., White), “ethnicity” when we refer to “common descent” and affiliation with a historically continuous community (e.g., Latino), and “culture” when we refer to social groups with specific or homogenous attributes. We particularly concentrate on culture as a source for the nosological revisions to explore whether certain cognitive/ behavioral elements (e.g., interpretations of illness; patterned reactions to stressors) affect the development or expression of psychiatric syndromes.

The search methods for the current review entailed a thorough computer search using the Pubmed and PsychInfo databases for articles published since the publication of the DSM-IV in 1994. Specifically, key words relevant to SAD (i.e., “social phobia” or “social anxiety disorder”) were combined with the terms “culture”, “ethnic*”, and “race”. This approach

yielded 602 articles, which were evaluated for relevance to the present topic. Finally, bibliographies of key articles were inspected, as well as references from 1965–1994 (as appropriate), to augment the final reference list.

In this review, we first discuss cultural differences in rates of SAD, in the form that SAD takes (emphasizing the well-researched case of TKS), and in treatment response. The final section examines key factors that generate SAD and affect its presentation, and discusses how these key mechanism may be influenced by culture. We end with a discussion of the implications of the review.

Cultural Differences in Prevalence Rates

Data from the National Comorbidity Survey (NCS) and the National Comorbidity Survey Replication (NCS-R) show that the 12-month prevalence rate of SAD among US adults is 7.1–7.9% [3,4]. Similar rates have been found in other cultural groups: 6.4% in Chile [5] and 9.1% in Brazil [6]. In contrast, the 12-month prevalence rate of SAD from East Asian surveys, although less studied, has been reported to be much lower, in the range of 0.4% in Taiwan [7], 0.2–0.6% in Korea [8, 9], 0.2% in China [10], and 0.8% in Japan [11]. The prevalence rates in several other populations have been found to be similarly low, such as in epidemiological surveys of Mexico (1.7%; [12]), Nigeria (0.3%; [13]), South Africa (1.9%; [14]) and Europe (0.8%; [15]). In contrast, the 12-month prevalence rate of SAD in the rural population of Udmurtia, a Constituent Republic of the Russian Federation, was estimated to be 44.2% when using ICD-10 criteria and to be 49.4% when using those of the DSM-III-R [16]. In that study, the disorder was more prevalent in women (50.7%) than in men (35.6%), and more prevalent in ethnic Udmurts (50.3%) than in Russians (32.6%). Finally, a study with Omani college students estimated that, depending on the assessment instrument, between 37% and 54% of individuals might meet criteria for SAD [17]. Table 1 provides a summary of the prevalence rates of the DSM-IV diagnosis of SAD across different countries.

The 2001–2002 National Epidemiologic Survey on Alcohol and Related Conditions (N = 43,093) showed that being Native American, being young, and having low income increased the risk for developing this disorder, whereas being male, being of Asian, Hispanic, or black race/ethnicity, or living in urban or more populated regions reduced this risk [18]. Similarly, a comparison between Hispanics, non-Hispanic Blacks, and non-Hispanic Whites from the NCS-R showed that both minority groups had lower risk for SAD as well as for depression and generalized anxiety disorder as compared to the non-Hispanic White group [19]. However, the lower rate among minorities was more pronounced at lower levels of education. Furthermore, the lower rate among Hispanics, relative to non-Hispanic Whites, was found only among the younger cohort (age \leq 43 years). This pattern of race-ethnic differences in rate for psychiatric disorders suggests the presence of protective factors that originate in childhood and have generalized effects on internalizing disorders (i.e., anxiety disorders and depression).

A study that compared 62 adult outpatients with SAD who presented at a university clinic for anxiety and depressive disorders in Rio de Janeiro, Brazil, with those who reported in clinical samples from North America, Europe, Asia, and Oceania (as identified through a systematic review in the published literature), showed that the majority of socio-demographic features and symptoms of this disorder were relatively independent of geographic and cultural differences [20]. Patients with SAD were generally characterized by a high percentage of males in clinical samples, early onset of the disorder, high education levels, and high comorbidity rates.

