CHAPTER 18

Understanding Depression across Cultural Contexts

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Yi, a young U.S.-born Hmong woman, is seriously distressed. She is having difficulty sleeping; she has lost her appetite; and she lacks interest in her studies. Yi also says that she has little energy and is having a difficult time balancing school and family obligations. Although she does not spontaneously use emotional terms to describe how she feels, when asked she agrees that she is unhappy and anxious. All these symptoms are consistent with DSM criteria for major depressive disorder (American Psychiatric Association, 2013). And yet Yi reports other symptoms that are not typically associated with major depression. She describes bodily aches and pains, especially in her stomach and liver. She has become particularly concerned about what other people think of her, making it hard for her to get along with her family. Finally, she reports that at night, the spirit of a disgruntled ancestor visits her, right before she is about to fall sleep. These encounters sap her energy. Although she says that she knows other people who have been visited by spirits, she is nonetheless concerned about experiencing these visits herself.

Cases like Yi's raise questions about how culture shapes the experience and expression of depression, with clear implications for assessment and treatment. On the one hand, diagnosable major depression is observed across cultural contexts, albeit with varying prevalence rates (Bromet et al., 2011). It disrupts lives worldwide, posing significant threats to people's productivity and well-being. Indeed, depression is projected to become a leading contributor to the global burden of disease by 2030 (Lopez & Mathers, 2006; see Kessler et al., Chapter 1, this volume). Given the costs of depression for individual sufferers and for society as a whole, it is tempting to rely on dominant Western[1] models of conceptualizing, assessing, and treating this disorder in cultural contexts that, like Hmong contexts, do not conceptualize its symptoms in the same way. Indeed, from this perspective,

[1]By "Western" we refer to a broad set of cultural contexts with historical ties to Western Europe, with majority populations of European origin (e.g., United States, Canada, Western Europe, Australia, and New Zealand).

a failure to diagnose Yi's symptoms as depression may delay treatment and prolong her suffering (Lee, Lytle, Yang, & Lum, 2010).

For this reason, it may not be surprising that much research and clinical work assumes that Western-based criteria for major depression reflect the underlying, culturally universal pathology of the disorder. In part, this is because this research has primarily taken place in the Western world. Therefore, much cross-cultural research on depression involves examining whether Western-defined depressive symptoms are recognized in non-Western cultural contexts (Jorm et al., 2005). This approach assumes that depression is similar to medical conditions that have a clear etiology and pathology leading to a specific set of symptoms that transcend culture.

In contrast, we argue that depression is distinct from many other medical conditions because it is not only a neurological phenomenon, but also a psychological and cultural one, and therefore cannot be explained without referencing all of these levels (Ryder, Ban, & Chentsova-Dutton, 2011). Take the case of gender differences in depression. Across many cultural contexts, women are more likely to develop depression than men. This pattern can be attributed to a set of biological vulnerabilities (e.g., stress reactivity, hormonal differences, genetic factors). Yet, one cannot fully explain it without considering psychological and cultural factors (e.g., increased likelihood of stress and victimization, body dissatisfaction, gender roles) (Hyde, Mezulis, & Abramson, 2008; Parker & Brotchie, 2010; see Hilt & Nolen-Hoeksema, Chapter 19, this volume). Indeed, exceptions to this pattern have been observed in some cultural groups, such as the Amish or Orthodox Jews (Egeland & Hostetter, 1983; Loewenthal et al., 1995). In these homogeneous and stable contexts that reinforce very clear gender roles, the prevalence rates of depression are similar for men and women. Such findings demonstrate how the study of culture and depression requires attention to the cultural context and to the interaction of biological and sociocultural factors.

In this chapter, we start by defining our terms before turning to the central concepts of normative and deviant cultural scripts and how they shape symptom presentation. We follow with two specific research examples, focusing on cultural scripts of somatization and positive emotions. Finally, we discuss future directions for research and conclude with some remarks on clinical implications of this work.

Defining Depression, or Serious Distress

Evolutionary accounts postulate that depression represents a breakdown in an evolved and otherwise adaptive response to scarcity and loss (Nesse & Ellsworth, 2009). These explanations provide a plausible biological origin story for why it can emerge in many different cultural contexts. Indeed, research indicates that across cultural contexts, depression is reliably linked to environmental factors such as demanding climatic conditions, stress, unemployment and poverty, and lack of social support (for a more thorough review, see Chentsova-Dutton & Tsai, 2009), as well as to vulnerability factors such as high level of neuroticism or being female (Kuehner, 2003; Matsumoto, Nakagawa, & Estrada, 2009). How do we define responses to these stressors in ways that would allow us to capture cultural similarities and differences in depression?

