

HANDBOOK OF DEPRESSION

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20

Understanding Depression across Cultures

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Depression is neither a simple "reflection" in personal experience of psychophysiological processes nor a culturally constituted phenomenon free of physiological constraints. Depression is of such interest to anthropologists and psychiatrists alike because it provides a prime opportunity for exploration of the interaction of culture and biology.

—KLEINMAN AND GOOD (1985, p. 31)

Since the 1960s and 1970s, clinical scientists and practitioners alike have been interested in understanding how culture influences the constellation of symptoms that comprise depression, as defined by Western diagnostic classification systems. Although social scientists agree that the core feelings of emptiness, loss, and helplessness associated with depression are universally experienced (Shweder, 1985), there is much debate about whether the other aspects of depression are too. Moreover, it is unclear whether the personal and social implications of these symptoms are the same across cultures. By revealing the aspects of our moods that are similar across cultures and those that are shaped by our cultural environments, cross-cultural studies of depression have much to contribute to our understanding of human function and dysfunction. This understanding is critical if we are to develop interventions that are effective in treating depression across different cultural contexts.

Studying depression across cultures, however, is fraught with many obstacles. The most challenging of obstacles may be the fact that the very definition of depression is imbued with Western cultural assumptions. Scholars have identified at least three ways in which modern conceptions of depression have been influenced by Western culture. First, current views of depression are shaped by Western culture's emphasis on positive emotions and feeling good about the self. As argued by Lutz (1985), depressed mood, loss of

interest in pleasurable activities, and decreases in self-esteem are only viewed as abnormal in cultures that assume that having positive emotions and feeling good about oneself is a normal and healthy way of being. Second, conceptions of depression are influenced by the Western view of the individual. Lewis-Fernandez and Kleinman (1994) argue that because Western cultures view individuals as independent, self-contained, and autonomous, depressive symptoms are attributed to internal disturbances. In cultures that view individuals as interdependent, connected with others, and defined by the social context (e.g., Japan, China; Markus & Kitayama, 1991), these same symptoms may be attributed to interpersonal disturbances. Moreover, in these cultures, more relational symptoms of depression, such as social withdrawal or failure to maintain interpersonal obligations, may be more salient and exact a greater toll on daily functioning than other depressive symptoms.

Finally, current views of depression are based on Western assumptions about the mind and body (Lewis-Fernandez & Kleinman, 1994). In Western cultures, depression (and other forms of mental illness) has been characterized as stemming from either mental or biological disturbances. Historically, depression was depicted as a mental disorder best treated by psychological means, such as psychotherapy. Over the last few decades, however, new evidence for the neurobiological bases of depression has emerged, and now depression has become primarily viewed as a biological disorder best treated by medical means, such as antidepressants (Kramer, 1994). In contrast, many non-Western cultures do not view the mind and body as separate and distinct entities. Instead, the mind and body are seen as intimately related and mutually constitutive, as illustrated by non-Western treatments of illness such as acupuncture and traditional Chinese medicine.

How, then, does one study cultural variation in a disorder whose very definition may be culturally constructed (Schieffelin, 1985)? Researchers have approached this challenge in one of two ways. The ethnographic approach (typically employed by anthropologists) assumes that even if members of a particular culture experience the symptoms defined by Western culture as depression, the meanings and implications of these symptoms may vary considerably across cultures. Proponents of the ethnographic approach focus on the structures, norms, and values that determine the meaning of these depressive symptoms within a particular cultural context and compare them to those of Western culture. Most of the work that falls under this approach is based on ethnographic interviews and behavioral observations.

The biomedical approach (typically employed by psychologists and psychiatrists) assumes that regardless of the cultural context, the disorder exists if individuals report having the symptoms associated with depression. To date, the bulk of the research employing a biomedical approach focuses on the prevalence rates of depression in various nations. Variations in prevalence rates of depression are typically attributed to cultural factors, in a somewhat post-hoc fashion. Most of this work is based on survey data or data gleaned from structured diagnostic interviews. For example, several studies have found that rates of depression are generally lower in Asian cultures than in Western cultures, which may be due to different perceptions of mental illness in these cultures (Bland, 1997; Hwu, Chang, Yeh, Chang, & Yeh, 1996; Sato & Takeichi, 1993; Simon, VonKorff, Picvinelli, Fullerton, & Ormel, 1999).

In this chapter, we present research findings from both approaches; however, because most research falls under the biomedical approach, we spend more time reviewing this type of research. We highlight consistent themes that emerge from the literature and then propose other ways of studying depression across cultures that we believe will advance our current knowledge base. We end with a discussion of specific topics that require further study. But first, we define what we mean by *culture*.

DEFINING CULTURE

According to Kroeber and Kluckhohn (1952):

Culture consists of patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols, constituting the distinctive achievement of human groups, and including their embodiments in artifacts; the essential core of culture consists of traditional (i.e., historically derived and selected) ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, and on the other, as conditioning elements of further action. (p. 181)

Clearly, culture is complex and multifaceted. Ethnographic and biomedical researchers have operationalized culture in different ways. Because ethnographic studies focus on cultural meaning systems, practices, and structures, they are explicit about the specific facets of culture that they are examining. Biomedical approaches, however, tend to assume that national differences are cultural ones. Often it is only after finding differences in specific aspects of depression that cultural values, beliefs, or structures are recruited to explain the variation. As a result, biomedical approaches tend to be less clear than ethnographic approaches about which aspects of culture they are focusing on. Regardless of which approach they fall under, however, most studies fail to demonstrate direct links between the specific cultural factors and the specific aspects of depression under investigation. In order to understand comprehensively how culture influences depression, we must measure culture in more specific and systematic ways than we have in the past.

ETHNOGRAPHIC APPROACHES TO UNDERSTANDING DEPRESSION

In trying to understand depression across cultures, proponents of the ethnographic approach typically develop an in-depth understanding of the culture and, based on that understanding, then examine whether conceptions of depression in that culture are similar to those of Western culture. Ethnographic accounts suggest that while the feelings of emptiness, learned helplessness, even "soul loss" as described by Shweder (1985) may exist across cultures, other aspects of depression may not (see Schieffelin's work among the Kaluli of Papua New Guinea, 1985; Obeyesekere's study of Buddhists in Sri Lanka, 1985; Kleinman's work among the mainland Chinese, 1986; Good, Del Vecchio, and Moradi's studies in Iran, 1985). To illustrate the ethnographic approach to understanding depression across cultures, we provide descriptions of two accounts that suggest that the personal and social meanings of depression differ in cultures where there is a greater emphasis on social reciprocity and where there are more mechanisms of reparation for social transgressions than in Western cultures.