Our review of the epidemiological literature suggests a wide range of the lifetime prevalence rates of SAD with Asian samples having some of the lowest rates, and Russian samples having some of the highest rates. Similarly, Asian race/ethnicity is associated with some of the lowest prevalence rates among US samples. Being Hispanic or black was also associated with a lower risk for SAD. It remains uncertain to what extent these differences in prevalence rates reflect genuine differences in psychopathology, or whether they are due to insufficient consideration of cultural aspects of the DSM criteria, the assessment instruments, or the influence of features associated with race and culture, such as level of education. Moreover, there is evidence to suggest that the diagnostic threshold used by mental health professionals differs across cultures. For example, one study investigated differences in the diagnosis of SAD by 31 Japanese psychiatrists in Tokyo and 22 American psychiatrists in Hawaii [21]. A brief segment of videotaped interviews and written case histories of 4 Japanese patients from Tokyo and 2 Japanese-American patients from Hawaii, who were diagnosed with SAD, were presented to the clinicians for their diagnosis. Japanese clinicians tended to diagnose SAD congruently for the Japanese cases but not for the Japanese-American cases. American clinicians tended to diagnose various categories including generalized anxiety disorders and avoidant personality disorder, in addition to SAD, regardless of the ethnic background of the patients. Thus, the diagnostic pattern for SAD varied considerably between psychiatrists of these two countries, possibly because of the patient's cardinal symptom manifestation, style of problem presentation, the clinician's professional orientation, familiarity with this disorder and the diagnostic system, and, most importantly, the clinician's own cultural beliefs about the meaning of anxiety symptoms.

Cultural Specific Presentations of SAD

Taijin kyofusho (TKS) has frequently been discussed as a culture-specific expression of SAD that is believed to be particularly prevalent in Japanese and Korean cultures. Similar to individuals suffering from SAD, individuals with TKS are concerned about being observed and consequently avoid a variety of social situations. It has been assumed that the major difference from typical SAD in Western cultures is that a person with TKS is concerned about doing something, or presenting an appearance, that will offend or embarrass the *other person*. In contrast, SAD is defined as the fear of embarrassing *oneself*. Therefore, investigators have referred to this as the *offensive subtype* of TKS because it is characterized by two features considered atypical of social anxiety disorder: the belief that one displays physical defects and/or socially inappropriate behaviors and the fear of offending others, termed as an allocentric focus of social fears [22].

Examples of TKS may include individuals who fear that they would offend others by emitting offensive odors, blushing, staring inappropriately, and presenting an improper facial expression or physical deformity [23]. Most patients with TKS only experience a single circumscribed fear, although the specific focus may change over time. More males than females (at the ratio of 3:2) present with this problem [23]. TKS cases seem to vary on a continuum of severity from highly prevalent but transient adolescent social concerns to delusional disorders [24].

In the Japanese diagnostic system, *taijin kyofusho* is classified into four subtypes, depending on the content of the patient's fear in respect to displeasing or embarrassing others. These subtypes are: *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 four subtypes, *sekimen-kyofu* and *taijin kyofusho* appear to be most closely associated with the current DSM definition of SAD, whereas *shubo-kyofu* appears to be most closely associated with body dysmorphic disorder. "most closely associated with body dysmorphic disorder [25].

A study by Kleinknecht and colleagues examined differences in SAD (as defined by DSM-IV) and TKS, and their relation to independence and interdependence in 181 U.S. students and 161 students enrolled in Japanese universities [2]. Factor analyses yielded three factors, each corresponding to the respective scales defining TKS and DSM-defined SAD. A case analysis indicated that there was an approximate 50% co-occurrence between high scorers on the TKS and SAD scales. Multiple regression analyses resulted in a different set of predictors of TKS and self-reported social anxiety for the U.S. and Japanese respondents. Stepwise regression analyses were conducted using independent and interdependent self-construals, embarrassability, social interaction anxiety, and SAD as predictors for TKS. For the US sample, only SAD and social interaction anxiety predicted TKS, whereas for the Japanese sample, social interaction anxiety, SAD, and independent self-construal contributed positively to the prediction of TKS. Similarly, different variables predicted SAD. For the US sample, TKS, social interaction anxiety, and embarrassability predicted SAD, whereas for the Japanese sample, only TKS and social interaction anxiety were significant predictors for SAD. These results suggest that cultural variables can mediate the expression of social anxiety. However, both forms of social anxiety can be found in each sample.

