# Do Cultural Differences Change What Depression Feels Like?

The contrasting ways Chinese people and Westerners express symptoms could point to distinct experiences of the same disorder.



SHAYLA LOVE OCT 4, 2017 | HEALTH

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Just after lunchtime, on a blistering summer day in Washington, D.C., cultural psychologist Yulia Chentsova-Dutton is showing me the stars. They're on her computer screen at Georgetown University, and labeled disturbingly: insomnia, anhedonia, headache, social withdrawal, chronic pain, and more. Each star represents a somatic or emotional sensation linked to depression.

Chentsova-Dutton's father was an astronomer. She's found a way to use what he studied, the night sky, to understand her own research: how culture can influence the way we feel and express emotion. If you look up, there are thousands of stars, she says. You can't possibly take them all in. So, each culture has invented schemas to remember them by, constellations. She pushes a button, and several of the depression stars are connected by a thin yellow line.

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"This is depression according the DSM," she says, referring to the Diagnostic and Statistical Manual of Mental Disorders. "This," she says, pushing another button, "is a Chinese model of depression."

The constellation changes, morphing into a different shape. New stars pop up, most having to do with the body: dizziness, fatigue, loss of energy. Chentsova-Dutton and her colleagues have been comparing these two constellations—of Chinese and Western emotion—for years, trying to explain a long-standing assumption about Chinese culture.

Since the 1980s, cultural psychologists had been finding that, in a variety of empirically demonstrable ways, Chinese people tend to express their feelings, particularly psychological distress, through their bodies—a process known as somatization. I had first encountered this concept while researching a story about my own family connection to the Chinese Cultural Revolution and the curious idea that psychological trauma might be able to pass from one generation to the next—a scientifically tenuous notion, but one that has generated increasing study among psychologists and, more recently, geneticists.

"It has become this one finding from culture and mental-health research that has filtered its way down to conventional practice," Chentsova-Dutton's collaborator, Andrew Ryder—a cultural psychologist at Concordia University in Canada—told me. "There's the way people express depression, which is to have a depressed mood. And then there's what Chinese people do, which is different."

After I had first learned about Chinese somatization, I began peering through the older literature, but couldn't find an explanation I felt satisfied with. Ryder said a similar dissatisfaction launched his and Chentsova-Dutton's research in this area. "You had people writing about how the Chinese are less sophisticated people," Ryder said. "In the past, people said that the Chinese don't express emotions the *right* way. They do it in a kind of immature way."

Even after rejecting that explanation, Ryder didn't find another that was more convincing. Some researchers said that it wasn't the people who were psychologically immature, but the language. They claimed there was no vocabulary for talking about emotions. "Looking back now on these papers, it's almost unintentionally hilarious," Ryder said. "What language did they put at the top? It's English. And the person writing it is at Oxford or University of London, a very English guy."

### "We live in a world that's overly psychologized, and that reflects the hyper-individualism of the West."

And yet, some recent work has continued to show that the Chinese exhibit comparatively more somatic symptoms than other cultures. In 2000, Shirley Yen and her colleagues from Duke University found more somatic symptoms among Chinese students seeking counseling. In 2001, Gordon Parker, at the University of New South Wales, compared depressed Malaysian Chinese with depressed Euro-Australians. He found that the Chinese reported physical complaints more often on their questionnaires, while the Euro-Australians group more frequently reported states of mind and mood. In a follow-up study in Australian primary-care settings, they found that the more Chinese-Australians became acclimated to Australian society, the more they reported psychological rather than somatic symptoms.

In 2004, a study spearheaded by the Depression Clinical and Research Program at Massachusetts General Hospital found that 76 percent of depressed Chinese Americans interviewed in a primary-care setting described mostly physical symptoms. "The results suggest that many Chinese Americans do not consider depressed mood a symptom to report to their physicians," the authors wrote, "and many are unfamiliar with depression as a treatable psychiatric disorder."