Depression among the Kaluli of New Guinea

According to Schieffelin (1985), emotions for the Kaluli of New Guinea are expressed in order to influence others:

When the Kaluli feel strongly about something, they are not usually ones to hide their feelings. Rage, grief, dismay, embarrassment, fear, and compassion may be openly and often dramatically expressed. The expression of affect is in part aimed at influencing others, whether by intimidation (e.g., with anger) or by evoking their compassion and support (e.g., with grieving). (p. 109)

These expressions of emotion are used to ensure social reciprocity, which is highly scripted in Kaluli cultures and embedded in social interaction styles, rituals, and ceremonies. That is, Kaluli culture provides clear scripts for how one should behave in order to get what one wants or deserves. Schieffelin argues that because cultural structures exist to enable Kaluli to recover any losses that incur, they rarely experience depression. In fact, during the 3 years he spent studying the Kaluli, Scheffelin was able to identify only one case of depression, which involved a woman who was unhappy in her marriage and who, due to her particular circumstances, had no outlet to express her grief. Notably, Scheffelin observes that this particular woman reported physical complaints that resembled the somatic symptoms of depression.

Pena in Highland Ecuador

Tousignant and Maldonado (1989) provide another example of a culture for which they believe that the meanings of depressive symptoms differ from those of Western culture. They studied the experience of *pena*, which means sadness or suffering, in highland Ecuador. In its severe form, individuals with *pena* have crying spells, poor concentration, anhedonia, social withdrawal, poor personal hygiene, sleep and appetite disturbances, gastrointestinal complaints, and heart pain. Like depression, *pena* is also often experienced in response to personal loss. However, Tousignant and Maldonado argue that unlike depression, *pena* is an "appeal, implicitly or explicitly expressed, for payment of an incurred loss" (p. 900). That is, *pena* provides an opportunity for others to restore equity and ensure social reciprocity among individuals. An injured party in a conflict may signal distress by withdrawing from others and displaying symptoms characteristic of *pena*. In turn, the party's social circle may attempt to remedy the situation by sharing feelings with the sufferer and by reintegrating him or her into the social network. Thus, although *pena* looks like sadness and, in its more severe forms, depression, Tousignant and Maldonado (1989) argue that its personal and social implications differ from those of depression in Western cultures.

In summary, although expressions of loss and grief can be found in both Kaluli and Ecuadorian cultures, Schieffelin (1985) and Tousignant and Maldonado (1989) argue that the meaning of these expressions differs from that of depression in Western culture. While contributing to our understanding of depression across cultures, ethnographic studies such as these have a number of limitations. Because of their in-depth nature, most ethnographic studies are based on a small number of participants, limiting the generalizability of the research findings. Moreover, although the researchers have firsthand knowledge about the cultures that they are studying, it is unclear to what extent their observations are influenced by their own cultural biases. Finally, because most of these studies are not comparative (i.e., do not include direct comparisons of data collected in more than one culture), it is unclear whether the meaning and consequences of depressive symptoms differ as drastically across cultures as these accounts suggest. Thus, other researchers have assumed a different approach to studying cultural influences on depression.

BIOMEDICAL APPROACHES TO UNDERSTANDING DEPRESSION ACROSS CULTURES

In stark contrast to the ethnographic approach, the biomedical approach assumes that if the symptoms associated with depression exist, then the disorder can be identified, diagnosed, and understood. These studies tend to consider culture as separate from and secondary to

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the disorder. For example, culture is used to explain national differences in the prevalence rates of depression. In an attempt to examine how culture might influence the symptoms of depression, researchers assuming the biomedical approach have also compared the basic elements (or factors) that comprise depression across cultures. We review findings from these studies next.

Different Rates of Depression across Cultures

Many epidemiological studies have found that the prevalence rate of depression varies considerably across national (and presumably, cultural) lines. For example, the Epidemiologic Catchment Area Study (United States), the Edmonton Survey of Psychiatric Disorders (Canada), the Christchurch Survey (New Zealand), the Zurich Cohort Study of Young Adults (Switzerland), the Munich Follow-Up Study (Germany), the French Study of Psychiatric Disorders (France), the Florence Community Survey of Mood Disorders (Italy), the Beirut War Events and Depression Study (Lebanon), the Taiwan Psychiatric Epidemiology Project (Taiwan), the Korean Epidemiological Study of Mental Disorders, and the Epidemiological Study of Puerto Rico document different lifetime prevalence rates for major depression by nation, ranging from 1.5% in Taiwan to 19% in Lebanon, based on the diagnostic criteria of the third edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III) (Merikangas et al., 1996; Weissman et al., 1993; Weissman et al., 1996). Figure 20.1 illustrates the tremendous variation in prevalence rates of depression across various nations, based on data obtained from Bland (1997), Kessler et al. (1994), Szadoczky, Papp, Vitrai, Rihmer, and Furedi (1998), and Weissman et al. (1996).

Notably, the prevalence rate of depression for the United States is lower in the Epidemiologic Catchment Area Study (ECA) conducted in 1980–1984 (Weissman, Bruce, Leaf, Florio, & Holzer, 1991) than in the National Comorbidity Study (NCS), conducted in 1990–1992 (Kessler et al., 1994). These differences may be due to the subtle methodological differences between the two studies: the NCS included a larger and a more representative sample, used DSM-IV diagnostic criteria rather than those of the DSM-III, and probed more comprehensively for signs of depression than did the ECA (Kessler et al., 1994). However, it is also possible that rates of depression increased from the early 1980s to the early 1990s.

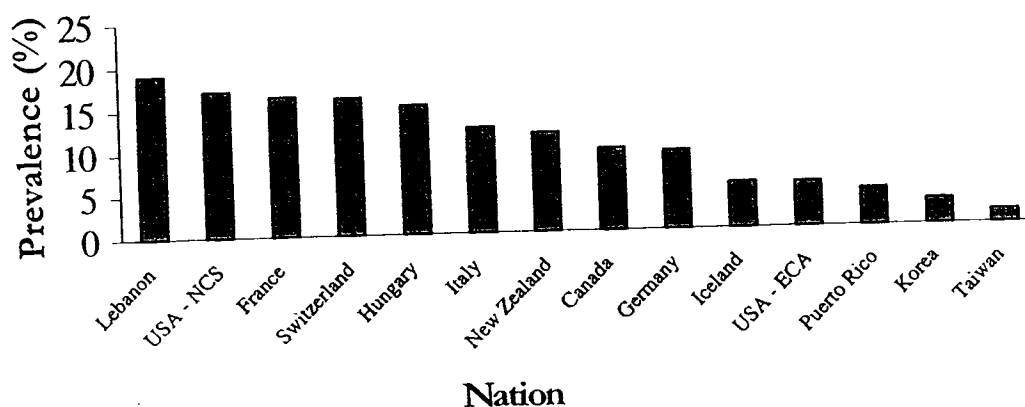


FIGURE 20.1. DSM-III/III-R lifetime prevalence of major depression by nation. Prevalence rates were obtained from Bland (1997), Kessler et al. (1994), Szadoczky, Papp, Vitrai, Rihmer, and Furedi (1998), and Weissman et al. (1996). USA–NCS, United States according to the National Comorbidity Study; USA–ECA, United States according to the Epidemiologic Catchment Area Study.