Sakurai and colleagues examined the symptom structure and clinical subtypes of patients with DSM-IV SAD among the Japanese clinical population [26]. The authors performed confirmatory and exploratory factor analyses of the joint Social Interaction Anxiety Scale and Social Phobia Scale [27] from 149 psychiatric patients diagnosed with SAD. Based on the derived symptom factors, the authors also performed a cluster analysis to identify patient subgroups. The factor analysis revealed three factors which were identified as *scrutiny fears*, *conversation fears*, and *relationship fears*. The first two seemed to be common to Western clinical populations, whereas the third appeared unique to the Japanese. The authors noted that the *relationship fears* factor does not seem to measure the construct in a straightforward manner and that some items merged into “interaction anxiety” for the US sample and did not constitute a distinct symptom factor. The authors argued that, therefore, the items defining the *relationship fears* factor may have a unique meaning for Japanese people, who typically pay close attention to others' thoughts and feelings even without direct interaction in a group-oriented society.

A recent investigation examined the offensive subtype of TKS [22] by assessing the allocentric focus of fear in US (n = 181) and Korean (n = 64) patients with DSM-IV social anxiety disorder, using a TKS Questionnaire. The results showed that 75% of patients with SAD in the US and Korea endorsed at least one of the five offensive TKS symptoms surveyed. In both samples, the severity of features of offensive TKS was significantly associated with severity of social anxiety symptoms, depressive symptoms, and disability. These results showed that features of the offensive subtype of TKS are not uncommon among US patients with SAD, suggesting they may not be as culturally specific as previously believed.

Another recent study examined the cultural specificity of an offensive subtype of TKS as compared to SAD in 94 participants with SAD and 39 normal controls who did not meet criteria for any mental disorder [28]. All participants lived in Australia and were born in Western countries. The results showed that levels of offensive worry were significantly elevated in individuals with SAD, and this decreased after treatment of their SAD. Correlational analyses suggested that TKS and SAD were clearly strongly related. However, diagnostic examination revealed that the prevalence of reported offensive symptoms (8 out of 94; 8.5%) was extremely low among participants with SAD in Australia and none of them met the full criteria for TKS.

A study by Nakamura [29] examined the relationship between TKS and SAD by conducting DSM-III-R structured clinical interviews with 88 outpatients who visited a hospital in Japan, where they were requesting Morita Therapy (a traditional form of Japanese psychotherapy that combines mindfulness meditation practices, physical activity, and acceptance techniques to treat emotional problems). The patients were also independently diagnosed by 3 psychiatrists to confirm the TKS diagnosis. In total, 65.8% of the 38 cases of TKS were given the diagnosis of SAD. In a second study by the same author [29], 20 Japanese individuals with SAD were compared with 21 cases of SAD in Canada whose diagnoses were based on DSM-III-R. The results showed that many symptoms that had been considered as key characteristics of the Japanese TKS, such as the concern that one's own glance may make others uncomfortable, were also observed among the Canadian SAD sample. Furthermore, the symptoms in both groups tended to exacerbate when exposed to a large group of people rather than a small group, people of the opposite sex rather than of the same sex, peers of the same age rather than the senior or the junior, and acquaintances rather than strangers or intimate persons.

One group of researchers investigated 111 Japanese university students who reported feeling tense or nervous in social or interpersonal interactions and analyzed their responses to items on a scale for TKS [30]. Cluster analysis of the factor scores revealed a group (N=25) with symptomatic profiles that fit offensive-type TKS. Despite this group's high TKS scores, their scores on the Liebowitz Social Anxiety Scale were relatively low. The authors interpreted these results as suggesting that the symptoms of some TKS sufferers do not fall within the SAD spectrum.

Another less studied but possibly culture-specific expression of SAD is *aymat zibur*. Literally translated, it is the fear of the community, a term used by ultra-orthodox Jews to describe fears of performance, although in its original meaning the term expresses the respect that the leader of prayers is expected to have for his awesome role. Greenberg, Stravynski, and Bilu described 3 cases of SAD in this community [31]. The patients' concerns included performing by either speaking on religious matters publicly, a role associated with status and authority, or leading prayers and ceremonies, a role of sanctity and duty. The authors reported an absence of women sufferers, which may be understood as a consequence of the value placed on modesty in women and there being no expectation of women to participate in study and public prayer. The authors further reported the absence of complaints of interactional SAD, which may be a consequence of the general discouragement of social intercourse not related to religious study. The cases described were motivated by personal shame, similar to SAD of the performance variety found in other cultures, rather than fear and respect [31].