Other work has yielded more complicated results. A follow-up by Yen found that a Chinese student sample reported *fewer* somatic symptoms compared with Chinese American and Euro-American student samples, leading the researchers to conclude it was the role as a patient, and not intrinsic "Chinese-ness," that led to an emphasis on the body. In 2004, another study from Parker revealed that if Chinese patients were carefully questioned about psychological symptoms, they would offer them—perhaps the Chinese simply didn't do it on their own.

In 2008, Ryder led his own study, comparing clinical outpatients from Hunan Medical University in China to ones from the Center for Addiction and Mental Health in Toronto. He found that both sets of patients had a mixture of psychological and somatic complaints, but the Canadians did significantly report more psychological ones. In follow-up work using the same data from his 2008 research, Ryder found that while the Chinese reported somatic symptoms of depression, it was the Euro-Canadians who emphasized bodily symptoms when it came to anxiety.

For all the cross-cutting results, however, Ryder and other researchers remain convinced that the human experience of depression—and really, of all mental states

—is culturally shaped, at least in part, and that the Chinese do tend to more often emphasize physical, rather than emotional or mental states.

"The big debate is becoming, why is this happening?" Ryder said. "I think there are two sides, and I don't think this has been fully resolved yet. One picture of it is almost a strategic answer, which is that Chinese people are choosing to talk about the somatic symptoms, and choosing not to talk about the psychological symptoms. The other approach is to say, maybe the Chinese are emphasizing somatic symptoms because in fact the somatic experience really is more salient to those people. They're reporting more sleep problems because they're having more sleep problems. They're reporting more pain because they're experiencing more pain. I think it's a more interesting possibility. It's also a lot more controversial."

### "Western culture privileges people's ability to articulate in terms of mental states and psychological states."

My mother was born in China in 1961 and lived there until moving in 1980 to the United States, where she met my father—an American of mixed Caucasian heritage. I tend to think of myself as racially and culturally ambiguous, but as I gazed at Chentsova-Dutton's constellation of Chinese depression, I couldn't help but wonder: Is this that how I feel my own emotions, too?

Do I "feel" like a Chinese person?

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In 1980, the Minister of Health of China told Arthur Kleinman, a visiting psychiatrist and anthropologist, that there was no mental illness in China. "I knew this was a crock of nonsense," Kleinman said. "But it was astonishing hearing it anyway."

As odd as it was, there was some data to back up his claim. The Global Burden of Disease project had reported a 2.3-percent depression rate in China, compared to

10.3 percent in the United States. Another survey found the lifetime depression rate was only 1.5 percent in Taiwan.

If the Chinese were somehow being spared from depression, they were not from another disorder, called neurasthenia. In the 1980s and 1990s when those mentalhealth surveys were conducted, somewhere between 80 and 90 percent of Chinese psychiatric outpatients were being diagnosed with it. In the outpatient clinic of the Hunan Medical College that Kleinman traveled to, neurasthenia was the most common diagnosis given to neurotic patients. Kleinman, who taught and worked at Harvard and the University of Washington, had never seen the diagnosis given in his clinics.

Neurasthenia, first described in 1869 by George Miller Beard, encompasses over 70 symptoms, including weakness, fatigue, memory loss, dizziness, headache, insomnia, and chronic pain. But by the 1940s in the United States, practitioners were questioning its validity. It eventually fell to the wayside with other too-vague syndromes, like hysteria, which represented a cluster of symptoms rather than a specific pathology. But as neurasthenia was fading away in the United States, psychoanalysts elsewhere were embracing the term "somatization"—from the Latin "soma," or body. They thought of it as a primitive defense mechanism, a way that an anxiety or fear buried in the subconscious could break through to the conscious world. And they were increasingly associating it with the Chinese.

Kleinman, working in Hunan, felt there was something more complex going on. In a now classic study in cross-cultural psychiatry, he examined 100 patients from the outpatient clinic at the medical college. Through lengthy interviews and diagnostic testing, he determined that 87 percent of them were actually suffering from depression, and could be treated with antidepressants—even though they had come to the clinic complaining of bodily symptoms and didn't report depressed moods.