Because the assessment instruments used to diagnose depression in the above studies varied across the studies, it is possible that the different prevalence rates that were found were due to the different methods of assessing depression rather than to culture. Therefore, in 1991, the World Health Organization (WHO) compared the prevalence of mental disorders in the primary care clinics of 14 countries on five continents (Simon, VonKorff, et al., 1999) using the Composite International Diagnostic Interview—Primary Care Version (CIDI-PHC) (Wittchen et al., 1991). Once again, the prevalence rate of major depression showed considerable variation across nations, ranging from 1.5% in Nagasaki, Japan, to 27.3% in Santiago, Chile, based on DSM-IV criteria.

One notable pattern that has emerged from the epidemiological literature is that depression appears to be less prevalent in Asian (e.g., Japan, China, Taiwan) than in Western cultures (United States, Canada, New Zealand, Germany, The Netherlands) (Bland, 1997; Hwu et al., 1996; Sato & Takeichi, 1993; Simon, VonKorff, et al., 1999). For example, the WHO study reported that the prevalence of depression in primary care settings was 1.5% in Japan and 2.4% in China, whereas the prevalence rates for Western countries, such as the United Kingdom or the United States, were significantly higher (17.1% and 6.4%, respectively; Simon, VonKorff, et al., 1999). This pattern has been found in different age groups, including college student and geriatric samples (Chen, Copeland, & Wei, 1999; Crittenden, Fugita, Bae, Lamug, & Lin, 1992). As mentioned earlier, these differences have been attributed to cultural variation in the conception of mental illness (with Western cultures viewing emotional problems as separate from physical complaints more than Asian cultures), to differences in the amount of stigma attached to mental illness (with Asian cultures stigmatizing emotional problems more than Western cultures), and to different levels of available social and familial support (with Asian participants having more social support than their Western peers). Differences among specific Asian groups, however, have also been found. For example, a study of self-reported symptoms of depression in college students (Crittenden et al., 1992) demonstrated that Korean students had the greatest proportion (32%) of individuals who reported high levels of depression, followed by Filipino and American students (17% and 15%, respectively), and finally, by Taiwanese students (11%). According to the authors, the greater rates of depression among the Korean students compared to their Filipino and Taiwanese peers reflect their more self-effacing and pessimistic styles, as well as their greater tendency to support "taking in and absorbing psychic insults" (Crittenden et al., 1992).

In addition to epidemiological studies on cross-cultural differences in rates of depression, an increasing amount of research examines rates of depression among cultural and ethnic minorities living in host countries such as Europe, the United States, Canada, and Australia (Beiser, Cargo, & Woodbury, 1994; Lin et al., 1992; Roberts, Roberts, & Chen, 1997; Ying, 1988; Kuo, 1984). For example, several studies suggest that prevalence rates of depression differ among ethnic groups within the United States. Both the National Comorbidity Survey (Kessler, 1994) and the Epidemiologic Catchment Area Study (Weissman et al., 1991) have reported that lifetime prevalence rates of affective disorders are lower for African Americans as compared to European Americans, with the rates for Hispanics falling between the two.

Epidemiological studies conducted in the United States have not included sufficiently large samples of Asian Americans or Native Americans to be able to draw conclusions about the national prevalence of depression in these groups. However, smaller community studies of depression have been conducted. A study of the prevalence of depression in a Native American primary care clinic sample (Wilson, Civic, & Glass, 1995) reported a prevalence rate of depression that was comparable to that of European American samples from the WHO study (Simon, VonKorff, et al., 1999). However, other studies have found that

Native American youth have higher levels of depressive symptoms (Manson, Ackerson, Dick, Baron, & Fleming, 1990) and rates of suicide (Sigurdson, Staley, Matas, Hildahl, & Squair, 1994) than non-Native American samples.

Studies with Asian Americans suggest that their rates of depression are equal to or greater than those of European Americans (Kuo, 1984; Ying, 1988). For example, Korean Americans had higher prevalence rates of depression (Lin et al., 1992) than their European American counterparts (Weissman et al., 1993). Foreign-born Asians also tend to report more symptoms of depression than do American-born Asians (Kuo, 1984), suggesting that Asian Americans' higher rates of depression may be due to the stresses they endure as immigrants and minorities in the United States.

Why do the prevalence rates of depression vary across national and ethnic lines? Although we have already mentioned a few possible explanations, others have been proposed. These include cultural differences in the use of diagnostic labels, the occurrence of specific symptoms, the existence of alternative forms of illness, and the experience of environmental stressors. We discuss each explanation and its supporting evidence below.

Use of Diagnostic Labels

Differences in prevalence rates may be due to the differential use of diagnostic labels among psychologists, psychiatrists, and other health care providers across cultures. Cultural conceptions of mental illness and health may influence whether or not specific behaviors are viewed as abnormal by both laypeople and physicians. Data from a study conducted by the WHO demonstrate that the probability of recognition of depression by a primary care clinician varies substantially across cultures (Simon, Goldberg, Tiemens, & Ustun, 1999). In this study, patients were independently assessed by the study interviewers and by a group of primary care clinicians. Primary care clinicians assigned psychiatric and medical diagnoses to each patient. A case of depression was deemed "unrecognized" when the study interviewer, but not the primary care clinician, assigned a diagnosis of depression. In Turkey, Greece, Nigeria, Japan and China, only 20% or less of depressed cases were recognized and treated. This is in contrast to the United Kingdom, France, Chile, United States, and Italy, where 50% or more of the depressed cases were recognized. Because recognition rates vary for countries with comparable base rates of depression, it is unlikely that they are the cause of these differences in recognition rates.

Although the use of standardized interviews and diagnostic systems should reduce subjectivity in assigning psychiatric diagnoses, cultural bias appears to exist even when these standardized instruments are used. For example, Katz, LeBars, Itil, Prilipko, and DeGiralamo (1994) asked psychiatrists from 14 countries to view a videotaped recording of a patient hospitalized for depression during an interview. The interview consisted of a brief mental status examination and a set of performance tasks (e.g., copying designs). Psychiatrists were asked to rate the expressive behavior and symptoms of the patient. Psychiatrists agreed about the presence and intensity of depressed mood, about the behavioral and somatic symptoms expressed, and about the patient's facial expressions, but they disagreed about the patient's rate of speech and energy level, as well as her cognitive and sexual symptoms. In a similar study, videotaped standardized interviews with psychiatric patients were rated by researchers from China, Korea, and Japan (Nakane et al., 1988). Even though the raters used identical assessment instruments and were all from Asian cultures, substantial diagnostic differences emerged in this study as well. Specifically, Japanese raters tended to diagnose patients as having affective disorders, whereas Chinese raters tended to diagnose the same individuals as having anxiety disorders. Korean raters tended to diagnose both affective disorders and anxiety disorders equally. The authors suggest that the Japanese raters

may have diagnosed affective disorders more than their Chinese counterparts because historically, Japanese psychiatric practice has been more influenced by Western psychiatry than Chinese psychiatric practice (Nakane et al., 1988). These findings suggest that culture may influence how mental health providers view similar depressive symptoms, or how they use diagnostic criteria, which may result in different prevalence rates of depression across cultures. Future studies are needed to determine whether or not this is the case.