It should be noted that a TKS-like presentation has been found in other cultures. In a case series of 6 patients (aged 16–43 yrs) with the offensive type of TKS [32], the authors compared features of TKS with those of SAD and compared treatment outcomes for 4 patients with TKS treatment experience in Japan and Korea with Western treatments for SAD. The authors reported that the features of the offensive type of TKS showed much overlap with symptoms of SAD.

Based on this review, it appears that culture may influence SAD in very important ways. Though there is evidence to suggest that different expressions of TKS also appear in non-Asian cultures [2], the rate of this disorder, and the meanings of the symptoms in those cultural contexts will greatly differ. It is possible that TKS symptoms are more likely to be expressed by individuals who construe themselves as low on independence but high on interdependence, whereas SAD symptoms are more likely to be expressed by individuals who construe themselves as low on interdependence but high on independence [33]. Clearly

cultures will vary along these dimensions (see below for further discussion). In addition, in the Japanese context, given that TKS-like symptoms are a known response to social situations, this will shape the experiencing and reaction to social situations in important ways.

Cross-Cultural Differences in Treatment Response

It has been shown that Black and White children similarly improved from pre- to post-treatment after cognitive behavioral therapy with no significant differences based on race [34]. Similarly, cognitive behavioral therapy that was developed for Western patients was similarly effective for Japanese and Western patients [35] and Hispanic/Latino youths [36]. However, these preliminary studies are based on only small numbers of participants and it is possible that there are cultural differences in treatment seeking behaviors [37,38]. For example, a study by Hsu and Alden [37] examined culture-related influences on willingness to seek treatment for social anxiety in first- and second-generation students of Chinese heritage (Ns=65 and 47, respectively), and their European-heritage counterparts (N=60). Participants completed measures that assessed their willingness to seek treatment for various levels of social anxiety. Results showed that participants were similar on willingness to seek treatment at low- and high-severity levels of social anxiety. However, at moderate levels, first-generation Chinese participants were significantly less willing to seek treatment compared to their European-heritage counterparts. The reluctance of first-generation Chinese participants to seek treatment was associated with greater Chinese-heritage acculturation, and was not related to perceiving symptoms of social anxiety as less impairing. The findings support the general contention that Asians in North America tend to delay treatment for mental health problems [39].

A study by Roy-Byrne [40] examined the effects of paroxetine among ethnic minority patients with mood and anxiety disorders, including major depression, panic disorder, generalized anxiety disorder, social anxiety disorder, obsessive-compulsive disorder, posttraumatic stress disorder, or premenstrual dysphoric disorder. The authors pooled data from 14,875 adults who participated in 104 double-blind, placebo-controlled paroxetine clinical trials from March 1984 through March 2002. An intent-to-treat analysis with last observation carried forward used the Clinical Global Impressions (CGI) scale to measure a dichotomous outcome, classified as either response (CGI score of 1 or 2) or more complete response (CGI score of 1) (“full response”). Minority group differences were examined using logistic regression. Furthermore, a survival analysis examined group differences in speed of onset of response. The results showed that Hispanic and Asian subjects had a slightly lower response rate overall, while Asians had the highest rates and Hispanics had the lowest rates of “full response.” The relative consistency in outcome for Hispanics as compared to Asians appeared to be due to a higher placebo response rate in the Hispanic cohort. Speed of response and adverse effects were similar across groups. Finally, TKS appears to respond well to serotonin reuptake inhibitors [41–43; for a review, see 44] and selective serotonin and noradrenaline reuptake inhibitors [45]. In general, these data do not provide any convincing evidence that race/ethnicity predicts response or non-response to any psychological or pharmacological treatments.

Cultural Factors that May Influence SAD: Future Research Directions

A key approach to cross-cultural examination of disorders across cultures is an examination of the factors that generate the disorder, and then a consideration of why those mechanisms would be influenced by culture. Researchers have illustrated that certain factors vary by culture and hence lead to a different trajectory of social anxiety disorder: individualism/collectivism, social norms, self-construal, and gender role and gender role identification.