# "Your cultural context just tells you what is important to pay attention to."

China was a recovering nation, fresh out of the terror of the Cultural Revolution. Kleinman believed that the Chinese didn't feel safe enough to express their emotions, which could be interpreted as criticism of the government. Instead, they intentionally complained of headaches or pains, a cry for help that was free of political interpretation. His findings sent ripples across Chinese psychiatric communities.

It was a study authored by an American at a time when China was adjusting to a drastic change from Mao Zedong to Deng Xiaoping, wrote Sing Lee, a professor in the Department of Psychiatry at the University of Hong Kong. But it also implied something else: that the Chinese were not reading their feelings accurately. The study, Lee continued, insinuated that they had flagrantly missed patients with major depression.

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I didn't know what neurasthenia or Chinese somatization was when I had my first dizzy spell in 2012. After almost failing out of undergraduate school because of anxiety, I put my life on hold to travel and work on farms in Europe. One day, a strange feeling washed over me, like the inside of my head was spinning. I returned to New York, and the dizziness worsened. When I started to feel numbness and tingling in my fingertips and toes, I saw a neurologist who ordered an MRI.

My doctor pulled out my brain scans and declared them, "perfectly normal." Then, he kindly looked me over and handed me a prescription for SSRIs, the common medication for depression.

This immediately became a joke among my friends: that I had gone to see a brain doctor and he gave me antidepressants instead. I laughed too, but I was puzzled. I never filled the prescription, but continued to get automated messages from CVS, telling me that my SSRIs were ready to be picked up; a robot voice telling me that what I was feeling wasn't real.

I repeatedly cast back to these experiences while talking to Chentsova-Dutton and Ryder, who said they wanted to rewrite the various outdated theories claiming that

the Chinese were too "immature" to feel their true emotions. But they also said they didn't want to ignore something that their work and the work of others has continued to show: The way the Chinese process and attend to their emotions might actually *be* different. Part of rewriting the past, in other words, meant learning that different doesn't mean bad.

"Your cultural context just tells you what is important to pay attention to," Chentsova-Dutton said. "Usually when you develop depression, you are hit with so many changes in your mind. You're thinking differently, you're feeling differently. You're essentially looking for some sort of explanation in your cultural environment, and if you happen to be in China and people around you talk about neurasthenia, they will tell you what is important to pay attention to."

# Was my dizziness "real?" It depends on what you think is real.

Just like she learned the Orion constellation from her father, a Chinese kid could have used the same stars to see a different shape: the White Tiger of the West. In her current experiments in collaboration with Ryder, Chentsova-Dutton is bringing Chinese and American students into her lab and putting their emotional constellations to the test. In their most recent study, which is still under review, the team showed Chinese and European American young women a sad animated, wordless film. While watching the film, the women had their physiological activity measured, their facial expressions recorded, and they filled out self-reports.

Chentsova-Dutton found that the Chinese women reported more bodily sensations. They said their heartbeat and breathing changed, they noticed goosebumps, and body temperature shifts. Both groups reported that they felt sadness, but the Chinese women also reported some positive feelings. While the movie was sad, they appreciated the beauty of the illustrations, for example.

Chentsova-Dutton said it reminded her of an ancient Chinese fable, from the Taoist tradition, about a farmer and his horse. One day the horse runs away, and the farmer's neighbor says, "I'm sorry about your horse, that's bad that he ran away." The farmer replies, "Who knows what's good or bad?" The next day the horse returns with a dozen feral horses, and the neighbor says, "What good fortune!" The farmer says, "Who knows what's good or bad?" And on, and on. The moral is that with each fortune comes a little misery, and vice versa. Nothing is purely good, or purely bad; the classic yin-yang model. Chentsova-Dutton's participants, watching the sad film, were exhibiting this lesson, or what she calls a cultural script. Though thousands of years old, it was influencing the way they experienced their emotions and, also, their bodies.

When Chentsova-Dutton looked at the actual bodily changes in her study subjects, there were no differences in heart rate, perspiration on the skin, or how they were breathing. So, were those sensations "real?" Was my dizziness "real?" Chentsova-Dutton says it depends on what you think is real. There wasn't something "real" happening in the body, she says. But she doesn't think her subjects were faking it, or feeling it strategically. She thinks they were genuinely feeling sensations that were coming instead from their brains, which is very real.