Specific Symptoms of Depression

National differences in prevalence rates of depression may also reflect cultural differences in the occurrence of specific depressive symptoms. For example, when accepted diagnostic criteria for a disorder include symptoms that occur more or less frequently in a particular cultural context (in comparison to the cultural contexts in which the diagnostic criteria were normed), cultural differences in the prevalence rates of the disorder may arise. Weissman et al. (1996) reviewed data from 10 epidemiological studies from around the world (United States, Canada, Puerto Rico, France, Germany, Italy, Lebanon, Taiwan, Korea, and New Zealand) and found that insomnia, loss of energy, difficulty concentrating, and thoughts of death and suicide were reported by the majority of depressed individuals in all of the countries sampled. On the other hand, other symptoms, such as poor appetite, feelings of worthlessness or guilt, and slowed thinking were not common at all sites. For instance, poor appetite was a common symptom in non-Western countries (Lebanon, Korea, and Taiwan), but not in Western countries. Thus, specific symptoms may vary in their ability to differentiate between cases and noncases of depression across cultures.

Another demonstration of cultural differences in the extent to which specific symptoms differentiate between depressed and nondepressed cases is provided by the 1991 WHO study, in which Goldberg, Oldehinkel, and Ormel (1998) compared patients' responses to the General Health Questionnaire (GHQ; Goldberg, 1972) across study sites. The GHQ is a self-report instrument of psychological distress and maladaptive behavior that has been used to screen for psychiatric disorders in primary care and community settings. This scale has good reliability and validity, and has been translated into many languages. Goldberg and colleagues found that most GHQ items (which correspond to the individual symptoms of depression) did not function in the same way across cultures. For example, "lost concentration" and "enjoy activities" discriminated between depressed and nondepressed groups for some cultures, but not for others. Only a few items functioned similarly across cultures. For example, feelings of depression tended to have low specificity (i.e., were unable to identify individuals who were not depressed) and high sensitivity (i.e., were able to identify individuals who were depressed) across cultures, and feelings of worthlessness and loss of confidence tended to have high specificity (were able to detect individuals who were not depressed) and low sensitivity (were unable to detect individuals who were depressed) across cultures.

The occurrence of a specific symptom may depend on how salient it is to members of that particular culture. For example, Pang (1995) used semistructured interviews to study the experience of depression in elderly Korean immigrants. Pang found that many depressed immigrants did not report feeling depressed; instead, they explained and communicated their distress in terms of loneliness, family dynamics, or somatic complaints. In another study, Jenkins (1997) asked European American and Latino (mostly Puerto Rican) individuals with major depression and schizophrenia to describe their life situations. Almost half of all subjects from both cultural groups failed to mention their illness in describing their lives, focusing instead on emotional distress, restricted activities, significant life events, accomplishments, and relationships. However, European Americans were more likely to de-

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scribe their lives in terms of mental and physical illness than Latinos, and Latinos were more likely to use the culturally acceptable term of *nervios* (Jenkins & Cofresi, 1998). Koss-Chiokino (1999) also found that depressed Puerto Rican women also reported visions of spirits, prolonged and uncontrollable crying, and headaches, none of which are included in the DSM diagnostic criteria.

Nonwestern cultures (e.g., Taiwanese, Korean, Phillipino, Arab, Turkish, Japanese) appear to emphasize the somatic symptoms of depression. Somatic symptoms may be more salient to members of non-Western cultures than to members of Western cultures because of beliefs about the integration of body and mind, of a lack of emphasis on emotional expression, and/or of a stigma attached to mental illness. For example, depressed inpatients and outpatients (Ebert & Martus, 1994; Hamdi, Amin, & Abou-Saleh, 1997) in the United Arab Emirates and Turkey were more likely to describe their depression in terms of somatic concerns (such as psychomotor retardation, somatic anxiety, and hypochondriasis) as compared to depressed individuals from Western cultures. Another study comparing depressed African Americans and European Americans found that despite comparable levels of cognitive and affective symptoms of depression, African Americans reported more somatic symptoms (Brown, Schulberg, & Madonia, 1996). In contrast, depressed Westerners were more likely to report symptoms such as suicidal ideation and feelings of guilt. Similarly, Waza, Graham, Zyzanski, and Inoue (1999) reviewed medical charts of patients in Japanese and American primary care clinics who had received new diagnoses of depression. They found that depressed Japanese patients were more likely to present with exclusively physical symptoms, whereas American patients were more likely to present with exclusively psychological ones. Interestingly, according to a WHO study (Simon, Goldberg, et al., 1999), depressed patients across cultures differed in their tendency to reveal somatic rather than emotional distress to their primary care providers. For example, in Turkey and Greece, nearly all depressed participants reported only physical symptoms as the reason for seeking a doctor. Moreover, somatization occurred more frequently in walk-in primary care centers that did not facilitate an ongoing relationship between patients and health care providers than those that did. Thus, in some cases, somatic presentation may reflect the quality of relationship between medical doctors and their patients.

Alternative Forms of Depressive Illness

Rates of depression may be lower in cultures where there exist alternative explanations for depressive symptoms. That is, depressive symptoms may co-occur with other symptoms that are part of another form of illness. The DSM-IV refers to disorders that have some depressive symptoms but that have other defining features as "culture-bound syndromes." Examples include *hwa-byung* in Korea (Lin et al., 1992), *sinking heart* among the Punjabi Sikhs (Krause, 1989), *pena* in Ecuador (Tousignant & Maldonado, 1989), *khoucherang* in Cambodia (D'Avanzo & Barab, 1998), *neurasthenia* or *somatization* in China (Grauer, 1984; Kleinman, 1982), and *wacinko syndrome* among the Sioux (Shore & Manson, 1981). For example, *hwa-byung* (Lin et al., 1992) is defined by constricted and oppressed sensations in the chest, and *sinking heart* (Krause, 1989) by irregular movement and shrinking sensation in the heart. Despite these unique features, some scholars have suggested that these culture-bound syndromes are essentially subtle variants of depression (Mumford, 1996). For instance, Lin et al. (1992) found that Korean subjects with *hwa-byung* were more likely to meet criteria for current and past major depression and had higher levels of depressive symptoms than those without the disorder. The agreement was not perfect, however, with only a half of self-defined *hwa-byung* sufferers actually meeting criteria for major depression. Similarly, Beiser et al. (1994) administered measures of depression, anxiety,

somatization, and culture-bound syndromes to 1,348 Southeast Asian refugees and 319 Canadians and found that for both groups, reported symptoms were best described in terms of depression.

