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The Cultural Shaping of Alexithymia

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Take a moment to imagine an alternative universe, where emotional experience and expression are socially devalued. How might clinicians view the occasional person who deviates from this trend?

> The term *lexithymia* describes a dimensional personality trait characterized, at the high end, by an extreme and potentially problematic tendency to think about one's own emotional state and to describe these states to others. The lexithymic individual tends to focus attention inwards on his or her own feelings, to subdivide those feelings into unusually fine-grained distinctions, and to share these observations with others; he or she is most comfortable in social settings where other people share these same proclivities. Factor analyses of the "TLS-20" consistently yield a unidimensional structure with three components: (1) need to label feelings; (2) need to describe feelings to others; and (3) internally oriented thinking. The original theory also included a fourth component, an overactive imagination. Lexithymic patients often do not respond well to, and may grow frustrated by, traditional somatotherapies (see "Somatotherapy with the garrulous patient", Rolyat, 1980 [fictional manuscript]).
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> Although local epidemiological studies suggest that high levels of lexithymia are relatively rare, there are some intriguing cultural variations. Mounting evidence suggests that lexithymia is much more common in so-called "WEIRD people"[1], who tend to live in societies where an independent model of self-construal predominates. Cultural psychologists have documented the ways in which this model of the self promotes a focus on one's own individual characteristics, and fosters interpersonal contexts in which one is encouraged to "authentically" convey these characteristics to others. Rather than aiming to treat lexithymia, WEIRD societies have developed many indigenous approaches that encourage patients with various health problems to talk at great length about their feelings.

Of course, this is a thought experiment. But is it a fair one? High levels of alexithymia have been associated with a wide range of mental and physical health problems. Low levels of alexithymia – or high "lexithymia" – have not been associated with any problems whatsoever. This pattern of findings is not surprising, as the core of alexithymia explicitly involves difficulties, both in identifying feelings (DIF) and in describing feelings (DDF). The assumption is that most people are at least moderately adept at these tasks, and it is hard to imagine a cultural context in which most people would report such difficulties.

Yet we believe such exercises in reversing perspective are useful. In this chapter, we will argue that although difficulties may be at the core of alexithymia, externally oriented thinking (EOT) comprises a substantial part of the construct and its measurement. EOT is not defined in terms of problems, but rather of preferences – for practical matters, rather than the nuances of emotional life. In this chapter, we will argue that a similar set of preferences is quite common in a number of cultural contexts and demographic subgroups. While the implications for alexithymia are rarely studied, there is a robust literature in cultural psychology to support this claim. Fictional details aside, the "alternative universe" looks a lot like daily life in a variety of cultural contexts.

Second, we will argue that even if DIF and DDF describe difficulties that are broadly or even universally problematic, they are nonetheless shaped by the cultural context. What does it mean to successfully identify a feeling? How are children socialized to do this properly, what feelings are we talking about here and what labels are available for them, how do we recognize when a feeling has been successfully identified? Or what does it mean to successfully describe a feeling? What communication norms are involved, what social pressures exist to encourage or discourage certain ways of describing particular feelings, how do we recognize that someone is doing this accurately – or not? We will argue that such questions are central to situating alexithymia in cultural context, but again are rarely studied.

The paucity of research directly pertinent to the cultural shaping of alexithymia is a recurring concern throughout this chapter. That said, we intend our critique to be a positive one. There is much untapped potential here for important contributions at the interface of culture, emotions, and health. Indeed, the history of international collaboration and careful attention to translation of measures means that many of the pieces are already in place for systematic investigation of culture and alexithymia. The overarching aim of this chapter is to push the field in precisely this direction, to bring cultural context to the heart of the alexithymia literature.