Much research on depression across cultural contexts has relied on the *Diagnostic and Statistical Manual of Mental Disorders*, now in its fifth edition (DSM-5; American Psychiatric Association, 2013). In DSM-5, major depression is described as a period of prolonged dysfunction that is characterized by the key symptoms of depressed mood and

anhedonia. As many anthropologists and cultural psychologists have argued, however, these criteria are not culture-free: the DSM definition of depression emerges from and is understood within a cultural context that emphasizes the uniqueness and autonomy of each person and the importance of personal experiences, goals, values, and preferences (Kirmayer, 2007). Key markers of healthy functioning in this context include promotion of the individual self, cultivation of positive feelings, and open expression of emotions to signal personal preferences (Heine, Lehman, Markus, & Kitayama, 1999). Accordingly, the DSM definition of major depression emphasizes deviations from these cultural norms and ideals. Furthermore, although the depression criteria include both psychological and somatic symptoms, the emotional symptoms of depressed mood and anhedonia are considered the "cardinal" symptoms, reflecting the Western emphasis on mental (vs. physical) states.

Finally, the DSM criteria describe depression as primarily intrapersonal. There is a striking absence of interpersonal symptoms, despite the fact that social deficits and dysfunctional communication patterns associated with depression are well documented in the literature (Hammen & Shih, Chapter 15, this volume; Joiner, Coyne, & Blalock, 1999). Indeed, in the opening case study, Yi's physical problems, like stomach and liver pains, and relational problems, like her inability to get along with her family, would not be counted toward a DSM diagnosis. All of these assumptions reflect a culturally specific set of values, norms, and ideals. Because the term *depression* carries this set of cultural assumptions, we prefer throughout this chapter to use a broader and less culture-specific term, *serious distress*, to describe a set of problematic and often prolonged responses to real or perceived failures or interpersonal losses (see Ryder & Chentsova-Dutton, 2012). Standard terminology (e.g., *major depressive disorder, levels of depressive symptoms*) is used when reviewing previous research based on systems such as the DSM.

Defining Culture

In defining culture, we begin with Kroeber and Kluckhohn's (1952) classic statement:

> patterns, explicit and implicit, of and for behavior acquired and transmitted by symbols . . . including their embodiment in artifacts; the essential core of culture consists of traditional . . . ideas and especially their attached values; culture systems may, on the one hand, be considered as products of action, on the other, as conditional elements of future action. (p. 181)

This definition emphasizes that culture exists "in the head" as ideas and "in the world" as institutions (e.g., family and legal systems), artifacts (e.g., advertisements, texts, songs), and practices (e.g., greetings, ceremonies). The idea of "cultural scripts" bridges these aspects of culture, describing specific sequenced patterns of meaningful ideas leading to observable actions in the world, which in turn reinforce the ideas held by the actor and observers. This approach to culture highlights the fact that people create cultural ideas and practices, and that these cultural ideas and practices in turn create people. Thus, culture and mind mutually constitute each other, or "make each other up" (Shweder, 1990).

Consider an example of this mutual constitution in the context of depression. One study showed that the editors and writers of popular Australian women's magazines promoted a way of coping with depression that reflected Australian individualistic values, specifically, the importance of "pulling oneself up by one's bootstraps" and managing

one's own distress (e.g., Gattuso, Fullagar, & Young, 2006). Australians in turn endorsed this view of coping with depression (Kokanovic, Dowrick, Butler, Herrman, & Gunn, 2008). This example highlights the fact that people do not passively absorb culture but recreate it as observable scripts and, in doing so, reinforce or change the cultural contexts in which they live (Kashima, 2000).

Before turning to the literature on culture and depression, a brief comment on methodology is warranted. Cross-national differences in prevalence rates are one way of establishing at least the possibility of important cultural variation. A key conclusion of these studies is that prevalence rates of major depression vary dramatically across cultural contexts. A person in Korea or Japan has less than a 1-in-50 chance of meeting DSM criteria for major depression in the previous 12 months. In contrast, a person living in Brazil has a much higher risk, as high as one in ten (Andrade et al, 2003; Bromet et al., 2011; Chang et al., 2008). Most of these studies do not directly examine cultural variables; rather, one must infer them from country-level differences. Such studies are useful, as they may contain valuable clues about how culture shapes reactions to serious distress. Yet they are best understood as only the beginning of a sustained line of inquiry. Cross-national differences raise but do not answer questions about underlying processes, about *why* a difference is observed.