Does the existence of "culture-bound" syndromes affect the prevalence rate of depression? To address the question of whether lower prevalence rates of depression are related to the greater prevalence of *somatization*, the WHO examined the prevalence of both disorders in different primary care centers across the world (Simon, VonKorff, et al., 1999). Researchers defined *somatization* as the presentation of unexplained medical symptoms or denial of psychological symptoms of depression (to distinguish it from the mere reporting of somatic symptoms). They found that rates of somatization were similar across cultures. Moreover, when the ratio of somatic symptoms to psychological symptoms of depression was examined, it became apparent that this ratio did not vary with culture. For example, even though patients in Nagasaki, Japan, reported few overall symptoms compared to patients in Santiago, Chile, the ratio of somatic to psychological symptoms did not differ for the two groups. These findings cast doubt on theories that *somatization* can account for cross-cultural differences in the prevalence of depression. Future studies should assess whether the same can be said for other culture-bound syndromes.

Environmental Stressors

Urbanization and Westernization have been hypothesized to have a negative effect on mental health in general and levels of depression in particular (Freeman, 1988). A study conducted in the United States found that urban samples were more depressed than rural samples (Blazer et al., 1985). However, a study conducted in Indonesia found that psychological symptoms were primarily associated with poverty and that inhabitants of villages in the process of urbanization with improved standards of living and increased socioeconomic development reported fewer psychological symptoms (Bahar, Henderson, & Mackinnon, 1992). Similarly, in Taiwan, rates of depression were twice as high in rural communities as compared to urban communities (Cheng, 1989). Thus, urbanization may serve as a proxy for poverty in certain countries. For example, in the United States, urban populations may be poorer than rural and suburban population, whereas in other cultures the reverse may be true. Poverty has been shown to be associated with depression (Murphy et al., 1991; Patel, Araya, de Lima, Ludermir, & Todd, 1999). In fact, some differences in levels of depression between ethnic groups may be entirely due to differences in socioeconomic status. For example, one study found that African Americans had higher levels of depression than European Americans; however, these differences disappeared when the researchers controlled for group differences in socioeconomic status (Comstock & Helsing, 1979).

In summary, an enormous literature has documented and attempted to explain the substantial variation in prevalence rates of depression across cultures. Clearly, there is evidence that the use of diagnostic labels, the salience/occurrence of specific symptoms, and the existence of alternative forms of illness and of environmental stressors have some influence. Future research is needed to examine how these factors interact with each other and to assess the degree to which they influence prevalence rates of depression.

Different Conceptions of Depressive Symptoms across Cultures

Although the bulk of biomedical studies on depression across cultures has focused on prevalence rates of depression, another body of research examines whether culture influences the basic elements or factors that comprise depression by examining the relationships

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among different depressive symptoms. To achieve this, researchers typically employ factor analytic techniques. For example, studies of British patients (Goldberg & Hillier, 1979; Goldberg, Rickels, Downing, & Hesbacher, 1976; Huppert, Walters, Day, & Elliott, 1989) found that the factor structure of the GHQ was comprised of four or six (one primary-order and five second-order) factors, including depression, anxiety, insomnia, social dysfunction, somatic symptoms, and diminished coping capacity. Most of the studies validating the GHQ among non-Western populations, such as adolescents (Shek, 1993) and parents of mentally handicapped children (Shek & Tsang, 1995) in Hong Kong, Japanese students (Takeuchi & Kitamura, 1991), and Turkish immigrants in Australia (Stuart, Klimidis, Minas, & Tuncer, 1993), find comparable factor structures, suggesting that in these cultures the basic elements that comprise depression are similar. Other studies with different cultural groups (Mexican general practice patients, middle-aged and elderly Japanese), however, have reported more factors (Medina-Mora et al., 1983; Ohta, Kawasaki, Araki, Mine, & Honda, 1995). For example, Ohta and colleagues (1995) found that depressive symptoms were described by eight factors (depression, anxiety and tension, anergia, interpersonal dysfunction, difficulty in coping, insomnia, anhedonia, and social avoidance) in a sample of middle-aged and elderly Japanese. This finding suggests that for these groups, the underlying elements of depression may differ.

Another widely used self-report measure of depression is the Center for Epidemiological Studies—Depression Scale (CES-D) (Radloff, 1977). Radloff (1977) found that in European American community samples, depressive symptoms were organized into four factors: depressed affect, positive affect, somatic and retarded activity, and interpersonal problems. Studies conducted with members of non-Western cultures and ethnic minorities, however, reveal different factors. For example, a study of older community samples from several Asian countries, including Indonesia, North Korea, Myanmar, Sri Lanka, and Thailand, found that the four-factor structure described above, with an additional general factor of depression, applied well to Indonesia and Thailand, but not to Korea, Sri Lanka, and Myanmar (Mackinnon, McCallum, Andrews, & Anderson, 1998). Interestingly, for all the samples, the depression and somatic factors were highly correlated (.92–.98), which is consistent with prevailing beliefs that emotions in many Asian cultures are situated in the body, as demonstrated by traditional Chinese medicine and Ayurvedic medicine. These systems of medicine view problems as psychobiological rather than purely psychological and expect emotional distress to be expressed through bodily complaints (Barnes, 1998). Thus, syndromes similar to depression are attributed to deficiencies in the functioning of bodily organs, such as kidney, heart, or spleen (Ots, 1990) or the imbalance of elements or humours in the body (Krause, 1989). Thus, it is possible that depression is comprised of three factors (e.g., positive affect, interpersonal problems, and a factor combining the depression and somatic factors) for samples from Korea, Sri Lanka, and Myanmar rather than four, as found for European Americans. Beliefs about the integration of mind and body also exist in many Native American cultures; therefore, it is not surprising that a factor combining affective and somatic symptoms of depression has been found for Native American boarding school students (Dick, Beals, Keane, & Manson, 1994) and Native American adults (Somervell et al., 1993) as well.

Studies conducted with immigrant groups in the United States also support claims that cultural differences in the factor structure of depression may reflect cultural differences in conceptions of emotion and mental health. As immigrants become more acculturated to American culture, their conceptions of depression begin to resemble those of American culture. For example, several studies have found that whereas a two-factor structure (i.e., depression and well-being) best fits CES-D data obtained from older Latino immigrants, CES-D data obtained from younger Latino immigrants best fit a three- or four-factor structure

(Golding & Aneshensel, 1989; Guernaccia, Angel, & Lowe Worobey, 1989; Miller, Markides & Black, 1997; Stroup-Benham, Lawrence, & Treviño, 1992). In one study comparing the CES-D factor structure for Mexican American and Puerto Rican women (Stroup-Benham et al., 1992), two- and three-factor solutions fit recent immigrant responses best, whereas four-factor solutions were more appropriate for Hispanics born in the United States.