We will begin by reviewing published studies on sociode-

[1] The reference to "WEIRD people" is also increasingly used by cultural psychologists in our universe; WEIRD stands for Western, Educated, Industrialized, Rich, and Democratic (Henrich, Heine, & Norenzayan, 2010).

mographic differences in alexithymia. Next, we explore what exactly we mean by culture, describing its role within the overall framework of culture– mind–brain (Ryder, Ban, & Chentsova-Dutton, 2011). We will then consider a small collection of studies in the literature on "Chinese somatization" (Ryder & Chentsova-Dutton, 2012) that do emphasize the role of cultural context in shaping alexithymia and its components, especially EOT. Finally, we will conclude with some thoughts on a culturally informed agenda for alexithymia research.

The Sociodemographics of Alexithymia

A central argument of this chapter is that much of the available research on "culture and alexithymia" is not particularly cultural, but rather focuses on ethnicity and language-based groups. Psychometric properties are established and correlates are determined within particular groups, and sometimes groups are compared as well. Despite the lack of an explicitly cultural focus, these studies nonetheless comprise an important foundation, establishing the quality of measurement tools across many groups while raising intriguing possibilities that point the way towards future cultural research. We begin with research on ethnicity and language, and then consider other sociodemographic groups: age and birth cohort; sex and gender; and education level and social class. While only the first of these distinctions is clearly related to "culture", we will argue that all of them are important aspects of the local cultural contexts that people inhabit.

Ethnicity and Language

The original measures of alexithymia were grounded on psychoanalytic theory and clinical observations, generally eschewing standard psychometric principles (Taylor et al., 1988). In response, Taylor et al. developed the *Toronto Alexithymia Scale* (TAS; Taylor, Ryan, & Bagby, 1985) and the subsequent *20-Item Toronto Alexithymia Scale* (TAS-20; Bagby, Parker, & Taylor, 1994). The introduction of the TAS-20 facilitated a rapid increase in studies on alexithymia and also contributed to its international dissemination. The TAS-20 has now been translated into almost two dozen languages, from Dutch, German, and French to Arabic, Hindi, and Japanese (e.g., Taylor, Bagby, & Parker, 2003). As we noted briefly in our introduction, we believe this international participation to be a major strength of the alexithymia literature. Moreover, the careful attention paid to translation by the TAS-20 developers has contributed considerably to the quality of this work [2]

The TAS-20 generally shows acceptable reliability across a wide range of cultural-linguistic contexts. Since the comprehensive review by Taylor et al. (2003), additional support for full-scale reliability has been found in such groups as: Arab, Belgian Dutch, Chinese, Greek, Iranian, Slovak, and Turkish undergraduates (Besharat, 2007; El Abiddine et al., 2017; Guleęt al., 2009; Látalová & Pilárik, 2015; Meganck, Vanheule, & Desmet, 2008; Tsaousis et al., 2010; Zhu et al., 2007); Chinese, Finnish, Korean, and Swiss children and/or adolescents (Ling et al., 2016; Säkkinen et al., 2007; Seo et al., 2009; Zimmermann et al., 2007); Canadian First Nations, French, Italian, Japanese, Pakistani, and Serbian adults (Bressi et al., 1996; Ghayas et al., 2017; Moriguchi et al., 2007; Parker et al., 2005; Pinaquy & Chabrol, 2002; Trajanović et al., 2013); and Belgian Dutch, Chinese, Iranian, Italian, and Japanese patients (Besharat, 2007; Caretti et al., 2011; Komaki et al., 2003; Meganck et al., 2008; Moriguchi et al., 2007; Zhu et al., 2007).

A recurring problem, however, is the reliability of the EOT subscale. This subscale demonstrates lower internal consistency as compared to the other two subscales and the overall score, especially when English is not the primary language (Komaki et al., 2003; Meganck et al., 2008; Säkkinen et al., 2007; Tsaousis et al., 2010; Zimmermann et al., 2007; see also Taylor et al., 2003). Although these problems with EOT might reflect issues with the translation ease of the corresponding TAS-20 items, they may also indicate a lack of coherence in the EOT construct in some cultural contexts. We return to this possibility later in the chapter.

