



Depression in Cultural Context: “Chinese Somatization,” Revisited

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Consider 2 cases from the same urban outpatient clinic in a large North American city.

Mrs Liu is a married woman in her early 40s, a recent immigrant who arrived 2 years ago from Mainland China. Presenting complaints are “tiredness,” “bad sleep,” “difficulty paying attention,” and “headache.” She acknowledges low mood on direct questioning, which she sees as understandable given the impact of her other symptoms. Concentration problems are attributed to the effects of fatigue and insomnia, and she denies other psychological symptoms. Indeed, she openly wonders on several occasions, “Why does everyone here want to know about thoughts and feelings and so on?” She has few friends, has difficulties improving her English, and spends most days at home while her husband works, but does not see these issues as relevant to her current symptoms. Rather, they are part of what one expects from the migration experience, although she acknowledges that she prefers to discuss life difficulties with her one close friend rather than with health professionals. She is not willing to consider psychosocial interventions, but accepts treatment with a selective serotonin reuptake inhibitor when the purpose of the medication is clearly linked to relief of fatigue.

Ms Chan is a single woman in her mid 30s, also a recent immigrant who arrived 5 years ago from Mainland China. Presenting complaints are “exhaustion,” “difficulty getting to sleep,” “no appetite,” and “depressed mood.” She agrees that psychosocial explanations are plausible, related to trouble finding permanent employment or a romantic partner, and admits to shame about “being weak.” “I am very embarrassed that I have this problem and I make sure my family back home doesn’t know anything about it.” Pessimistic or even hopeless thoughts about the future are also acknowledged on direct questioning, but she does not really see these thoughts as symptoms; other psychological symptoms are denied. She is willing to consider antidepressant medication so long as it is not a permanent solution, but ends up dropping out of psychotherapy after 2 sessions. After a few months, she agrees to take part in weekly group therapy sessions emphasizing a skills approach for new immigrants, and completes the program with no sessions missed.

Both cases exemplify a pattern of clinical presentation sometimes called somatization, most closely associated with depressed patients of Chinese cultural origin, and one of the best-known findings from cultural psychiatry. To what extent does the “somatization” represented here fit with classic ideas of a real psychological problem masked by somatic symptoms? Are these somatic symptoms emphasized (and psychological symptoms deemphasized) strategically, for example, to secure health care resources or avoid psychiatric stigma? Might there instead be a sense in which an emphasis on somatic symptoms really does reflect subjective experience shaped by culture? Indeed, can we assume that the somatic symptoms presented by Chinese patients always reflect the same process?

Although it is old news that “culture matters” in depression, there is not much research on the specific ways in how it does so. Work on “Chinese somatization,” beginning in the

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1970s and continuing today, is an important exception. Discussion has centered on explanations for this phenomenon, and whether these somatic symptoms are best understood as a particular way of presenting depression or as a different syndrome specific to this cultural context. Proposed explanations have also differed markedly in whether they postulate deep cultural shaping of both subjective experience and outward expression of symptoms, or instead emphasize more-or-less conscious processes of strategic presentation.

In using Chinese somatization as our example of a relatively well-researched topic on culture and depression, we return to a well-trodden path. The issue and its attendant debate might be familiar to many readers. We return nonetheless, and we do so with 2 aims. First, we aspire to say something new: We present an approach to culture and mental health, apply it to Chinese somatization, and in so doing point the way toward new ways of thinking about research and clinical work. Second, we hope that several decades of theory and research on Chinese somatization, seen through our interpretive lens, might serve as a model for how researchers might study psychopathology in other cultural contexts.

We begin with a brief review of international research on depression before narrowing in on the Chinese case. Then, we turn to studies establishing Chinese somatization, followed by the literature that attempts to explain these findings. We then pause to consider an approach to the study of culture that draws on ongoing developments in cultural psychology, influenced also by anthropology and cultural psychiatry.¹ This view allows us to expand our attentional approach to Chinese somatization. We conclude by considering implications for treatment, and then expand outward again to propose some future directions for culturally grounded depression studies and interventions.

Culture, Depression, and Symptom Presentation

International studies in psychiatric epidemiology have shown that DSM-defined major depressive disorder (MDD) can be identified in many different parts of the world, albeit with considerable variation in prevalence rates. The Cross-National Study,² studied 10 sites and found lifetime prevalence estimates ranging from 1.5% (Taiwan) to 19% (Lebanon). A group of studies conducted by the International Consortium of Psychiatric Epidemiology³ also covered 10 sites and found lifetime prevalence estimates ranging from 3.0% (Japan) to 16.9% (United States).

Finding cases worldwide that conform to DSM-based MDD does not mean MDD best captures depression in every cultural group, let alone that depression is the same in each group. Universal features are important and facilitate group comparisons, but tend toward the general and abstract (we make this point elsewhere for personality disorders⁴). We could decide that we are going to compare cultural contexts in terms of how people experience profound distress. We

could focus on prolonged problematic responses to losses of various kinds,⁵ and call that set of responses “depression”—but that category would be broader than DSM-defined MDD. These responses are embodied as genetic predispositions, neurochemical events, and bodily reactions. Similarly, they are deeply embedded in, and hence profoundly shaped by, their cultural context.^{1,6–10} (Chentsova-Dutton YE, Choi E, Ryder AG, et al. Cultural variation in the effects of anhedonia on well-being. Submitted for publication.) A “disembodied” symptom makes as much sense as a disembodied one.