Research focusing on Asian and Asian American samples report similar findings. Groups that are less oriented to American culture are less likely to produce the European American four-factor structure. A study of mostly foreign-born monocultural Chinese American adults living in Chinatown, San Francisco, revealed a three-factor structure (Ying, 1988), with depressed and somatic factors combined. On the other hand, a five-factor solution with depression, interpersonal, positive affect, and two somatic factors was obtained for a sample of bicultural Chinese American college students (Ying, Lee, Tsai, Yeh, & Huang, 2000).

Cultural differences have emerged in the order of extraction of different factors, suggesting that the most significant elements of depression also vary across cultures. For example, social dysfunction emerged as a first factor for the GHQ-60 among Japanese students (Takeuchi & Kitamura, 1991) and Spanish adults (Vazquez-Barquero, Williams, Diez-Manrique, Lequerica, & Arenal, 1988), whereas it was one of the last factors that was extracted for Chinese and British samples (Huppert et al., 1989; Shek, 1993). This pattern of extraction may indicate that the social dimension is relatively more important in the experience of distress for Japanese and Spanish adults than for Chinese students or for a British community sample. Somatic symptoms comprised the first extracted factor for a sample of Mexican patients (Medina-Mora et al., 1983) and Chinese students (Chan, 1985), suggesting that the somatic aspects of depression may be more significant for these groups than the affective and interpersonal ones.

In summary, researchers employing the biomedical approach have also explored the influence of culture on conceptions of depression, as manifested by the factor structure of different symptoms of depression. Findings from these studies suggest that although the symptoms may be the same across cultures, how they relate to each other and what elements they represent may differ. One major criticism of this work is that the types of elements that can be found depend on what symptoms are assessed. Thus, some elements of depression or depression-like disorders in different cultures may not be represented well by Western diagnostic instruments. Future studies should include other symptoms and then test the equivalence of various factor structures across cultural groups.

OTHER APPROACHES TO STUDYING DEPRESSION ACROSS CULTURES

Both ethnographic and biomedical approaches to studying depression have taught us important lessons about the role culture plays in this disorder. Each approach, however, has important limitations. While ethnographic studies capture the depth of meaning of symptoms associated with depression, they preclude extensive comparison across cultures. Biomedical studies, however, often gloss over important differences in the meanings of depressive symptoms by defining a priori what depression is. Moreover, both approaches tend to rely on self-report data, and neither approach explicitly links cultural variables to depressive symptoms. Both clinicians and scientists recognize the importance of developing new approaches to studying psychopathology across cultures that address these limitations. For example, Ritsher, Ryder, Karasz, and Castille (2002) argue that qualitative and quantitative methods of data collection should be combined in the study of psychopathology across cultures. In this next section, we discuss other approaches that address these limitations and that promise to reveal more about the influence of culture on depression.

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Measuring Culture by Integrating Interview and Questionnaire Methods

Although a plethora of studies have focused on how culture influences different aspects of depression, few studies have clearly defined or measured culture. Neither ethnographic nor epidemiological studies demonstrate that cultural variables (e.g., values, ideas, practices) are causally linked to different conceptions of illness. By integrating interview and questionnaire methods, researchers can identify the specific aspects of a given culture that are hypothetically influencing depression (e.g., religious beliefs, conceptions of illness, engagement in rituals, orientation to social relationships, locus of control), measure these variables in their samples, and then examine whether a relationship between those variables and depression actually exists. For example, ethnographers have found that cultures differ in whether their members view life events as internally or externally caused, as dispositional or situational, or as event-specific or global, which in turn may influence their susceptibility to depression. According to the hopelessness theory of depression (Abramson, Metalsky, & Alloy, 1989), individuals who tend to attribute negative events to internal, stable, and global causes may be at increased risk for depression (Fazio & Palm, 1998; Tripp, Catano, & Sullivan, 1997). However, in certain cultures, these attribution styles may be more normative than in European American culture, and therefore members of these cultures may be more susceptible to depressive feelings. For example, one study (Anderson, 1999) compared the attributional styles of Chinese and American students and found that Chinese students used more maladaptive attributions in imagined and scripted situations than American students. That is, they tended to attribute failures rather than successes to their internal abilities and traits. Chinese students in this study also reported higher levels of depression than American students, suggesting that their attributional styles made them more susceptible to depression. Because this study examined levels of depressive symptoms only, we do not know whether cultural differences in attribution styles result in different rates of clinical depression. We should also note that the magnitude of the correlation between attributional styles and levels of depression has been found to vary cross-culturally as well. Sakamoto and Kambara (1998) found that the depressive consequences of attributing negative events to internal, stable, and global causes are less for Japanese students compared to Western subjects. Despite these caveats, the studies illustrate how one might measure a specific cultural factor and then examine its relationship to depression.

Studies that directly measure cultural variables may also reveal which variables are not related to depression. Having an external locus of control, or believing that life events are out of one's personal control, is thought to be a risk factor for depression (Benassi, Sweeney, & Dufour, 1988; Neff & Hoppe, 1993; Rotter, 1966). For example, Mirowsky and Ross (1984) found that among Mexican Americans and Mexicans, being fatalistic (i.e., having an external locus of control) was predictive of higher levels of depression. However, cross-cultural studies have demonstrated that the association between external locus of control (or fatalism) and depression is not universal. While having an external locus of control was positively correlated with levels of depression for American and Turkish college students, it was not for Nigerian or Filipino college students (Akanke & Lester, 1994; Lester, Castromayor, & Icli, 1991). Similarly, Sastry and Ross (1998) found that although having personal control was related to lower levels of depression across cultural groups, the magnitude of the correlation was weaker for Asian Americans and South Koreans, Indians, Chinese, and Japanese than for non-Asians living in the United States and living abroad. Thus, by measuring cultural variables directly, we can test specific hypotheses about the relationships between specific cultural variables and depression.

Focusing on Emotional, Cognitive, and Social Functioning

Surprisingly few studies have examined whether individuals diagnosed with depression, or a disorder comparable to depression, show the same types of impairments in emotional, cognitive, and social functioning across cultures. By examining deficits in psychological functioning, researchers can transcend the diagnostic challenges that accompany studying depression across cultures to assess whether the effects of the disorders, however defined, are the same. For instance, depression impairs the perception of emotional cues: depressed individuals are less able to detect positive and negative emotional words than nondepressed individuals (Wexler et al., 1994). Depression also influences the behavioral and physiological aspects of emotional responding. In terms of expressive behavior, depressed individuals express less happiness while imagining happy events (Berenbaum, 1992; Schwartz, Fair, Salt, Mandel, & Klerman, 1976) and during clinical interviews (Ekman, Matsumoto, & Friesen, 1997; Ellgrip, 1989). However, depressed individuals also demonstrate more contempt, anger, and disgust than nondepressed individuals while imagining disgusting events (Berenbaum, 1992) and during clinical interviews (Ekman et al., 1997). Surprisingly, depressed and nondepressed individuals do not differ in their facial expressions of sadness when imagining sad events (Schwartz et al., 1976). Other studies have found differences between depressed and nondepressed individuals in their physiological responses during challenging tasks (e.g., mental arithmetic). Depressed individuals demonstrate faster heart rates and smaller skin conductance responses compared to nondepressed individuals (Dawson, Schell, & Catania, 1977; Zeiner, 1975). These studies and others (Davidson, 1998) collectively demonstrate that depression influences the physiological and behavioral components of emotion. Future studies should examine whether the individuals with somatization, hwa-byung, or other disorders thought to be similar to depression show similar deficits to determine whether the disorders are the same along these lines.