The ethnographic tradition with its "thick description" (Geertz, 1973) offers a contrasting approach to the study of culture and depression, focusing on the local cultural worlds in which serious distress is experienced and expressed. Many of the findings we present in this chapter are informed by this approach. The ethnographic method can help us determine whether a seemingly unusual symptom is normative, or is a recognized symptom of distress, in an informed, nuanced way. Yet this approach is also only the beginning. Research on culture and depression increasingly uses epidemiological studies *and* ethnographic data as dual starting points (e.g., De Jong & Van Ommeren, 2002; Guarnaccia, 2003). Such a multimethod approach depends on an informed model of the cultural scripts that shape how people experience and express distress.

Normative and Deviant Cultural Scripts

Experiences of serious distress are best understood in reference to two broad sets of cultural scripts. The first set, which we refer to as *normative cultural scripts*, comprises the full range of possibilities for a person in a given cultural milieu to perceive, think, feel, and act in ways that are experienced, and seen by others, as normal. Our understanding of these scripts is informed by research on the fundamental properties of scripts in cognitive psychology (Schank & Abelson, 1977), as well as by work in cultural psychology and psycholinguistics describing the role of scripts in understanding a given cultural context (DiMaggio, 1997; Lewis, 1989; Wierzbicka, 1999). Normative cultural scripts provide the background against which serious distress is understood, and can differ markedly depending on the cultural context. For example, parents of Chinese toddlers see shyness as developmentally appropriate and consistent with the normative script of how to behave with strangers (Chen et al., 1998). Any study of social anxiety among children in Chinese cultural contexts would need to take this into account. In other words, when studying distress in a given cultural context, one must start by learning more about local norms for thoughts, emotions, and behaviors.

The second set, which we refer to as *deviant cultural scripts*, comprises the various possibilities for a person in a given cultural milieu to deviate from these norms in ways

that are nonetheless culturally comprehensible. These scripts describe unusual and/or undesirable perceptions, thoughts, feelings, and actions in ways that are familiar for people living in a given cultural context. Cultural scripts for serious distress comprise a subset of these scripts. Our conception of deviant cultural scripts draws on research conducted on a variety of interrelated constructs, including work on "illness schemas," "illness narratives," "illness representations," "explanatory models," and the "sick role" (e.g., Hagger & Orbell, 2003; Kleinman, 1988; Leventhal, Meyer, & Nerenz, 1980; Parsons, 1951; Shilling, 2002; Stern & Kirmayer, 2004; Weiss, 1997).

Deviant cultural scripts flag a person's experience as abnormal (i.e., pathologization) while also helping that person and those around him or her make sense of what is happening (Ban, Kashima, & Haslam, 2012). Research suggests that culture shapes the ways in which lines are drawn between normal and deviant reactions to the experience of living in an unpredictable world. Indeed, whereas serious distress is understood as a diagnosable medical problem in some cultural contexts, it is recognized as a normal part of being human in others. For instance, mild levels of depressive symptoms and heightened negative emotions are viewed as culturally normative in Eastern European contexts (Jurcik, Chentsova-Dutton, Solopieva-Jurcikova, & Ryder, 2013; Turvey, Jogerst, Kim, & Frolova, 2012). Eastern Europe is not unique in this respect: Germans report less desire to avoid negative emotions compared with European Americans (Koopmann-Holm & Tsai, 2014), and Spaniards tend not to view symptoms of depression that are triggered by external events (e.g., family member's illness) as pathological (Durà-Vilà, Littlewood, & Leavey, 2013). Indeed, some Iranians see "Western"-based symptoms of depression as consistent with the normal experience of falling in love (Dejman et al, 2010; Essau, Olaya, Pasha, Pauli, & Bray, 2013). These beliefs stand in contrast to North American views on serious distress. Over the course of the 20th century, North American cultural models have increasingly pathologized symptoms of distress and emphasized positive emotions as the norm (Horwitz & Wakefield, 2007). Given these differences, it is not surprising that the understanding of serious distress that prevails in one cultural context does not always translate easily to other contexts.