Chinese Somatization

Despite the “Western” emphasis on psychological experience, the DSM-IV includes a range of somatic symptoms. Given these symptoms are almost always an important part of depressive presentations, the issue may instead be one of emphasis—why do some patients have predominantly or exclusively somatic presentations while others emphasize psychological symptoms? We discuss “Chinese somatization,” well aware that one could easily frame the phenomenon as “Western psychologization.” “Western” contexts are also cultural contexts; variation in “somatization” and “psychologization” is inherently comparative. With this caveat in mind, we refer to and largely focus on Chinese somatization, for ease of use and in keeping with the available literature.

Evidence

One of the first systematically reported cultural group differences in mental health was a low rate of depression in Chinese contexts.¹¹ A mental health survey was undertaken in 12 regions of China in 1982, and replicated in seven of these regions in 1993.¹² The 1993 follow-up reported lifetime- and point-prevalence estimates of 0.08% and 0.05%, respectively, which are several hundred times higher than the rate found in 1982. The Global Burden of Disease project reported a 1-year incidence rate for unipolar depression in China of 2.3%,¹³ compared with the 10.3% previously found in the United States.¹⁴ National community surveys in Taiwan have identified similarly low depression rates compared with other countries,^{2,15} although not as low as rates from the mainland.

Although some researchers asked why Chinese people were unusually protected from depression, others wondered whether reporting biases or differences in symptom presentation might play a role. Use of the Chinese diagnostic category *shenjing-shuairuo* (SJSR; also known as *neurasthenia*) might reflect either or both of these possibilities. Originally described by Beard¹⁶ in the United States, the diagnosis was adopted first by Pavlov and then introduced to China by Russian psychiatrists after the 1949 revolution.^{2,17} SJSR describes symptoms similar to MDD, but with an emphasis on the somatic—the cardinal symptom is physical and mental fatigue.

By the 1960s, as many as 80% of psychiatric outpatients in China carried SJSR diagnoses,^{18,19} a figure that persisted at least until the early 1980s.^{11,20} A review of Chinese research in the 1980s demonstrated that SJSR was by far the most frequently identified neurotic disorder in China,²¹ whereas the diagnosis of depression was rarely used.²² During certain periods, SJSR covered such a wide range of presentations, including schizophrenia, that clearly the diagnosis was being used in part to protect patients and their families from stigmatizing diagnoses.^{18,19} Nonetheless, many patients did meet formal criteria for SJSR, which were increasingly well-defined through the 1980s.

In the now-classic example of, “the new cross-cultural psychiatry,” Kleinman¹¹ studied 100 consecutive neurasthenia patients in a Chinese psychiatric outpatient clinic. Although he found that 87% of these patients were suffering from some sort of depressive disorder, he also found that the symptom presentations were very different from stereotypical “Western” cases—somatic symptoms were the most common chief complaints, and depressed mood was infrequently reported. He concluded that SJSR and MDD are both culturally shaped responses to social suffering, sharing commonalities but at the same time incomprehensible outside their specific cultural contexts.

This study led to numerous papers debating explanations for SJSR and somatization in China. Kleinman²³ himself proposed that the legacy of the Cultural Revolution might play a role, rendering certain psychological symptoms politically threatening. Of course, explanations contingent on historical events highlight the possibility of change over time. With the end of the Cultural Revolution and the opening of Chinese society, there is reason to anticipate that at least some of the cultural effects on depression and somatization might now be very different.²⁴

Indeed, only a few years after the original study, Kleinman²⁵ reported on large changes underway during the 1980s, characterizing the period as one in which previously silenced emotions could now start to be expressed. Overlap with depressive disorders, coupled with the observation that the separate diagnoses did not provide clinically useful treatment information, led to a dramatic reduction in the use of SJSR²⁶ as a diagnosis or explanatory model. More recent epidemiologic studies suggest that rates of depressive disorders are increasing,^{27–30} with adolescent figures comparable with those in North America.^{31–33} The concerns of these patients may be shifting as well, to love and money rather than political conformity.²⁶

These changes were well underway by the time the first cross-group comparisons were attempted. Yen and co-workers³⁴ found more somatic and fewer psychological symptoms among Chinese students seeking counseling compared with Chinese student controls. Yet, they also found fewer somatic symptoms in a Chinese student sample com-

pared with Chinese-American and Euro-American student samples. They concluded that the Chinese emphasis on somatic symptoms is specific to people seeking help, with somatic symptoms being strategically chosen to more effectively access resources from the Chinese health care system.

The first direct comparison of clinical patients found that a somatic chief complaint was much more common in a depressed Malaysian Chinese sample compared with a depressed Euro-Australian sample.²⁰ Chinese respondents had higher endorsement rates for somatic symptoms on questionnaire compared with Euro-Australians; Euro-Australian respondents had higher endorsement rates for psychological symptoms compared with Malaysian Chinese. Indeed, the latter effect was stronger, supporting the idea that “Western psychologization” is a cultural phenomenon deserving just as much investigation. A follow-up study in Australian primary care settings found these differences lessen as Chinese-Australians adapt to mainstream Australian society.³⁵

Ryder and associates³⁶ used clinical interviews, structured interviews, and questionnaires in Chinese and Euro-Canadian psychiatric outpatients. There was again support for greater somatic symptom reporting in the Chinese sample, and even stronger support for greater psychological symptom reporting in the Euro-Canadian sample. Levels of “externally oriented thinking” (EOT), higher in the Chinese sample and predictive of somatic symptoms in both samples, partially explained the relation between cultural group and somatic symptom emphasis. Although numerous explanations of Chinese somatization have been proposed, they have rarely been tested empirically.^{36,37}

Although cultural variation in symptom presentation continues despite rapid changes in Chinese society, these studies also demonstrate that it is rare for patients in either group to solely report one set of symptoms, either somatic or psychological, at the expense of the other. Chinese somatization, at least over the past decade, seems to be a matter of symptom emphasis rather than an utterly different way of presenting distress. At the same time, the explanatory value of EOT suggests that observed group differences might be more than strategic presentation of symptoms. It is to potential explanations for Chinese somatization that we now turn.