Using Physiological and Behavioral Measures

Most studies of depression across cultures rely primarily on the self-reports of the patients themselves, or on the relatively unsystematic observations of others. While valuable, self-report data are susceptible to numerous biases, including self-presentation biases, unreliability, and contextual demands. Because of these biases, researchers have made inferences about the meaning of these self-reports that may or may not be justified. As described above, depression affects not only subjective emotional experience, but physiological functioning and interpersonal behavior as well. Moreover, differences among different subtypes of depression may be clarified using these procedures. For example, Lader and Wing (1969) found pulse rate differences between agitated and retarded depressed patients. Given existing physiological measurement techniques and microanalytic behavioral coding systems (e.g., Facial Action Coding System, Specific Affect System), the field is well equipped to move beyond self-report when assessing depression across cultures. It is possible that physiologically, depression looks quite similar across cultures, but that behaviorally, it looks quite different.

For instance, we conducted a study that examined the effects of depression on the emotional responses of Spanish-speaking Latinas to sad and amusing film clips, using physiological, behavioral, and self-report measures (Tsai, Pole, Levenson, & Muñoz, 2002). In terms of physiological responding, depressed Latinas demonstrated lower levels of skin conductance activity than did their nondepressed peers. Interestingly, this finding was consistent with a body of literature on depression in Anglo-American samples, which suggests that depressed individuals have lower levels of skin conductance response than nondepressed indi-

viduals (Dawson et al., 1977; Donat & McCollough, 1983; Greenfield, Katz, Alexander, & Roessler, 1963; Iacono et al., 1983; Lader & Wing, 1969; McCarron, 1973; Noble & Lader, 1971; Zuckerman, Persky, & Curtis, 1968). Thus, there may be a universal, physiological substrate of depression. Depressed Latinas also reported feeling more anger and contempt during both film clips and showed fewer unfelt smiles during the amusing film clip compared to their nondepressed peers. These findings were somewhat inconsistent with the literature on the effects of depression on Anglo-American groups (Berenbaum & Oltmanns, 1992), suggesting that the effects of depression on subjective emotional experience and behavior may differ across cultures. Thus, studies that employ physiological and behavioral measures will considerably advance our knowledge about the effects of depression on different levels of functioning and how these effects vary by culture.

FUTURE DIRECTIONS

In this chapter, we have reviewed ethnographic and biomedical approaches to understanding depression across cultures. Despite their different theoretical and methodological approaches, both have demonstrated the various ways in which culture may influence depression—from concepts of depression and illness, to diagnosis, to the meaning of depressive symptoms. On the one hand, it is sobering to realize how little we know about depression across cultures. On the other hand, we are encouraged by current techniques that may significantly advance our knowledge base. Perhaps by using different approaches, we can move beyond simply measuring depression and instead examine more comprehensively how culture influences other aspects of depression, such as its relationship to other disorders, the course of depression, the protective and risk factors associated with depression, and the treatment of depression and related disorders. We discuss each of these topics in detail.

How Does Culture Influence the Comorbidity of Depression with Other Disorders?

Research focusing on depression tends to conceptualize it as a phenomenon that is distinct and separate from other forms of psychopathology. This assumption may not be true. Instead, depression may be more appropriately viewed as one possible expression of psychological distress. Existing literature suggests that the degree of comorbidity of depression with other disorders differs substantially across cultures (Merikangas et al., 1996). For example, the odds ratio for the association of depression with an anxiety disorder is 2.7 in Switzerland, but 14.9 in Puerto Rico. These differences indicate that “pure” depression may be an exception rather than the norm across cultures. Studies of comorbidity of mental disorders (Krueger, 1999) have revealed that depression functions as one of the indicators of a higher order internalizing factor. Other indicators include other mood (such as dysthymia) and anxiety (such as phobias and generalized anxiety disorder) diagnoses. Thus, the pursuit of studying depression across cultures in isolation from other internalizing disorders may be of limited value. Future research should examine the comorbidity of depression with other disorders across cultures.

Is the Course of Depression and Depression-Like Disorders Similar across Cultures?

Much remains to be learned about the impact of cultural variables on the course and outcome of depression. Does depression remit faster in some cultural contexts than in others?

What aspects of the culture facilitate or hinder this process? Very few studies have attempted to answer this question. The World Health Organization Collaborative Study examined cases of depression in Canada, Iran, Japan, and Switzerland and followed them 10 years later (Thornicroft & Sartorius, 1993). With the exception of social dysfunction, outcome and course variables differed significantly by site. Japan had the highest proportion of cases with poor clinical and social outcomes, whereas Canada had the highest proportion of cases with poor course, characterized by longer duration of depressive episodes and fewer remissions. However, these comparisons did not control for differences in severity of depression at baseline or availability of treatment, and therefore should be interpreted cautiously. Ormel et al. (1994) found that psychiatric diagnoses were associated with increased disability across cultures, although the degree of occupational and physical disability associated with psychiatric diagnoses varied across centers. Another study of course and outcome of acute affective disorder in rural and urban clinics in India (Brown et al., 1998) reported that 100% of depressed participants experienced brief recovery period (defined as at least 1 month free of any symptoms) during the year after the initial assessment. A substantial number of patients (71%) sustained recovery at 1-year follow-up, a considerably greater percentage than that of the United States (28–52%; from Picinelli & Wilkinson, 1994). It is unclear, however, what aspects of Indian culture are responsible for this finding. Moreover, the evaluations in the Indian study were performed by the treating psychiatrists, which may have influenced the results. Clearly, future work assessing the specific aspects of culture that may be responsible for these differences must be conducted. Furthermore, the use of physiological and behavioral techniques may also provide more objective assessments of improvement than standard instruments.

Are the Factors that Place Individuals at Risk for Depression Similar across Cultures?