Once a person's symptoms cross the culturally shaped threshold for being seen as problematic or pathological, deviant cultural scripts help people identify and understand instances of serious distress and communicate them to others. Even within a single cultural context, descriptive studies of responses to serious distress reveal that its symptoms are very often numerous, confusing, and potentially overwhelming. They are known to span the range of bodily sensations, perceptions, attentional processes, thoughts, emotions, and social interactions. For example, studies examining Koreans and Korean American cultural contexts show that in the somatic realm alone, depression is associated with complaints of constipation, heartburn, loss of appetite, indigestion, abdominal cramps, numbness, weakness, dizziness, faintness, hot flashes, fatigue, tiredness, sore muscles, swollen ankles, stiff muscles, stiff joints, palpitation, heart racing, and chest pain (Saint Arnault & Kim, 2008). There is also the sense of an "aching heart" and feeling that one's "body is not listening" (Bernstein, Lee, Park, & Young, 2008), as well as the reports of emotional entrapment—the experience of having to hide negative emotions (Bernstein et al., 2008). It can be difficult for people to understand such a large and confusing set of distress-related changes and communicate them to others.

Deviant cultural scripts reduce this complexity by guiding attention toward some experiences that are considered important and worth attending to, and away from others (Ryder & Chentsova-Dutton, 2012). Korean cultural scripts of serious distress (e.g., *hwabyung, han*) emphasize feelings of anger and unfairness and somatic sensations of heat,

dry mouth, and epigastric mass, and describe gradual progression from these symptoms to sorrow, self-blame, and acceptance (Choi & Kim, 1993; Min, Suh, & Song, 2009). In contrast, Puerto Rican scripts prioritize crying jags, difficulty sleeping, and visions (Koss-Chioino, 1999), whereas rural Nepalese scripts emphasize numbness and tingling (Kohrt et al., 2005). Returning to the example of Yi, a Hmong script for "soul loss" alerts her that something unusual, wrong, and possibly dangerous is happening. Although soul loss in Hmong contexts is uncommon and troubling (i.e., "deviant"), it is neither bizarre nor incomprehensible (Lee et al., 2010). Deviant cultural scripts of serious distress turn experiences that are alarming and confusing (e.g., "Something is profoundly wrong with me and I don't know what it is") into experiences that are troubling, but comprehensible and meaningful (e.g., "I am suffering from neurasthenia due to overwork"), with a label, acceptable explanations for the distress, and specific ways to address it.

Most cultural contexts foster a number of alternative scripts for serious distress that shift in their popularity over time (Gattuso et al., 2006; Pritzker, 2007). For example, Pritzker (2007) observed that Chinese people with depression often go back and forth in their use of bodily metaphors, locating depression sometimes in the heart and sometimes in the brain, each with different manifestations and implications. Karasz (2005), meanwhile, showed that European Americans can recruit depression scripts that include contradictory psychological and biological ideas about etiology. Furthermore, the relative availability of these scripts may vary over time. Particular deviant scripts, such as those for hysteria, neurasthenia, and chronic fatigue syndrome, emerge and disappear (Abbey & Garfinkel, 1991). For example, from 1996 to 2006, Americans became increasingly convinced that symptoms of depression represented effects of chemical imbalances and genetic characteristics rather than environmental factors (Pescosolido et al., 2010). This increase in the popularity of a biologically focused depression script is likely due to a number of factors, ranging from public education efforts (Regier et al., 1988) to the persuasive power of brain imaging (Dumit, 2003). These findings indicate that even within a single cultural context, researchers and clinicians need to attend to the range of scripts that are currently available in that context.

Although normative and deviant sets of cultural scripts inform one another (Rebhun, 1994; Tousignant & Maldonaldo, 1989), the relationship between them is not always straightforward. Sometimes, normative and deviant scripts describe contradictory patterns of emotions, thoughts, and behavior. For example, in European American cultural contexts, the deviant cultural script for depression emphasizes low arousal negative states (e.g., low energy) and emotional numbness. This pattern represents the reversal of a culturally normative script that places value on high-arousal positive states, such as excitement (Tsai, Knutson, & Fung, 2006) and on the open expression of emotions (Matsumoto et al., 2008). Indeed, depressed European Americans show blunted emotional response relative to nondepressed controls (Chentsova-Dutton et al., 2007; Chentsova-Dutton, Tsai, & Gotlib, 2010). This pattern of emotional reactivity, however, is not culturally universal. In contrast to European Americans, Asian Americans with major depression show normal or even intensified patterns of emotional reactivity. This pattern, in turn, violates Asian American normative cultural scripts that emphasize emotional moderation and control. In both cases, evidence is consistent with the idea that deviant cultural scripts of emotional reactivity violate normative cultural scripts of emotional reactivity.