This literature will be summarized in the following sections, which also suggest important future research directions.

Individualism and Collectivism

A concept that has been given a considerable degree of attention in cross-cultural research is the notion of individualism/collectivism [46–48]. Collectivism describes the relationship between members of social organizations that emphasize the interdependence of its members. In collectivistic cultures, harmony within the group is the highest priority and individual gain is considered to be less important than improvement of the broader social group. Thus, it is possible that in collectivistic countries more overt social norms exist to maintain social harmony. In contrast, in individualistic societies, individual achievements and success receive the greatest reward and social admiration.

Lucas and colleagues demonstrated that social contacts serve different purposes in individualistic versus collectivistic cultures [47]. In individualistic cultures, individual feelings and thoughts more directly determine behavior. In collectivistic cultures, harmony within the group is the highest priority, and norms and role expectations have a considerable impact on behavior. Thus, in collectivistic cultures more rules and guidelines for social behavior possibly exist that make social slips more obvious than in individualistic cultures.

In Asia, South America, the Pacific Islands, and Southern European countries, strict social rules are supposed to be provided about what behavior is appropriate in certain social situations [e.g., 49–51]. If an individual deviates from these social rules, they are threatened by sanctions, such as exclusion from the group. Therefore, it is important for individuals in such countries that their social behavior is evaluated as appropriate and positive [52]. Further, norms are strong predictors of life satisfaction in collectivistic but not individualistic countries [52]. Thus, it is possible that it is the match between the cultural orientation of a person and the cultural norms that contribute to SAD and other emotional disorders, especially if the person shows extreme collectivist orientation (allocentric) or extreme individualist values (idiocentric). This hypothesis was examined by Caldwell-Harris and Aycicegi [53], who administered individualism-collectivism scenarios and a battery of clinical and personality scales to college students in Boston and Istanbul. For students residing in a highly individualistic society (Boston), collectivism scores were positively correlated with social anxiety, as well as depression, obsessive-compulsive disorder and dependent personality. Individualism scores were negatively correlated with these same scales. A different pattern was obtained for students residing in a collectivist culture (Istanbul), where individualism was positively correlated with scales for paranoid, schizoid, narcissistic, borderline and antisocial personality disorders. Collectivism was associated with low report of symptoms on these scales. These results suggest that conflicts between personal values and values of society are associated with SAD and other clinical symptoms. This notion is consistent with the results of a study investigating the associations between the frequency of, and motivations for, social withdrawal during adolescence and emotional distress in young adulthood. The findings showed that shy and unsociable individuals in Korea showed better social and emotional adjustment than their counterparts in Australia [28].

A study by Heinrichs and colleagues [54] investigated individuals' personal and perceived cultural norms and their relation to social anxiety and fear of blushing. A total of 909 participants from eight countries completed vignettes describing social situations and evaluated the social acceptability of the behavior of the main actor both from their own personal perspective as well as from a cultural viewpoint. Personal and cultural norms showed somewhat different patterns in comparison between types of countries (individualistic/collectivistic). According to reported cultural norms, collectivistic countries

were more accepting toward socially reticent and withdrawn behaviors than was the case in individualistic countries. In contrast, there was no difference between individualistic and collectivistic countries on individuals' personal perspectives regarding socially withdrawn behavior. Collectivistic countries also reported greater levels of social anxiety and more fear of blushing than individualistic countries. Significant positive relations occurred between the extent to which attention-avoiding behaviors are accepted in a culture and the level of social anxiety or fear of blushing symptoms.

In a later study [55], the authors conducted a replication and extension by including Latin American countries in the collectivistic group. The sample included 478 participants from individualistic countries and 388 individuals from collectivistic countries (including East Asian and Latin American). The results from the earlier study by Heinrichs and colleagues were replicated for the individualistic and Asian countries, but not for Latin American countries, which displayed the lowest social anxiety levels.

In sum, although the individualism-collectivism distinction does not fully capture the relevant norms, there is some evidence in the literature to suggest that social anxiety is related to different cultural norms across countries. Specifically, it is possible that the cultural differences in reported levels of social anxiety are related to social norms and standards toward publicly displaying signs for social anxiety. However, the results should be interpreted cautiously because they are entirely based on non-clinical student samples.