Support for the standard three-factor model for the TAS-20 has since been confirmed in Arab, Belgian Dutch, Chinese, Greek, Slovak, and Turkish students (El Abiddine et al. 2017; Guleęt al., 2009; Látalová & Pilárik, 2015; Meganck et al., 2008; Tsaousis et al., 2010; Zhu et al., 2007); Finnish, Korean, and Swiss children/adolescents (Säkkinen et al., 2007; Seo et al., 2009; Zimmermann et al., 2007); Canadian First Nations, Japanese, and Pakistani adults (Ghayas et al., 2017; Komaki et al., 2003; Moriguchi et al., 2007; Parker et al., 2005); and Chinese patients (Zhu et al., 2007). The same three-factor model was found in a sample of Dutch children using a modified TAS-20 with many age-appropriate re-phrasings (Rieffe, Oosterveld, & Terwogt, 2006). One study modified the TAS-20 by adapting additional items from the TSIA to assess constricted imaginal capacity (CIC), and found support for a four-factor model – DIF, DDF, EOT, and CIC – in Japanese healthy and clinical adolescents (Nishimura et al., 2009).

Data favoring an alternative four-factor model (DIF, DDF, Low importance of emotions, and Pragmatic thinking) were found in Chinese adolescents (Ling et al., 2016), German adults (Franz et al., 2008; Müller, Bühner, & Ellgring, 2003),

[2]The first author worked with several Chinese colleagues on a translation of the *Toronto Structured Interview for Alexithymia* (TSIA; Bagby et al., 2006). After several meetings with the research team, a full independent back-translation was developed. The translation and back-translation then passed through several iterations of feedback from the original developers until everyone was satisfied with the final product. This procedure was followed by the TAS-20 and TSIA developers for all approved translations.

and German patients (Müller et al., 2003). One study of obese French women reported a five-factor model, where EOT is subdivided into "emotional avoidance", "cognitive avoidance", and "lack of interest in psychological comprehension" (Pinaquy & Chabrol, 2002). As alternative four-factor models have been identified in some English-speaking samples as well, there is no particular reason to posit that these structural variations reflect the cultural context.

Age and Birth Cohort

The pattern of associations between age and alexithymia is inconsistent, yielding contradictory findings. In adult samples, some studies show no association (Franz et al., 2008; Lane, Sechrest, & Riedel, 1998; Parker, Taylor, & Bagby, 1989), other studies suggest that alexithymia increases with age (Honkalampi et al., 2000; Lane et al., 1998; Mattila et al., 2006; Salminen et al., 1999), and still others suggest that alexithymia decreases with age (Moriguchi et al., 2007; Parker, Taylor, & Bagby, 2003). Moriguchi et al. (2007) found that, in Japan, adolescents and young adults (up to age 30) had higher overall TAS- 20 scores than older adults; EOT, in contrast, was positively associated with age in adulthood. At the same time, studies focusing on adolescent samples have reported no particular association with age (Karukivi et al., 2010; Seo et al., 2009).

In a large Finnish survey of the general adult population, the prevalence of high alexithymia – defined as a TAS-20 score ≥61 – grew steadily with increasing age, from 4.7% of 30– 44-year-olds to 29.3% of 85– 97-year-olds (Mattila et al., 2010). In an 11-year follow-up on the same sample, mean TAS-20 scores remained stable in age-groups younger than 75 years (Hiirola et al., 2017), suggesting that the original findings were due to birth cohort rather than age effects. Mean TAS-20 scores did increase in those who were aged 75 years or older at follow-up, indicating that age effects may contribute to alexithymia scores in older adults.