Other aspects of deviant cultural scripts, however, represent exaggerations rather than reversals of what is culturally normal. For example, European American cultural contexts foster preference for monitoring and understanding internal psychological states

and sharing them with others (Markus & Kitayama, 1991). Chinese cultural contexts, by contrast, discourage focus on internal emotional experiences and emphasize the monitoring and sharing of somatic symptoms and social references (Dere, Falk, & Ryder, 2012; Tsai, Simeonova, & Watanabe, 2004). The relative emphasis placed by depressed Chinese patients on somatic symptoms can be partially explained by endorsement of this normative cultural focus (Ryder et al., 2008). Moreover, this tendency is associated with traditional Chinese values in both students and patients, further supporting the interpretation that in this case, the deviant cultural script can best be described as an extension of the normative cultural script (Dere et al., 2012, 2013). Because deviant scripts can violate or exaggerate normative scripts, the two sets cannot be easily deduced from one another.

Further complicating the task of studying culture and serious distress, some people experience symptoms that fit neither normative nor deviant cultural scripts. For example, some patients with depression studied in England report very rare psychotic-like symptoms such as depersonalization or paranoid delusions (Hamilton, 1989). These people are distressed in ways that may be hard for others in their cultural context to recognize as depression (Rothschild et al., 2008; Schatzberg, 2003). Interestingly, the same symptoms are a prominent part of cultural scripts of depression in other cultural contexts, such as South Africa (Mosotho, Louw, Calitz, & Esterhuyse, 2008).

The degree of fit between the symptom presentation and available normative and deviant cultural scripts may affect the illness experience. We know that being identified as "mentally ill" can have stigmatizing effects but can also confer benefits. The label can enhance understanding and self-control and contribute to effective treatment seeking (Wright, Jorm, Harris, & McGorry, 2007; for a review, see Link & Phelan, 1999). In contrast, people whose symptoms cannot be easily identified or labeled within the realm of deviant scripts available in their cultural context may feel more frightened, experience frustration with ineffective treatments, and feel more misunderstood by health care providers, family, and friends. Thus, the study of cultural shaping of serious distress requires researchers to consider the culturally normative (i.e., normative scripts), the deviant-but-comprehensible (i.e., deviant scripts), and the bizarre-and-incomprehensible (i.e., unscripted) patterns of symptoms in a given cultural context.

In sum, cultural scripts of serious distress help people draw the lines between understandable responses to stressors and problematic distress. They also serve to emphasize and reinforce some symptoms over others, thereby reducing complexity and enabling people to understand symptoms or distress and communicate about them. Finally, like any aspect of culture, they compete for attention with other scripts and are a moving target due to historical change. How does understanding cultural scripts of normality and deviance advance research on culture and depression? Let us consider two of the best-studied scripts of serious distress, the somatization script of distress in Chinese cultural context and the script focusing on diminished positive emotions in North American cultural contexts.

Two Research Examples

Somatic Symptoms in Chinese Cultural Contexts

One consistent pattern reported over the past thirty years is the emphasis placed on somatic symptoms in East Asian cultural contexts, most notably in China (Ryder & Chentsova-Dutton, 2012). Consider these symptoms of a Chinese patient described by

Lee, Kleinman, and Kleinman (2007): "head swelling, very distressed and painful in the heart, my heart felt pressed" (p. 4). These types of symptoms are recognized as deviant in Chinese cultural contexts. For decades, the predominant script used to describe this form of serious distress in China was "neurasthenia," a disorder characterized by overwhelming and persistent mental and physical fatigue (Lee, 1999). In Chinese samples, the affective and cognitive symptoms of depression that are so common in North American clinics were relatively deemphasized in favor of somatic symptoms such as chronic fatigue, weakness, sleeplessness, "heartache," and bodily aches and pains (Kleinman, 1982; Lee et al., 2007). Symptoms of neurasthenia tend to unfold according to a sequential script. The sufferer first complains of circadian dysfunction, in which she would be kept awake by "too many thoughts" during the night. She would then, not surprisingly, be exhausted during the day. Although emotional symptoms are not entirely absent from this script, they are described as consequences of the fatigue, rather than as the primary problem (Kleinman, 1982; Lee, 1998; Liu, 1989). The key symptom of low energy is alarming and explicable in Chinese contexts, fitting with traditional Chinese medicine's concerns with low *qi* (described as "life force" or "energy") and societal concerns with economic productivity. Proposed explanations for the emergence of this script include the idea that physical symptoms gain one better access to scarce health care resources (Yen, Robins, & Lin, 2000), the influence of traditional Chinese medicine (Cheung, 1995), and even political censure of symptoms such as "hopelessness" during the Cultural Revolution (Kleinman & Kleinman, 1995).