Social Norms, Embarrassment, and Other Related Constructs

SAD may be defined as an excessive fear of violating social norms, and a concept that is closely related to violating social norms is embarrassment [56]. Singelis and Sharkey [57] have suggested that it is easier to embarrass individuals from South-East Asia because more rules for social behaviors exist there. Asian individuals should, therefore, be more concerned and worried about their social behaviour because social deviations are easier to detect. Other authors have also suggested that embarrassment is 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 [58,59]. Thus, there is some evidence and considerable conjecture regarding different social norms between collectivistic societies, including South-East Asian and South American societies, and individualistic societies as found in most Western countries.

A related construct that distinguishes cultural groups in SAD might be separation anxiety [60]. The authors examined the developmental progression and pattern of self-reported symptoms of SAD (SP) and separation anxiety (SA) in a community sample ($n = 2,384$) and a clinical sample ($n = 217$) of children and adolescents (aged 8–19 yrs), using a cross-sectional method. Participants were cross-classified by age, gender, and race. Using mean scores on the SP and SA subscales of the Multidimensional Anxiety Scale for Children, 4 categories of children were established: High SP/High SA, High SP/Low SA, Low SP/High SA, and Low SP/Low SA. White children reported more symptoms of High SP/Low SA, while the opposite pattern was found among African-American children.

In sum, it is not yet clear whether cultural factors may work to reshape levels of social anxiety or SAD. There is little clear evidence relating to levels of symptoms of social anxiety or embarrassment across cultures, but at least some evidence has suggested possibly higher levels of social anxiety and a higher social significance of embarrassment in collectivistic relative to individualistic cultures.

Self-Construals

Self-construals are overarching schemata that define how people relate to others and the social context. On the basis of cross-cultural research, Markus and Kitayama [61] suggested that individuals from the US and other individualistic societies tend to construct and promote *independent* self-construals, which are characterized by one's tendency to view oneself as autonomous and separate from the social context. Individuals possessing an independent self-concept are motivated to uphold and validate their own unique, internal attributes and goals, and their self-esteem is derived from an ability to distinguish themselves from other people in their environment. In contrast, members of Asian and other Eastern cultures are more likely to value and possess *interdependent* self-construals, which are based upon viewing oneself as being intricately connected and integrated with others in the social group. Interdependent people view the self as an extension of the social group to which they belong. To this end, they strive to maintain harmony in various interpersonal relationships by being attentive to, adjusting their behavior to, and corresponding appropriately with the thoughts, feelings, and behavior of important others. Consistent with this notion is a study by Hong and Woody that examined Korean (n=251) and Euro-Canadian (n=250) community samples [62]. Results indicated that independent self-construal and identity consistency, views of the self that are typically associated with Western cultures, fully mediate the ethnic difference on self-reported social anxiety. Moreover, two indicators of East Asian views of the self in social contexts (interdependent self-construal and self-criticism) were partial mediators.

Although the concept of independent and interdependent self-construals was originally developed in the context of explaining cross-cultural differences in motivation and social behavior [61], and has been cited predominantly in cross-cultural research, it has since been extended to examine differences between people even *within* individualistic cultures, such as the United States. Along these lines, Cross and Madson argued that although both men and women value social connectedness, the American man is likely to be socialized to construct an independent self-construal and develop a social self that is marked by the motivation to promote core personal attributes over group goals [63,64]. They theorized that American men possess self-representations that they construe separately from representations of important others. Conversely, the American woman is likely to be socialized to construct an interdependent self-construal such that representations of close interpersonal others are incorporated into her definition of self, and self-representations are construed as being intricately connected with particular relationships or contexts. These gender differences in self-construals are believed to emerge in early childhood, out of the developmental learning process that occurs when boys and girls are taught what it means to be members of their respective gender groups.

Thus, according to this theory, differences in self-construals exert a pervasive influence upon the way men and women organize their experiences and assess their understanding of themselves vis-à-vis the world around them, and such differences may account for many of the empirically demonstrated gender differences in affect, social behavior, and cognitive processing. Though intriguing, this theory has, thus far, received little direct empirical validation. One pertinent question that is raised by the authors [63,64] as well as their critics [e.g., 65] is how American women are able to reconcile the mixed messages they receive from a culture that broadly emphasizes independence and autonomy but expects females specifically to be interdependent and connected with others.