Pathologizing Explanations of Chinese Somatization

The first generation of explanations offered for Chinese somatization tended to assume that psychological symptom presentation was the norm for depression. Indeed, psychoanalysts introduced the term “somatization” to refer to a defense mechanism in which anxious affect is permitted to reach consciousness only through visceral expression.³⁸ This view implies that something else—a psychological experience closer to the true problem—is being somatized. Such a view in turn implies that a tendency to emphasize somatic symptoms represents an immature defense.³⁹ In other words,

cultural contexts that foster such avoidance of threatening content are therefore less psychologically sophisticated.

A different hierarchy was proposed several decades ago based on linguistics rather than psychoanalysis. In this view, languages differ in terms of their capacity to describe emotions and other abstract psychological constructs in detail: The structure of a vocabulary directly reflects the emotional life of the population using that vocabulary.⁴⁰ English—predictably—ranks at the top, and Chinese is much lower down. Chinese patients might have depression, but lacking the language to describe it they rely instead on somatic metaphors.⁴¹

Both approaches have been criticized for proposing Eurocentric hierarchies that privilege classical mind–body dualism with its emphasis on the primacy of the mind.^{42,43} This view corresponds with descriptions of individualistic values and the independent self-construal, emphasized in cultural contexts with origins in Western Europe. Because the most important features of personal identity are situated in the mind, a good self should be able to appraise these features and communicate them to others.⁴⁴ Much of the world's population, by contrast, does not hold such a model of the self.⁴⁵

Strategic Explanations of Chinese Somatization

A number of additional explanations for Chinese somatization posit that the fundamental experience of depression is not so different across cultural contexts. Instead, a somatic symptom emphasis reflects the need for different strategies to navigate different contexts. The Chinese language does indeed have an adequate number of words to describe psychological states,^{37,46} and somatic metaphors are often used as part of a culturally shaped communication style.⁴⁷ European languages also have such expressions; English includes expressions such as heartache, burning anger, blind panic, and butterflies in the stomach.^{24,48} Somatic metaphors for emotions convey rich meaning, and do so across a wide range of cultural contexts.

Such metaphors are evocative in their own right, but can also help people talk indirectly about threatening ideas. Goffman⁴⁹ characterizes psychiatric stigma as a sense that people with mental illness have a spoiled identity, one that also carries over to those who interact with them. There is thus considerable pressure, especially from friends and family, not to be labeled in this way; moreover, such labeling can generate a looping effect in which the consequences of stigma worsens the illness.^{50–53} Somatization allows psychologically distressed people to be sick without stigma.⁵⁴

Psychiatric stigma in Chinese populations can be inferred from studies showing a help-seeking delay.^{43,55–57} The elapsed time is spent pursuing traditional and self-care approaches of various types.⁵⁸ When psychosocial attributions are made, there is a tendency to prefer help from friends rather than physicians.⁴³ There is also a preference

for nonpsychiatric medical practitioners rather than psychiatrists when professional help is deemed necessary.⁵⁸ Chinese families are particularly likely to shield the afflicted family member from the community when the need for professional help arises.⁵⁹

Along with avoidance of psychiatric stigma, presentation of somatic symptoms can also be understood as “ticket behavior,” emphasizing symptoms that provide access to care. Somatic symptoms are commonly reported in primary care across a range of countries, including Western Europe and North America.⁶⁰ Moreover, many patients who present initially with somatic symptoms in primary care settings go on to endorse psychological symptoms when asked about them directly.²³ Chinese people may simply have an even greater tendency to seek help from general medical practitioners when distressed, and emphasize those somatic symptoms perceived as relevant to a medical setting.⁵⁸ Is it possible, however, that perception of relevance actually magnifies the experience of the symptom itself?

An Attentional Explanation of Cultural Variation

Pathologizing explanations of Chinese somatization imply that culture shapes subjective experience of depressive symptoms. Strategic explanations instead emphasize various ways of navigating the social world, at times explicitly repudiating the ethnocentric assumptions of older approaches.^{37,43} These strategies are not necessarily conscious, but they involve a reasonable approach to the social world. One communicates to specific others using available terms, idioms, metaphors, and so on, that best fit the purpose at hand—pursuing positive ends (eg, social support, symptom relief) while avoiding negative ones (eg, criticism, shame). In this view, “somatization is basically a communicative act.”⁶¹

Implicit in this contrast of hierarchical and strategic explanations is the idea that only the former approach really involves variation in the subjective experience of symptoms. The latter approach is compatible with the idea that depression itself is the same around the world, but different people choose to emphasize different symptoms for culturally shaped reasons. Strategy does not necessarily preclude deep shaping of experience; however, Kleinman and Kleinman²³ argue that the Cultural Revolution profoundly shaped the emotional lives of people who lived through it.²³ If it is indeed possible for such strategies to change symptom experience itself, and not just how they are described or enacted, by what mechanisms might this take place?