With recent historical changes, neurasthenia is receding in China while depression-like presentations are becoming increasingly common—perhaps due to globalization, increased competition in the marketplace of ideas, the passing of the Cultural Revolution, and/or changing roles in Chinese society (Lee, 1998; Lee & Wong, 1995; Ryder, Sun, Zhu, Yao, & Chentsova-Dutton, 2012). Similar moves away from the somatization script of serious distress have been observed among South Indians (Rao, Young & Raguram, 2007; for a popular treatment of this theme, see Watters, 2010). Knowing more about the ways in which cultural changes engender shifts away from bodily complaints and toward psychological distress can help researchers better understand relationships between these symptoms and advance our scientific and clinical understanding of serious distress.

On the other side of the globe, European American normative and deviant scripts that encourage reflection on emotion also beg for cultural analysis (Kirmayer, 2001; Ryder et al., 2008). Although these scripts may seem more natural than Chinese somatization scripts to researchers steeped in Western cultural contexts, they are also culturally shaped. A particularly interesting aspect of these scripts is the role of positive emotion, specifically, their presence in scripts of normality and their absence in scripts of serious distress.

Positive Emotions in European American versus East Asian Cultural Contexts

Although "depressed mood" has not been recognized as a key feature of depression across different times and places, research suggests that there is a shared understanding that negative experiences accompany serious distress across cultural contexts. An absence of *positive* emotions intuitively seems to go hand-in-hand with these negative experiences. Dampened levels of positive affect are posited to be central to phenomenology of depression, distinguishing it from many forms of anxiety (Watson, Clark, & Carey, 1988). After all, one might wonder, how can a person be happy, joyful, peaceful, or amused while depressed?

Indeed, studies conducted in North America and Western Europe show that people meeting diagnostic criteria for depression do experience and express diminished levels of positive emotion relative to those who do not meet these criteria (see Bylsma, Morris & Rottenberg, 2008; Rottenberg & Bylsma, Chapter 6, this volume). These deficits go beyond self-report: Psychophysiological research, along with animal work on reward responsiveness, dovetails with human behavioral studies in demonstrating that diminished anticipation and experience of pleasure in depression have neurobiological correlates (Treadway & Zald, 2011; see Pizzagalli & Treadway, Chapter 11, this volume). Dampening of positive emotions appears to be particularly pronounced for self-focused positive emotions, such as pride (Gruber, Oveis, Keltner, & Johnson, 2011), and for high-arousal positive states such as excitement and enthusiasm (Tellegen, 1985). Researchers have therefore suggested that cultivation of positive emotion may be key to reducing depression (Fredrickson, 2000).

Yet our understanding of the role of positive emotions in depression is incomplete without considering the cultural context in which they occur. In European American cultural contexts, positive emotions are considered functional and desirable (Bellah, Sullivan, Tipton, Swidler, & Madsen, 1985). These preferences are particularly pronounced for high-arousal positive states, such as euphoria or excitement, and self-focused positive emotions, such as pride (Eid & Diener, 2001; Tsai et al., 2006). Despite the documented psychological risks of valuing and pursuing high levels of positive emotions, such as disappointed expectations or neglect of social cues (Gruber, Mauss, & Tamir, 2011), European Americans rarely demonstrate awareness of the drawbacks (Uchida & Kitayama, 2009) and instead view positive emotions as central to optimal psychological functioning. The pervasive influence of these scripts is further illustrated by studies of emotional adjustments made by migrants and their descendants. One study suggests that acculturation to mainstream European American culture among Korean Americans is associated with increased willingness to endorse higher levels of happiness and hopefulness on depression inventories (Jang, Kim, & Chiriboga, 2005).

East Asian cultural contexts, in contrast, promote a more balanced perspective on positive emotions. Indeed, people in East Asian contexts are less likely to want to maximize positive emotions and minimize negative emotions than people in European American cultural contexts (Sims, Tsai, Wang, Fung, & Zhang, 2014). In part, the reason may be that East Asians recognize that feeling positive—especially self-focused and high arousal positive states—may invite jealousy from others or make a person less responsive to others' feelings (Uchida & Kitayama, 2009). As a result, people in East Asian contexts are more likely to experience negative feelings during positive situations (Leu et al., 2010; Miyamoto, Uchida, & Ellsworth, 2010; Sims et al., 2014) and to value low-arousal positive states, such as peacefulness and calm, which facilitate attending to others (Tsai et al., 2006; Tsai, Miao, Seppala, Fung, & Yeung, 2007) than are people in European American contexts.