After decades of intensive research, a number of risk factors for depression have been described for Western samples: being female, experiencing negative and stressful life events, being physically ill, lacking education, having financial difficulties, not working, and lacking social support. To what extent, if any, do these factors also place members of other cultures at risk for depression or depression-like states? A number of studies have identified the same risk factors for non-Western cultures (Chen et al., 1999; Hwu et al., 1996; Madianos & Stefanis, 1992; Patel et al., 1999), although much more work is needed. For example, some studies that investigated the risk factors for depression among European and African Americans found that, for both groups, gender, marital status, and socioeconomic status (Jones-Webb & Snowden, 1993) and dissatisfaction with personal relationships (Rodriguez, Allen, Fronglio, & Chandra, 1999) were associated with depression. Similarly, the positive link between interpersonal sensitivity (appraising interpersonal situations as threatening, needing approval, being timid, and having separation anxiety) and depression that has been documented for Western samples (Boyce et al., 1992) has also been replicated for a sample of Japanese hospital workers (Sakado et al., 1999). However, other factors, such as being widowed or unemployed, were less predictive of depression among African Americans as compared to European Americans, and while higher income has been shown to be a protective factor against depression, this association is stronger for African Americans than for European Americans (Cockerham, 1990).

Another way in which culture may influence vulnerability to depression is via perceptions of the self. Self-discrepancy theory (Higgins, 1989) purports that the greater the discrepancy between how one would like to be ("ideal self") and how one is ("actual self"), the more susceptible one is to depression. This theory is consistent with Western cultural

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values that place a premium on having a positive image about oneself. Heine and Lehman (1999), however, found that the relationship between depression and discrepancies between ideal and actual selves is stronger for European Canadians than for Japanese, with a bicultural Asian Canadian sample falling in between the two groups. Thus, actual-ideal self-discrepancy may be less of a risk factor for depression for Asian than for European cultural groups, perhaps because Asian cultures place less emphasis on promoting the self than do Western cultures. In fact, Cheung (1997) found that the discrepancy between actual and *undesirable* selves predicted levels of depression among Hong Kong adolescents better than did the discrepancy between actual and ideal selves. Moreover, for these adolescents, discrepancy in identity based on social roles, rather than on individual characteristics, predicted levels of depression. This finding is consistent with reports that Asians are more interdependent than Westerners, that is, they base their identities more on relationships with others (Markus & Kitayama, 1991). Thus, the above findings suggest that some of the factors that place individuals at increased risk for depression in the United States do not function in the same way in other cultural contexts.

In addition, research should focus on the factors that protect individuals from depression. For example, Vega and colleagues (1998) found that Mexicans living in Mexico had lower rates of depression than did Mexican-born immigrants living in the United States or American-born Mexicans living in the United States. The authors suggest that Mexicans living in Mexico have stronger support networks, and that this social structure protects individuals from experiencing depression. Similarly, Obeyeskere (1985) suggests that Buddhist philosophical beliefs also protect one from depression or paralyzing feelings of loss and emptiness.

How Does Culture Influence the Effectiveness of Treatments for Depression?

Culture has been thought to influence all aspects of the treatment process, ranging from the utilization of mental health services to beliefs about the therapist-client relationship, to the effectiveness of particular psychotherapeutic as well as psychopharmacological interventions. Although an enormous literature exists regarding the influence of culture on the treatment of depression, this literature is comprised primarily of case studies (e.g., Cheung & Lin, 1997; Eisenbruch, 1983; Ruiz, 1998) and clinical guidelines (Sue & Sue, 1999; Pederson, Draguns, Lonner, & Trimble, 1996). Few empirical studies have actually been conducted on the effects of culture on various aspects of the treatment process.

What are the ways in which common treatments for depression are imbued with Western values and assumptions? Toukmanian and Brouwers (1998) argue that despite the conceptual and technical differences between psychodynamic, cognitive-behavioral, and humanistic-existential psychotherapies, "all are formulated from the basic premise that problems reside within the individual, that change is an internal process, and that the responsibility for bringing about this change rests primarily with the individual" (p. 113). Thus, Western psychotherapeutic treatments may be less effective with individuals whose cultures place less emphasis on internal processes and who do not view the individual as the basic unit of experience than those that do. For example, interventions that emphasize personal agency may be ineffective for cultural groups that view behavior as externally influenced (Kaiser, Katz, & Shaw, 1998). In addition, many Western treatments are based on the notion that disclosing one's feelings alleviates distress and is a necessary ingredient for change. However, in many Asian cultures, disclosing one's distressing experiences may result in great shame rather than great relief (Toukmanian & Brouwers, 1998).

Of the empirical studies of cultural influences on the treatment of depression, the bulk of the literature has focused on cultural and ethnic differences in the utilization of

mental health services. For example, Sue, Fujino, Hu, Takeuchi, and Zane (1991) found that within the United States, ethnic groups vary in their utilization of mainstream mental health services. Specifically, Asian Americans are less likely to go to psychiatric and community mental health clinics compared to their European American counterparts and only do so as a last resort. This finding is consistent with reports that mainland Chinese are more likely to go to medical health centers for psychological and emotional problems than they are to go to mental health services (Kleinman, 1986). Moreover, over 60% of Asian Americans who actually seek services do not return after the first session. Ethnic differences in the use of mainstream mental health services may reflect the Western orientation of such services as well as the emphasis on Western conceptions of depression in these settings. Takeuchi, Sue, and Yeh (1995) found that in Los Angeles, Asian American, African American, and Mexican American clients were more likely to remain in mental health programs if those programs were oriented toward their cultural heritage. Moreover, members of non-Western cultural groups often use other services (e.g., traditional healers) to address psychological and emotional concerns. Even among individuals who attend mainstream mental health services, a significant percentage of patients are concurrently receiving some form of complementary and alternative care, particularly those with depressive symptoms (Knaudt, Connor, Weisler, Churchill, & Davidson, 1999; Unuetzer et al., 2000).

To address possible differences in values, beliefs, traditions, and expectations between the Western clinician and the non-Western client, a number of clinicians have proposed ways of adjusting Western treatments for depression. For example, Randall (1994) discusses ways of adjusting traditional cognitive-behavioral techniques for use with disadvantaged African American women. Even psychopharmacological treatments have had to be adjusted for use with non-Western clients. For example, Hispanic patients require less antidepressant medication and report more side effects at lower dosages than do their white counterparts (Marcos & Cancro, 1982; Mendoza, Smith, Poland, Lin, & Strickland, 1991). Despite the plethora of recommendations regarding the adjustment of Western therapies for the treatment of non-Western groups, few studies have actually empirically examined whether these cultural adjustments improve the effectiveness of various treatments of depression. Clearly, this research is needed.

Almost no cross-cultural studies have compared the effectiveness of Western treatments of depression with those that may be more indigenous to a particular culture. However, a number of researchers are beginning to explore non-Western treatments and their effects on depression in Western populations. For example, Allen, Schnyer, and Hitt (1998) found that acupuncture provided symptom relief to depressed women, compared to wait-list controls. Similarly, Roeschke et al. (2000) found that depressed patients taking mianserin (a tetracyclic antidepressant) who also received acupuncture improved more than patients who received placebo acupuncture and those who did not receive any acupuncture. Future studies should compare the characteristics of Western and non-Western treatments for depression to assess their similarities and differences and to determine how these similarities and differences influence treatment effectiveness across cultural contexts.

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