Researchers have described characterological tendencies to attend to the body or away from thoughts and feelings, albeit with a tendency to pathologize them. For example, somatosensory amplification is defined as bodily hypervigilance, focus on weak and infrequent sensations, and tendency to assume that sensations signify problems.^{62,3} The result is increased somatic symptom reporting without

increased coherence between self-report and measureable physiologic change.^{64,5} Others have proposed that somatization might be caused by difficulties in processing and expressing affect.⁶⁶ Alexithymia—literally, “no words for feelings”—is characterized by difficulty identifying feelings, difficulty describing feelings, and externally EOT. High scores on this trait are linked to various psychological and psychosomatic problems, including a tendency to identify negative emotional arousal as physical symptoms.

As an explanation for cultural differences in symptom presentation, alexithymia risks pathologizing particular groups.⁶⁷ Indeed, the original descriptions of alexithymia come from psychoanalysis, and both difficulty identifying feelings and difficulty describing feelings clearly describe pathology.⁶⁸ EOT, in contrast, represents a lack of interest in and attention to one’s own emotional life, resembling a culturally shaped set of values about emotions rather than a particular impairment. If EOT differs from the other 2 components in helping to explain Chinese somatization and in relating to cultural values, we would have preliminary evidence that culture might be shaping the attentional processes involved in somatic symptom presentation.

Indeed, we observe this pattern in recent research. Greater alexithymia levels are found in Chinese versus Euro-Canadian samples,⁶⁹ a difference largely driven by EOT—which alone mediates cultural group differences in somatic symptom presentation.³⁶ Moreover, cultural variation in EOT comparing Euro-Canadian and Chinese-Canadian students is mediated by adherence to “Western” values.⁷⁰ EOT, but not other components of alexithymia, is also associated with these values in a Chinese psychiatric outpatient sample. (Dere J, Tang Q, Zhu X, et al. The cultural shaping of alexithymia: values and externally oriented thinking in a Chinese clinical sample. Submitted for publication.) Chinese cultural contexts encourage focus away from the internal world of emotions to the practical details of the external world, in turn shaping symptom presentation.

It is not necessary to assume that deep cultural variation in symptom presentation reflects stereotypes about the best way of presenting symptoms. Instead, we can consider how attentional processes encourage a focus on certain symptoms, processes that ultimately reflect different value priorities. In this view, depressed people living in Chinese cultural contexts who engage in EOT for culturally meaningful reasons are not dysfunctional, but nonetheless experience somatic symptoms as more salient and more important than psychological symptoms. Depressed people living in North American cultural contexts, meanwhile, find psychological experiences particularly salient and central to the sense that one has conveyed that experience to others.

Our consideration of the research literature on culture and depression has taken us to a point where deeper interpretation leading to a future research agenda is needed. We be-

lieve, however, that one cannot make much progress in that direction without a clear view of what “culture” actually is, what it means. Beyond the biopsychosocial model, in which 3 domains all contribute toward understanding mental health, we propose a single multilevel system—the culture–mind–brain—in which the 3 components are fundamentally inseparable. We briefly introduce this perspective and then use it to consider the implications of our attentional approach to Chinese somatization.

Depression and the Culture–Mind–Brain

In briefly presenting our emerging model of culture–mind–brain, we begin with an attempt to better describe what “culture” represents. Although we do not expect to provide a final definition—it may be impossible to do so—we believe a working definition is necessary at this point before continuing. Then, we turn to a summary of culture–mind–brain, considering implications for mental health. In closing, we reflect on the position of the body in such a system, important for any work on somatization. Note that we do not see this perspective as brand new, but rather as representing an emerging integration that extends back along several lines of thought on culture, psychology, and mental health. We also believe it points forward to new research and new ways of thinking about treatment, ideas to which we shall return.

What is Culture?

Our starting point in understanding culture is the ‘cultural psychology’ approach of Shweder,⁷¹ Markus and Kitayama,⁴⁴ Heine and Norenzayan,⁷² and many others. We emphasize this approach because of its conception of how culture and psychology interrelate, and because this conception points to specific ways of conducting research. Mainstream psychiatric and psychological research tends to use “culture” as a synonym for ethnic group or nationality, and has done so for a long time. There are advantages, certainly—research designs are more straightforward and results are easier to discuss with clearly identified groups.

The danger here is a slippage from the pragmatic use of such groups for research purposes to the assumption that one is identifying fixed group characteristics. One runs the risk of stereotyping while evading important questions about why group differences are observed. “Culture” becomes a black-box explanation for observed differences, rather than a complex phenomenon that itself demands explication.¹ The last couple of decades brought a salutary shift away from this approach, defining culture in terms of beliefs and practices that pertain to a group, rather than as synonymous with the group itself.⁷³ Along with this general perspective come specific methods researchers can use to explore and unpack how culture shapes psychological processes, including those implicated in psychopathology.

Researchers also increasingly attend to heterogeneity among group members. Rather than treating each member as a perfect representative of that group, specific aspects of the cultural context shape different people in different ways. There is a sense in which sets of beliefs and practices are common to a group—even rejection of a norm is still shaped in certain ways by that norm, and others see this rejection in light of that norm.^{4,74} There is another sense, equally important, in which beliefs and practices are distributed throughout a cultural group, rather than replicated in each member.