How do these normative scripts regarding positive emotions affect experience and expression of serious distress? Studies conducted in East Asian cultural contexts or with Asian American samples suggest that a lack of positive emotions, particularly high-arousal positive emotions, is not an integral part of depression for these groups. For instance, discrepancies between how much people actually feel high-arousal positive states and how much they want to feel those states are associated with depressive symptoms (as measured by the Center for Epidemiologic Studies Depression [CES-D] Scale) for European American college students but not Hong Kong Chinese college students (Tsai et al., 2006). For the latter, discrepancies between the extent to which people actually feel low-arousal positive states and how much they want to feel those states are associated

with depressive symptoms. These findings have been replicated with community samples of European American and Hong Kong Chinese adults (Tsai, Sims, Thomas, & Fung, 2014). These differences have implications for how depression is assessed across cultures. Widely used self-report measures of depressive symptoms typically include items that assess presence of positive affect, positive self-image, hopefulness, and life satisfaction. However, these items tend to emphasize high-arousal rather than low-arousal positive emotion and therefore miss the positive states that are valued in East Asian contexts (Hong & Tsai, 2012).

Indeed, research has demonstrated that positive items on depression inventories are less useful as markers of depression in East Asian contexts than in "Western" contexts (Iwata & Buka, 2002; Kanazawa, White, & Hampson, 2007; Yen et al., 2000). Intensity of trait positive emotions is negatively associated with levels of depression among students from European American cultural contexts; however, this relation does not hold for students from East Asian cultural contexts (Leu, Wang, & Koo, 2011). College students with clinical depression in China report higher levels of depressive symptoms (e.g., "I felt sad") but the same levels of happiness or hopefulness compared to their nondepressed counterparts (Yen et al., 2000). Similarly, when comparing their reports of positive emotion in response to the same stimuli in a laboratory setting, East Asians without depression are similar to their counterparts with depression (Chentsova-Dutton et al., 2010).

Taken together, these studies indicate that diminished positivity, particularly diminished high-arousal positive emotions, cannot be relied on as a core feature of depression in East Asian cultural contexts. Although lack of positive emotions such as pride and enthusiasm may signal an inability to conform to European American normative cultural scripts, they are not as relevant in East Asian cultural contexts. This suggests that preventive and clinical intervention aimed to cultivate self-focused, high-arousal positive emotions may be more likely to enhance the quality of life in European American than in East Asian contexts (Boehm, Lyubomirsky, & Sheldon, 2011).

Future Research Directions

Current research on the cultural shaping of depression points in many exciting directions for future research. First, researchers need to develop better ways of identifying and assessing normative and deviant cultural scripts as they are instantiated in the head and in the world. This process will depend in part on recognizing that serious distress is not only intrapersonal, but also interpersonal (see Hammen & Shih, Chapter 15, this volume). Although some researchers have acknowledged this emphasis by going beyond self-report methods to use daily diary or live observational methods to study the interactions of patients with depression with their partners (e.g., Papp, Kouros, & Cummings, 2010), much research still treats psychopathology as something that happens within an individual person. As more studies focus on the interpersonal impact of depression, it becomes apparent that cultural factors cannot be overlooked in this endeavor. We know that culture powerfully shapes interpersonal relationships; indeed, interpersonal relationships are one means by which cultural scripts are propagated. "Social support," "teasing," and other interpersonal phenomena carry culturally specific meanings and take place in culturally specific ways, reinforcing cultural norms via repeatedly evoking or enacting them (Campos, Keltner, Beck, Gonzaga, & John, 2007; Chen, Kim, Mojaverian, & Morling, 2012). Not only do individual people within a cultural context hold culturally salient beliefs and act on them, but they also tend to assume that other people hold these beliefs

and enact them for broadly similar reasons. In other words, cultural meanings and practices, including those that are relevant to serious distress, are intersubjectively understood (Chiu, Gelfand, Yamagishi, Shteynberg, & Wan, 2010). Integration of cultural research with interpersonal research on depression is one example of a potentially rich landscape for future researchers to explore.