It may be that the constellations they've been taught include more stars on the body. In America, we're taught to monitor and pay attention to our emotions. They are our brightest stars, the points that tell the story of "us." In other countries, those stars don't shine as bright. The outward contexts matter more, other people, your family, and your body.

#### "Chinese women are having a far more nuanced reaction in the same amount of time."

What's also real is the takeaway message: Just because the Chinese were feeling physical sensations did not mean their emotional experiences were dampened or being replaced by the bodily sensations. In fact, Chentsova-Dutton thinks their findings turn the previous Eurocentric theories on their head. If anything, the Chinese were showing a more complex response than the Americans.

"When you directly ask these Chinese women, they know they're feeling sad," Chentsova-Dutton said. "But they're also having a far more nuanced reaction and in the same amount of time that is provided to everyone else."

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If a Taoist fable could change the types and variety of emotions people felt, could such cultural scripts also be changing our brains? In an emerging field called cultural neuroscience, that answer appears to be yes. Mary Helen Immordino-Yang, a cultural neuroscientist at the University of Southern California, is currently completing a five-year NSF grant to figure out how culture and our environments shape our brains, and our perceptions of ourselves.

When I found Immordino-Yang's work, I was drawn to it for a selfish reason: Immordino-Yang was married to a Chinese American man, and her kids were bicultural, like me. One of her studies included a bicultural group, and I was eager to ask her: How did I know how *I* felt? Do I feel like a Chinese person or an American?

In that research she looked at three groups: American USC students, Englishspeaking second-generation East-Asian USC students, and Chinese students at Beijing Normal University. When she looked at how their neural activity corresponded to their emotional experiences—what they were feeling in the moment—she found "very systematic cultural differences," in their anterior insulas, the part of the brain that maps visceral states and makes us aware of our feelings. Her findings showed that activity in different parts of the insula was associated with feeling strength depending on what culture a participant was from. And, for the biculturals, or second-generation Chinese, in the study, Immordino-Yang found that their brain results fell somewhere in between the full Chinese and full Americans.

When Immordino-Yang and I connect on Skype to talk it over, she tells me that she firmly believes, and her work continues to show, that our biological legacy is intertwined with our cultural one. The ways our brains are wired and develop is

shaped by the culture in which we are raised. The answer of "how I feel," could only be answered by my specific past.

# "Many cultures don't even have a general concept of emotion."

Jeanne Tsai, a cultural psychologist at Stanford University, who has been studying emotion and culture in East Asians for over 25 years, has looked for where that contextual information comes from. She's examined children's storybooks in both the United States and Taiwan, the types of smiles that leaders show in their official photos, and images in people's social media. Among other things, she's found that European Americans show much more animated smiles.

From her work, she says that American and European cultures value excited and high-arousal states, compared to Eastern cultures that value calm and stoic ones. This can be seen in brain activation too: Chinese people will find looking at excited faces less rewarding compared to European Americans. These variations are likely to extend to depression, Tsai thinks, because it's another example of a narrow definition of what an emotion is supposed to look like. In other cultures, it might simply not be true.

"Many cultures don't even have a general concept of emotion," Tsai told me. "That might be characterized as 'Oh, they're not emotional.' But it doesn't mean that they don't have specific emotional experiences. I think Western culture, or psychiatry [and] psychology, privileges people's ability to articulate their states in terms of mental states and psychological states. But it might not be that describing your emotions in terms of your physical states is any less of a way of doing it."

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In the end, there was something physically wrong with me. I was eventually diagnosed with a dysautonomia called postural orthostatic tachycardia syndrome (POTS), which means that my body doesn't do a great job of regulating my blood

pressure when I move around. That moment of dizziness you get when you stand up too fast? That's what I was feeling all the time.

My cure was table salt, 1 gram each day, to raise my blood pressure. It worked; my dizziness went away. But something else went away around the same time: my backbreaking anxiety, and my depression resulting from that anxiety. It wasn't solved by the salt, but from regularly going to therapy, graduating college, renewing my passion in writing, and finding a partner.