By emphasizing both beliefs and practices, we are arguing for a view of culture as, at the same time, “in the head” and “in the world.”¹ Indeed, attempts to make a clear distinction here might represent a legacy of dualistic thinking. The idea of cultural scripts bridges these perspectives, reflecting meaning structures while guiding behavioral practices.⁷⁵ People perform “acts of meaning,”⁷⁶ behaviors that only make sense within a given cultural meaning system, shared at least in part by actor and observer.⁷⁴ Moreover, enacting these behaviors further shapes the meaning system.⁷⁷

What do we mean here by “cultural script”? First, “scripts” refer to organized units of culturally salient knowledge, such as knowledge about the ways in which one communicates distress. This information is based on observation as well as formal learning; it may be implicit and thus not accessible via verbal recall. Second, scripts serve as mechanisms for rapid, automatic retrieval of information and recognition of patterns. Information stored in scripts is easily primed and activated, and is processed in tightly organized packages regardless of the script’s apparent complexity. Finally, once scripts are enacted they are observable by others as behavior and become elements of the larger cultural context.¹

Kleinman and Kleinman’s²³ description of the Cultural Revolution’s impact on symptom presentation in China can be understood this way. Cultural scripts emerged in which certain experiences were freighted with profoundly dangerous political significance. Some depression symptoms became closely bound with ideas of decadence, laziness, or antiproletarian attitudes.²¹ For example, “hopelessness” signaled an indictment of communist society. The sufferer would know that others could perceive it this way, and might even do so themselves. They would then follow the script by not expressing such attitudes; others would play their roles too, reinforcing behaviors conforming to the script while making it difficult to express proscribed ideas. Somatic symptoms and SJSR would be easily understood as part of longstanding cultural scripts linking them to bodily and brain dysfunction.⁷⁸

The Culture–Mind–Brain

The core claim of cultural psychology is not simply that “culture matters,” but rather that culture and mind “make

each other up.”⁷⁹ This process is an integral part of socialization, in that the mind develops in cultural contexts that are themselves composed of minds. Children develop psychological systems designed to regulate thoughts, feelings, and actions in ways deeply shaped by the environment, and they also impact and help to shape that environment.^{80,81} One must find ways of thinking and studying the psychological and the cultural so that neither is seen as the ultimate source of the other.⁸²

Departing from traditional cultural psychology, we add brain to our conception of mutual constitution. It is now untenable to propose models of mental health that have no room for the brain and the ways in which it is shaped by the genome and, in turn, by evolutionary processes. Rather than replacing mind with brain, mind is retained as a separate level that is experiential, tool using, and social—deeply interconnected with the surrounding world and with other minds.^{83,84} Incorporating the brain also keeps with the emerging subdiscipline of cultural neuroscience, which is documenting ways in which the environment shapes the highly plastic brain so that brain function reflects cultural variation.^{85,86}

Indeed, the human brain seems to be adapted quite specifically for the acquisition of culture, and responds to cultural inputs with marked plasticity, especially early in development.⁸⁷ At the same time, the brain does not contain an infinite number of possibilities for human life. Biology places constraints on culture. There are a great number of possible ways in which culture can be configured, but the number is finite; the number of impossible configurations is practically infinite.^{88–90} We should therefore expect a large but finite number of ways in which humans in different contexts respond to basic life predicaments, such as loss of status, resources, or relationships.

As with psychopathology in general, we see depression as an emergent property of culture–mind–brain. The implication is that while changes at 1 level affect all levels, ultimate cause cannot be assigned to any given level. This idea can be approached by considering different levels of complexity in the brain: “A disordered brain circuit does not require malfunctioning neurons, nor does a disordered neuron require malfunctioning molecules, although neither makes sense in the absence of neurons or molecules.”¹ A brain-level change cascades through the system and affects the other levels—so too a mind-level change, or a culture-level change.

For example, the Cultural Revolution might have disrupted local social networks to cause profound chronic stress, with consequences for the brain,⁹¹ pointing in turn to further consequences for mind and culture. Today, rapid modernization in China might be exerting its own effects on mind and brain. A mind-level intervention, such as cognitive-behavior therapy, is understood according to cultural scripts about appropriate ways of dealing with depression. If delivered in a culturally appropriate manner, the treatment not

only changes thoughts, behaviors, and feelings, but also the brain.⁹² None of these possibilities are surprising when culture–mind– brain is considered as a single system.

Situating the body

Where does the body, so important for understanding somatic symptoms, fit into this model? We see “the body” as existing across all levels of culture–mind– brain. At the brain level, the body continually relays and receives signals to and from the brain, which monitors these sensory inputs, integrates them, and maintains a dynamic representation of the state of the body.^{93,94} This interoceptive information is processed by the same brain areas that detect and evaluate hedonic changes and contribute to construction of the subjective experiences of emotion,^{95–97} suggesting that neural representations of the body and emotions are intertwined.