Future work should also aim to better understand the ways in which culture interacts with biological and psychological factors in shaping serious distress. We believe that an organizing principle for cultural-clinical psychology is the idea that culture–mind–brain can be understood as a single, mutually constitutive, multilevel system (Ryder et al., 2011; see also Kitayama & Uskul, 2011). Rather than privileging a single explanatory level, this approach conceptualizes key phenomena, such as expression of serious distress, vulnerability, or resilience, as system properties (Chentsova-Dutton & Ryder, 2013). Thus "depression" is not only a biological disease, nor is it only a set of cognitive distortions, nor is it only a culturally sanctioned way of communicating social suffering. Instead, "depression" is a profoundly distressing set of experiences involving disruptions within the single complex system that encompasses culture, mind, and brain. All levels are implicated in the maintenance of these disruptions—and all are ultimately implicated in their resolution (Ryder & Chentsova-Dutton, 2012).

For example, genetic sensitivity to environmental stressors has been linked to variation in the serotonin transporter gene. Such sensitivity is an individual-difference characteristic thought to be associated with increased vulnerability to depression (Caspi, Hariri, Holmes, Uher, & Moffitt, 2010; Uher & McGuffin, 2008). Indeed, in Western cultural contexts, this genetic sensitivity is associated with higher levels of depression in the presence of environmental stress (e.g., Zalsman et al, 2006). However, cultural contexts differ in the percentage of people who are genetically sensitive to environmental stressors (Way & Lieberman, 2010), and cultures with higher rates of genetic sensitivity actually show *lower* rates of depression. The reason for this reverse pattern may be due to how genetics interrelates with culture. Genetically similar populations tend to share broad similarities in cultural context; in this case, people from ethnic groups with a genetically higher likelihood of sensitivity to environmental stress tend to inhabit cultural contexts that foster collectivistic values (e.g., East Asian). Collectivism may serve to protect such genetically vulnerable groups against serious distress; in fact, some researchers have argued that it may even have evolved to do so (Chiao & Blizinsky, 2009). These findings suggest that the degree to which genetic sensitivity is linked to depression depends on the cultural context (Kim et al., 2010).

Thus, concern for the cultural does not mean bypassing the biological. Although we have emphasized culture in this chapter, we believe that some of the most exciting directions for research in this area require the contributions of genetics and neuroscience (see Lau et al., Chapter 9, and Pizzagalli & Treadway, Chapter 11, in this volume). To be transformative, however, researchers need to engage seriously with all levels, recognizing the evolved legacy of the human brain throughout culture while simultaneously acknowledging that the human brain is profoundly shaped by culture (Kirmayer, 2012). Future research should characterize ways in which genotypes interact with cultural models of emotions and social relationships in shaping how people respond to losses (see Sherman, Kim, & Taylor, 2009, for a model). It should also investigate the brain mechanisms responsible for shifting attention to culturally salient aspects of the phenomenal field, such as specific body parts, emotional responses, or social perceptions, to help gain a better understanding of the processes underpinning the ways in which deviant cultural scripts contribute to cultural variation in symptom presentation.

These are only a few of the many directions that cultural research on depression and serious distress might take. One final direction involves improving assessment and treatment. Cultural variation in symptom presentation has important implications for psychological assessment, but there is little work at present to guide us in thinking about, let alone addressing, these implications. We know that tailoring treatments to particular cultural contexts improves treatment outcomes (Griner & Smith, 2006), but we know little about what drives these effects. Preliminary evidence supports the roles of language match, inclusion of culturally relevant content, adaptation of clinician style to culturally normative communication patterns, and greater attention to family dynamics (Sue, Zane, Nagayama Hall, & Berger, 2009). There is also early evidence suggesting that a cultural consultation approach, bringing together health professionals, social scientists, and "culture brokers" to assess and discuss complex cases, is helpful in guiding clinicians working with patients of differing cultural backgrounds (Kirmayer, Groleau, & Rousseau, 2014). However, more research is needed to advance our understanding of how cultural ideas and practices play a role in the treatment process.

Concluding Remarks

We argued at the beginning of this chapter that we cannot simply deal with Yi's symptoms as her failure to understand "true"—meaning "Western"—depression. Indeed, we have reviewed the literature on culture and depression in order to argue for a more complex and, we believe, more compelling perspective. Culturally informed clinical research should concern itself with identifying the ways in which culturally normative and deviant scripts shape Yi's experience. We need to understand whether encounters with spirits are widely shared in Hmong culture and whether Yi's symptoms are consistent with Hmong and American scripts of normality and deviance. Understanding these scripts can help us better predict the ways in which Yi will cope with her symptoms and the consequences they will have for her psychological functioning. We believe that cases like Yi's present opportunities to bring a truly integrative and culturally informed perspective into the mainstream of clinical psychology. Moreover, this perspective goes far beyond the assumption that culture is only for minorities and migrants: Culture is an integral part of understanding any aspect of human behavior, including experiences of serious distress.

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