Recently, I stopped taking my salt pill. First I skipped a day, terrified the dizziness would come back. Then I skipped two days, then three. I've been completely off them for five weeks and haven't had any attacks. My cardiologist said this might happen, that I might grow out of it. But even now, I question the diagnosis. What was real—my anxiety, my depression, or POTS?

## "It's not, in my view, a somatic experience of depression that is different. It's the psychological."

I'm still stuck in the idea that one must be more "real" that the other. Body or mind —my American culture shining through. But what of the Chinese side? I didn't feel like I had a choice to feel dizziness instead of a more psychological expression of anxiety. In reality, I know I experienced both. At the same time, whether I have POTS or not, I did spend two years in doctor's offices seeking help for physical symptoms before it even dawned on me to see a therapist. It's clear which culture's help-seeking method I prioritized.

Almost two decades after Kleinman's seminal study in China, I went to Harvard to see him. If the American emotional life is bleeding its way into China, Kleinman's office offers refuge. In it, I found an American man submerged in the Chinese. All the books and paintings were of China, its culture and its people. Kleinman himself drops into Chinese effortlessly, with an accent my mother would raise her eyebrows at, and say, "impressive." Kleinman still believes that the political turmoil and trauma of his original study influenced the behavior he encountered, and what symptoms people felt safe expressing. But he doesn't think what he saw in 1980 should be pathologized, or even considered unusual. He now thinks it should be seen as precious.

"In the past and even in the present, many psychologists and psychiatrists saw this as a limitation or even a pathology," he said. "I completely disagree now. I believe it's a virtue of Chinese society. We live in a world that's overly psychologized, and that reflects the hyper-individualism of the West, which has now extended completely to young people in China."

Kleinman says this with a hint of sorrow. "It's not, in my view, a somatic experience of depression that is different. It's the psychological experience of depression," he said. "I think that the world we live in has changed, and with it, the perceptions of feelings and the actual feelings themselves have changed. If your mom treated you in a traditional Chinese manner, for example, she expressed her love, not by telling you, 'I love you,' which is an American thing, but by expressing it in the food she gave you, and the things she did for you."

I had been so focused on depression, and other dark feelings that somatization could be covering, that I was jolted by Kleinman mentioning love.

## I have another constellation, too—the one of Chinese love.

In a rush of sentiment, I think back to my 3-year-old self, taking a nap beside my Chinese grandmother. She would gently scratch my arms until I fell asleep, attending completely and only to my body. Laying in the afternoon warmth, my arms stretched out toward her, like a plant reaching for the sun. My grandmother also made clothes for me (and my body). When I saw her in China last year, I complimented a shirt she was wearing—blue with white flowers. She immediately took it off and insisted that I take it home with me; literally taking the shirt off her back for me. My mother's garden was also filled with this type of wordless love. Once the summer months took hold, her guava bush yielded dozens of egg-like fruits. The more oblong and light-green guavas—more sour—we would eat first. The holy grail was the guavas that were perfectly round, the kind of perfect circle you're not supposed to find in nature. They were a deep green, and we knew that the flesh of those guavas would contain the sweetest burst of flavor. After cutting one in half, and reveling in its perfection, she would often let me eat the whole thing.

I'm thinking back to Chentsova-Dutton's constellation, and the points that make up the story of Chinese depression and distress. The headaches, dizziness, the insomnia—all stars that burn too brightly. I can feel their gaseous fiery nature. They're painful.

But I have another constellation, too—the one of Chinese love. It's less about the words "I love you" than it is about round guavas and arm tickles; homemade clothing and my mother eating the stringy center of the mango so I could have the pieces that melt like butter; my grandfather hand-squeezing my orange juice, and my grandmother giving me slippers to wear so my feet don't get cold.

These symptoms of love involve the body too, but these stars don't hurt. Like the sun, they have incredible warmth.

This post appears courtesy of Undark Magazine.

#### ABOUT THE AUTHOR

SHAYLA LOVE is a writer based in New York.