At the mind level, emergent conscious representation of the body integrates sensory and hedonic inputs with conceptions of normative and non-normative bodily responses. These conceptions continually evolve based on personal and inferred experience, and are situation specific—for example, feeling exhausted is normal after a hard day’s work or during a cold. Current feelings are compared with memories and expectations of typical bodily responses to a given situation. Once activated, these conceptions direct attention to particular bodily feelings. Conceptions that are highly salient in a given situation may even trump physiologic changes.^{98,99} Notably, depression and somatization impair monitoring of one’s bodily state by focusing attention on highly salient conceptions of the body.^{100,101}

At the culture level, sufferers draw on the large but finite pool of possible responses to profound distress,¹⁰² which includes numerous bodily reactions. Activated scripts draw attention to some responses and away from others.¹ More than shaping how these responses are described, attention magnifies or minimizes them, changing how they are experienced. Salient responses become particularly prominent and are drawn into the web of associations provided by the cultural script—what it means to have this response, whether it should be shared with others, and so on. In short, they become symptoms.

Thus, the assumption that somatic and psychological symptoms are in fact distinct reflects a particular cultural worldview rather than an underlying neural mapping of somatic and hedonic signals. Inherently integrated streams of somatic and psychological experiences are identified as related by people who conceptualize them as related. Others might conceptualize them as distinct, and so experience them as such. Somatization reflects culturally based tuning of these signals toward an amplification of somatic signals and reduced sensitivity to affective or cognitive signals. The result is neither closer nor further from the brain-level signals than the “Western” tendency to clearly separate the signals

and prioritize the psychological. Both represent effects of activated cultural scripts.

Attention to Symptoms in the Culture–Mind–Brain

We return now to Chinese somatization to reflect on how a culture–mind– brain approach pushes our thinking forward. While reviewing previous research, we used the standard diagnostic terminology shared by these studies. Here, in considering new directions, we prefer to use “profound distress” rather than using a specific diagnostic label, although we certainly believe that people meeting criteria for MDD— or SJSR—would fit under that general rubric. The aim is to take a step back from some of the cultural baggage that comes with specific diagnostic labels, especially when the key label includes the name of a symptom where the presentation and even meaning are under discussion.

The Social Life of Symptoms

Profound distress, however defined, does not emerge as a rational ordering of certain symptoms that need to be described to the right people, but rather as a chaotic mix of sensations, emotions, thoughts, and behaviors. Sufferers try to account for this chaos and cannot focus on everything at once; indeed, the more intense the experience, the greater the need to explain it and the more reliance upon scripts to do so.¹⁰³ People have access to cultural scripts relevant to profound distress and assume that others have access to them as well.¹⁰⁴

One consequence of having a deeply social mind is awareness that one acts meaningfully in front of real and imagined audiences. Behaviors are watched and interpreted by others, thoughts are potentially shared or concealed from others, occupational impairment impacts on and may be judged by others, and so on. Indeed, there is evidence that depression can spread through populations, like an infectious disease but via mechanisms of social influence.¹⁰⁵ More than just encouraging help-securing or stigma-avoiding presentations, the real and imagined presence of others shapes our choice of scripts, the emotions that get expressed, and the symptoms that emerge.^{1,106,107}

It is only through this process of socially and culturally shaped winnowing of chaotic experience to a specific set of symptoms that categories of “somatic” and “psychological” start to emerge. This distinction serves important functions. Sufferers may at times become consciously aware of the demands of a particular situation and choose to emphasize certain categories of experience. We believe it more likely, however, that, help-securing or stigma-avoiding presentations often seem strategic because they tend to work, in the aggregate, for many people facing similar situations in the same cultural context—and as such, these strategies get incorporated into cultural scripts.

Acute episodes pass, but leave a legacy in culture–mind–brain. The brain learns to process interoceptive information in new ways, with increased sensitivity to negative cues coupled with decreased coherence between experiences, communicative acts, behavioral expressions, and measurable physiologic changes.¹⁰⁰ Still-activated cultural scripts join with personal narratives about one’s own failings, increasing likelihood for further distress and possibly future episodes.¹⁰⁸ Former sufferers have to adapt to the knowledge that they are capable of great disturbance and impairment while navigating the revised views of others as well. Actual experiences of profound distress in turn shape relevant cultural scripts: Sufferers typify these scripts, but also transcend them through their own specific narratives. If many sufferers add similar extra-script details, the script itself shifts

From Conscious Strategy to Core Experience

We propose that attentional mechanisms are central to Chinese somatization—and “Western psychologization”—and that these mechanisms are deeply shaped by the social world. Rather than superseding previous efforts to explain why somatic symptoms might be emphasized in China, we retain their best aspects. We agree that social positioning strategies, such as those that facilitate help and avoid stigma, are important; however, we see these strategies as very often deeply experienced while acknowledging that they may at times be consciously chosen.

We also agree with Kleinman and Kleinman²⁴ that important historical and political contingencies can profoundly affect the cultural environment and thereby shape both the experience and expression of symptoms. Rapid modernization and urbanization may well be exerting similar effects in China presently.⁷⁸ The question remains, however—what are the means by which a social positioning strategy, such as how one talks to a friend about a problem, or a physician about a symptom, shapes the problem or symptom itself? We briefly review 3 possibilities.

Regulation can be implicit

People use effortful control to regulate emotions when needed under particular circumstances, but there is a tendency to assume that the default state, the normal and healthy state, is emotional expression. Research has demonstrated, in contrast, that suppression is not necessarily problematic and may in fact reflect culturally normative functioning. Depression in Euro-American cultural contexts is generally characterized by dampened emotional reactivity to negative or positive stimuli.¹⁰⁹ In Chinese-American cultural contexts, this effect is not observed—on some measures there is evidence of more reactivity in depressed people, even when the stimulus is positive.^{110, 111}

Emotional suppression is not necessarily a problem, but rather can make sense in particular contexts to fit cultural

norms and expectations. That does not mean emotional suppression is consciously chosen as a strategy to that end. In fact, emotional experience can be—and often is—regulated implicitly. Implicit regulation happens when people learn to employ the same regulatory strategy repeatedly, making its use automatic, effortless, and less costly to psychosocial functioning.^{112–115} This learning includes personal experience, but also social learning through direct observation of others or hearing relevant stories about others. Emotions and their constituents, including somatic sensations, thereby shift in ways that make sense for the situation without any effortful control.