Research has demonstrated that interdependence is positively, and independence is negatively, correlated with embarrassability [57] and fear of negative evaluations [58], both of which are important elements of the symptomatic expression of social anxiety and SAD [56]. Singelis and Sharkey [57] proposed that being interdependent may engender an acute

awareness of the social context and sensitivity to evaluation by others, while being independent may “gird people in the face of these evaluations” (p. 638). Similarly, Okazaki [66] suggested that highly interdependent people might be more highly attuned to social cues and the experiences of social anxiety than individuals who score low on this dimension. This hypothesis was confirmed in a cross-cultural study that examined the relationship between self-construals and social anxiety symptoms among American and Japanese university students [33].

In sum, these studies suggest that self-construal is an important variable to consider when examining the degree of social anxiety, particularly for examining individuals in East Asian cultures.

Gender Role and Gender Role Identification

Gender role and gender role identification (masculinity vs. femininity) are constructs that are closely related to self-construal. Historically, the constructs of 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. Almost three decades ago, however, Bem, in her classic study on psychological androgyny [67], challenged this traditional belief by reasoning that a single individual can be, “both masculine and feminine, both assertive and yielding, both instrumental and expressive” (p. 155). To test this hypothesis, Bem devised a new sex-role inventory, which treated masculinity and femininity as two independent dimensions. The Bem Sex-Role Inventory (BSRI) enabled researchers to characterize individuals as *masculine*, *feminine*, *androgynous* (a concept which reflected an individual's endorsement of both masculine and feminine personality characteristics), or *undifferentiated*, an endorsement of neither gender role.

Bem speculated, and her subsequent research confirmed [e.g., 68], that androgynous individuals are more adaptable and flexible in their behavior and perform well across a wide range of tasks. On the other hand, sex-typed individuals are motivated to restrict their behavior in accordance with cultural definitions of gender appropriateness, and perform poorly on tasks that require them to act in ways that are incongruent with their self-defined sex-type [69].

Although closely linked to social behaviors, very little research exists on gender role and gender role identification in social anxiety and SAD. A study by Moscovitch, Hofmann, and Litz [70] asked 97 American-born, Caucasian participants to complete self-report questionnaires to study the impact of gender, gender role orientation, and independent and interdependent self-construals upon social anxiety. The results showed that biological gender membership did not predict social anxiety severity. However, identification with a traditionally masculine gender role orientation decreased the risk for social anxiety, and self-construals predicted levels of social anxiety differentially in men and women. In men, interdependence and independence predicted levels of social anxiety positively and negatively, respectively, while these patterns of association were reversed in women.

In clinical samples, researchers have investigated differences between men and women in the experience and expression of social anxiety and SAD. Whereas women are slightly more likely than men to have SAD [3], men with SAD are more likely to seek treatment [56]. Men and women with SAD report similar fears of social situations, but women endorse more intense fear [71]. Because gender is a complex social construct, gender role may, in part, explain these sex differences, but this has not been examined empirically in clinical samples [e.g., 71,72].

Shame

Although shame is likely to play an important role in any culture, a particular emphasis has been placed in the literature on the relationship between shame and the Asian culture [73]. A study examining the cross-cultural differences of the effects of shame and personality on social anxiety supported this notion [74]. This study administered the Experience Scale of Shame, the Eysenck Personality Questionnaire-Revised Short Scale and a social anxiety measure to a Chinese sample (n=211, 66 males and 145 females, average age 20.12) and an American sample (n=211, 66 males and 145 females, average age 20.22) of college students. The structural equation modeling (SEM) was performed separately for the Chinese and American samples. The SEM results revealed a shame-mediating model in the Chinese sample only. This model did not apply for the American sample. This study supports the hypothesis that shame has a more important effect on social anxiety in the Chinese culture compared to its effect on Americans. It has been noted that shame may have different meanings in various cultural contexts [75]. In Japan, shame-prone and self-effacing behavior appears to be given positive functional value and is actively promoted by society, whereas the American culture might tend to prohibit shame-prone behaviors and the show of one's vulnerability, while encouraging the visible demonstration of one's power and capacity.