Complicating matters, profound distress does more than generate emotional states in need of regulation. Regulatory processes are also adversely affected. The cultural norm hypothesis posits that MDD is associated with regulatory patterns that differ from local norms.^{110, 111} Profound distress in North American cultural contexts represents failure to adhere to scripts promoting open or exaggerated emotions¹¹⁶; profound distress in Chinese cultural contexts represents failure to adhere to scripts promoting moderated emotions.¹¹⁷ Cultural scripts shape how distressed people attend to particular experiences while, at the same time, these people interpret some of these experiences as violations of scripts. In either case, we suspect that the attendant distress would make constant effortful and strategic regulation very difficult to maintain. The result is a combination of regulatory approaches, explicit and implicit, executed with varying degrees of success.

Expression shapes experience

In considering the gap between private experience of symptoms and their public expression, there is a tendency to assume that the former governs the latter. Where there is discrepancy, it is because the sufferer has chosen to conceal or distort their private experience. Emotion researchers going back to William James, in contrast, have long held that experience and expression shape one another; the experience of profound suffering is likely to be constructed at least in part on how the sufferer behaves and describes this experience to others. Sadness makes us frown, but frowning also makes us sad.^{118, 119} A cultural context that discourages certain public expressions will thereby shape private experience as well.

There is no single “true” report

Much of the debate on Chinese somatization involves consideration of which symptoms are true symptoms. Some approaches assume that psychological symptoms were both true and best; others assume that public symptom presentation reflects either private experience or strategic distortion. Such concerns are relevant to clinical practice as well, where “accuracy” of patient reports and their interpretation by the clinician is critical to effective diagnosis. We have argued,

however, that contextual features profoundly shape both experience and expression of symptoms. Contextual features of the recall situation further complicate this picture. Just as we do not have perfectly accurate memories, symptom reports are never—strictly speaking—true.

Instead of thinking of these seeming distortions as noise or measurement error, we should consider them as valuable data. Similarly, lack of coherence between different aspects of an emotional problem does not reflect reporting errors. There is no reason to assume that somatic and psychological symptom clusters should closely align in any given sufferer. As emotion researchers have learned, we should not assume certain modes of assessment are “truer” than others. Self-disclosure or inner experience, behavior or cognition or physiologic response, each contribute to understanding and all are vulnerable to noise. Nor is the true response the average or aggregate across these signals; rather, it is the pattern across all signals, including inconsistencies.^{120–122}

Summary

We believe that the application of a culture–mind–brain perspective to Chinese somatization opens up new possibilities for the study of longstanding questions in cultural psychiatry. There is the potential here to break down the false dichotomy between personal experience and public expression of symptoms. For anthropologists and cultural psychiatrists, who have long argued that the social world does indeed deeply shape personal experience, we suggest specific mechanisms by which this shaping might take place. That said, much of the supportive evidence is indirect. Although the processes and mechanisms we describe are plausible, and grounded in research, we await studies that apply our proposed approach to specific questions. A move toward the multimethod and interdisciplinary work required to systematically pursue culture and mental health research in this way is the necessary next step.

Broader Implications for Research and Treatment

For decades, psychiatrists and other mental health professions have spoken of the biopsychosocial approach, invoking it as a reminder that the biological, the psychological, and the social all contribute to our understanding of mental health. The approach we advocate here, building on developments in cultural psychiatry, anthropology, and cultural psychology, incorporates the same 3 broad domains. We believe the critical distinction is the idea of mutual constitution: We are making claims beyond the straightforward idea that each of 3 domains carries a proportion of the explanatory weight. To the extent that culture, mind, and brain can be said to “make each other up,” effectively making for a single multi-level system, we have to adjust our views of mental illness and its treatment in fundamental ways.

Although the need for a new perspective following broadly these principles has been discussed within cultural psychiatry for decades,^{123,124} we believe that with some exceptions this need has not had much influence on the psychiatric mainstream. One reason may be the current ascendancy, and in many ways remarkable successes, of genetics and neuroscience research. A second reason, intertwined with the first, may be that there is often a tendency to pit the biological and the cultural against one another. In viewing culture, mind, and brain as deeply interconnected, and ultimately unitary, we hope to challenge the assumption that we can take any part of this system seriously while dismissing the other parts.

A third, pragmatic, reason may be that taking seriously deeply argued cultural critiques of psychiatry requires us to rethink how we conduct research or deliver treatment, and may even imply that such pursuits are extremely difficult or no longer scientific. We believe, in contrast, that there is little lasting purpose to a culture–mind–brain approach unless it points the way to feasible research programs. As we have argued elsewhere,^{1,4,80} there are in fact a plethora of methods available in various subdisciplines of psychology. Other disciplines have much to contribute here as well; the study of culture and mental health is inherently interdisciplinary.²⁴

Many such methods are familiar to consumers of the psychiatric and behavioral sciences literatures—questionnaires and interviews, social experiments, physiologic readings, ethnographies. Others are newly emerging, with several particularly well-suited to the complex task of studying people in context—situation sampling, in vivo behavioral observation, examination of cultural products.⁴ Moreover, although we anticipate most future work will continue focusing on 1 level while incorporating, we hope, awareness of the others, several recent studies showcase the potential for integration across levels; even, in a few cases, incorporating aspects of all 3 levels.^{125,126} Application of a culture–mind–brain approach to Chinese somatization is but a small example of the potential.

A culture–mind–brain approach to mental health also impacts treatment. What are we to make of applied research that adapts well-established treatments for particular cultural contexts? There is insufficient space here to consider the many issues pertaining to cross-cultural adaptations of treatments. Although such adaptations can be deeply problematic, often little more than cultural dressing up of “Western” approaches, we see reason for optimism in efforts to carefully integrate culturally specific approaches. For example, there is ongoing work in China to incorporate Daoist perspectives into cognitive-behavior therapy for depression, and in Canada to develop culturally appropriate group cognitive-behavior therapy for Chinese migrants, with some supportive evidence.^{127,128} Meta-analysis collapsing across groups provides at least some preliminary evidence that integrating

cultural specificity into the design of treatment programs improves outcomes.¹²⁹

Treatments developed in this way can potentially incorporate cultural research on mental health in ways that include these findings into how we work with individual patients. The move toward “unpacking culture,” explicating processes underlying group differences while incorporating group heterogeneity, can also help us clinically. If we know that a particular script tends to shape symptom presentation in a particular way, we can better understand those patients for whom the script is not operating, and who thus might present symptoms in a different way. We cannot use culturally specific treatments in a “cookbook” manner, but rather must adapt them for actual people embedded in actual contexts.

There are implications for the “cultural competence” necessary to flexibly use suitable treatment programs. If people are deeply embedded in their local social worlds, it does not make much sense to proceed with a cookbook approach either to acquiring cultural competence or to delivering particular treatments. We have argued that “cultural groups” are best understood as pragmatic constructs for particular purposes.¹ Even understood this way, many North American clinicians could potentially encounter patients from dozens of groups. Ethnoracial blocs such as “Hispanic” or “Asian,” most often used in the United States, are much too heterogeneous to support a cultural competence approach based on deep knowledge of the patient in context.¹³⁰

What then is cultural competence? We believe that a culture–mind–brain approach to mental health requires that clinicians think about patients in their local worlds, learning from and with patients how they fit into these contexts. Doing so requires attention to available and activated scripts—what the patient believes, their intersubjective⁷⁴ beliefs about what others believe, how they act in the world as a result, and how others respond. Although no one can be expected to understand the countless ways in which a deeply interconnected system might work, a culture–mind–brain approach demands, at a minimum, openness to a wide range of potential information sources. Familial risks and psychopharmacologic mechanisms remain important, no more and no less than political conflict in the country of origin or religious beliefs about the meaning of suffering.

This general approach to cultural competence raises a further question—how is this different from clinical competence? Is not attention to these things part of being a good clinician? We agree. Yet, we believe there is value in keeping the 2 ideas separate, while maintaining that you cannot effectively have one without the other. The problem with maintaining a sole focus on clinical competence is that we can proceed sensitively, but without realizing the extent to which we are products of our own cultural contexts. Moreover, clinicians can fail to recognize how much they are shaped by

their particular, and in some ways peculiar, local worlds—the ethos of medicine, psychiatry, and psychology.¹³¹

Returning to our opening examples, clinicians working with both Mrs Liu and Ms Chan would not get any closer to the “essence of Chinese-ness.” Indeed, an important part of their learning experience should be realizing this. Attending to cultural context includes noticing how different these 2 patients are, not just how similar. At the same time, working with these patients might teach the clinician to attend more carefully to different ways in which somatic metaphors might convey profound distress. The clinician might become more adept at considering how different explanatory models shape acceptability of a treatment, and at proposing treatment options in ways that resonate with their patients. As part of that process, we hope they will notice that their own views of distress and its amelioration are shaped by their social position, in cultural context, at a particular historical moment.

Clinicians and researchers should come to perceive their own lives as culturally shaped ways of being in the world.¹³⁰ We need to understand our own contexts both to remain grounded in them while also defamiliarizing ourselves, seeing how we live as one way of living. Encountering cultural difference, through personal experience, clinical work, or research, then becomes part of understanding very different lives. Working cross-culturally can help us to do this, especially when accompanied by supervision or consultation, provided we do not assume that a guidebook and a few cases will teach us rules about how a particular cultural context operates.⁴ Cultural competence does not lead to easy answers, but vastly expands the possibilities we can imagine and then the questions we can ask.

Summary

We have presented a view of culture and mental health that builds on work in cultural psychiatry, anthropology, and cultural psychology, and applied it to research on culture and depression. In particular, we have returned to the well-known topic of Chinese somatization. A culture–mind–brain approach to these questions helps us think about them in a way that points toward new research. We have applied this approach to thinking about a single set of questions, relevant to a single (DSM-based) diagnosis, in a single cultural group. The potential, however, is to rethink how we conceptualize mental health in ways consistent with cultural psychiatry’s general perspective over the past several decades, while incorporating rather than rejecting the many recent advances in brain and behavior sciences. In so doing, we gain a more expanded and nuanced view of the global landscape of mental health, accompanied by a more expanded and nuanced view of individual patients.

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