Concluding Remarks

Epidemiological studies show a wide range of lifetime prevalence rates of SAD with Asian samples having some of the lowest rates, and Russian and US samples having some of the highest rates. There appear to be culture-specific expressions of SAD, most notably *Taijin kyofusho* (TKS), a syndrome found in Japan and Korea. This disorder identifies people who are concerned about offending or embarrassing the other person rather than embarrassing oneself. Though TKS symptoms can be found in other cultural contexts, the symptoms cluster in particular cultural contexts and even have a particular syndrome name. Despite these differences in the cultural expression and prevalence rates, there is little evidence to support differential treatment response of SAD in individuals from different cultures. Key mechanisms were examined that produce SAD, and it was shown that these factors are influenced by culture; this suggests important areas for future research. Some of these factors include individualism/collectivism, perception of social norms, self-construal, and gender role and gender role identification.

Based on this review, we can conclude that social fears are very much dependent on a particular culture. The same social behavior may be perceived as normal in one culture and “unreasonable and excessive” in another; cultural syndromes may lead to the expectation of certain types of embarrassment in particular situations; and the meaning of SAD symptoms and their experiencing will be influenced by multiple factors—field dependence, gender role and gender role identification, local ideas of shame and what is shaming (on how cultural syndromes influence DSM disorders, see [76,77]). People with SAD fear violating the perceived social norms of the social reference group they identify themselves with. The social reference group not only includes the cultural/racial/ethnic group, but also gender identification, social status, and sexual orientation. In certain cultural groups, certain social situations and certain symptoms, actions, and “failures” may be the cause of particular shame; these shame syndromes associated with particular situations may take the form of a syndrome that has a particular name, such as the case of TKS. An important research area is how persons in various cultures treat these SAD symptoms, as well as syndromes like TKS (e.g., the treatment of TKS by Morita therapy), fear of body odor, fear of blushing, etc in Asian and other cultures. This may give insight into the mechanisms generating the disorder (including the genetic contribution), and how culturally appropriate treatment can be conducted

What are the implications for the DSM-V definition of SAD? Our review indicates that SAD varies by key socio-cultural factors, including collectivism/individualism, perception of social norms, self-construal, gender roles, and gender roles identification. This suggests that SAD should be defined in relation to the particular reference group because the same social behavior can be perceived very differently in different socio-cultural subgroups. Therefore, the person's socio-cultural background needs to be carefully taken into consideration when evaluating social behaviors and attitudes. These issues should be included in the DSM-V text and should be part of the definitional criteria so that clinicians are encouraged to evaluate the symptoms in relation to the patient's socio-cultural background (for a further discussion of changes to the SA criteria in the DSM, see [78]).

The study is limited by the nature of the relatively modest quantity and quality of existing studies, which include a high percentage of American samples. Furthermore, we focused our discussion primarily on the cultural difference in the rates of SAD and selectively reviewed the existing literature on the cultural expression of social anxiety. We suggest that future studies more closely examine cultural differences in the degree and expression of social anxiety symptoms. An important research area is how persons in various cultures treat these SAD symptoms, as well as syndromes like TKS (e.g., the treatment of TKS by Morita therapy), fear of body odor, fear of blushing, etc in Asian and other cultures. This may give insight into the mechanisms generating the disorder (including the genetic contribution), and how culturally appropriate treatment can be conducted.

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Table 1

Epidemiological studies assessing for DSM-IV 12-month prevalence rates of SAD

Study	Year	Country/Region	N	12-month Prevalence (%)
Vorcaro et al.[6]	2004	Brazil	1,037	9.1
Vicente et al. [5]	2006	Chile	2,978	6.4
Shen et al. [10]	2006	China	5,201	0.2
Alonso et al. [15]	2004	Europe	21,425	0.8
Lee et al. [8]	1980	Korea	5,100	0.6
Cho et al. [9]	2007	Korea	6,275	0.2
Kawakami et al. [11]	2005	Japan	1,663	0.8
Medina-Mora et al. [12]	2005	Mexico	5,826	1.7
Gujreje et al. [13]	2006	Nigeria	4,984	0.3
Williams et al. [14]	2008	South Africa	4,351	1.9
Hwu et al. [7]	1989	Taiwan	11,004	0.4
Kessler et al. [3]	1994	USA	8,098	7.9
Ruscio et al. [4]	2006	USA	9,282	7.1
Grant et al. [18]	2006	USA	43,093	2.8