Birth cohort effects in adults may be attributable to cultural-historical change. Lane et al. (1998) proposed that the association between alexithymia and age in North American samples may reflect "progressively increased psychological mindedness and attentiveness to psychological states . . . during the course of the twentieth century." (p. 381) These shifts parallel similar increases in individualism, in self-esteem, and in narcissism during the same historical period (Twenge & Campbell, 2009). Most of the large population studies on alexithymia come from Finland, a society that underwent rapid urbanization during the twentieth century (Mattila et al., 2006). A similar transformation is taking place in China, with researchers documenting shifts towards individualism and open emotional expression (Sun & Ryder, 2016).

At the same time, alexithymia findings specific to older adults may be more amenable to neurobiological explanations (Hiirola et al., 2017). Neuropsychological studies in the elderly have shown that alexithymia is associated with poorer performance in visual memory and non-verbal general intelligence in a northern Italian adult sample (Onor et al., 2010), and with poorer verbal executive function in the United States (Santorelli & Ready, 2015). Alexithymia has also been associated with a reduction in gray matter volume in the anterior cingulate cortex in a sample of healthy adults in the United States (Paradiso et al., 2008).

Sex and Gender

Although the occasional study suggests a lack of difference between men and women (Joukamaa et al., 1996; Sakkinen et al., 2007), most studies indicate that men score higher on alexithymia measures. Prevalence figures of 7.8% to 16.6% for high levels of alexithymia have been reported for men, compared with 4.4% to 9.6% for women (Honkalampi et al., 2000; Horwitz et al., 2015; Kokkonen et al., 2001; Salminen et al., 1999). Beyond prevalence studies, there is a general pattern at least in "Western" societies for adult men to score higher than adult women on the TAS-20 (Franz et al., 2008; Honkalampi et al., 2000; Jørgensen et al., 2007; Karukivi et al., 2015; Kokkonen et al., 2001; Mattila et al., 2006; Parker et al., 2003; Salminen et al., 1999; Tsaousis et al., 2010).

The same pattern also applies to some adolescent samples (Parker et al., 2010), but in others no male– female differences are reported (Moriguchi et al., 2007; Parker et al., 1989; Picardi et al., 2011). In younger adolescents the pattern seems to be reversed (Honkalampi et al., 2009; Joukamaa et al., 2007). Regardless, there is a tendency across both adolescent and adult non-clinical studies for a particular pattern of variation on the three TAS-20 subscales, with men scoring higher on EOT (Karukivi et al., 2011; Moriguchi et al., 2007; Parker et al., 2010; Picardi et al., 2011; Säkkinen et al., 2007) or on both EOT and DDF (Franz et al., 2008; Karukivi et al., 2015; Mattila et al., 2006; Tsaousis et al., 2010).

In these same studies, either there is no reported difference in DIF (Mattila et al., 2006; Parker et al., 2010; Tsaousis et al., 2010) or women score higher than men (Franz et al., 2008; Karukivi et al., 2011, 2015; Moriguchi et al., 2007; Picardi et al., 2011; Säkkinen et al., 2007). Such findings suggest that men do not suffer from a particular inability to identify their emotions, but rather tend to engage in more externally oriented thinking and, in some cases, to have more difficulty describing how they feel. Levant et al. (2009) have described "male normative alexithymia" , in which boys and men learn through gender role socialization to restrict emotional expression. Intriguingly, Besharat (2007) has described how Iranian cultural contexts promote more emotional control in women than in men, and found that Iranian women tend to report higher EOT scores.

Education Level and Social Class

The relation between alexithymia, education, and social class is not yet well understood. Several studies have shown associations between alexithymia and lower education levels (Franz et al., 2008; Honkalampi et al., 2000; Horwitz et al., 2015; Joukamaa et al., 1996; Kokkonen et al., 2001; Lane et al., 1998; Mattila et al., 2006; Parker et al., 2003; Salminen et al., 1999), and between alexithymia and lower socioeconomic status (Brosig et al., 2004; Franz et al., 2008; Honkalampi et al., 2000; Kokkonen et al., 2001; Lane et al., 1998; Salminen et al., 1999). This set of studies includes those with large samples and normative data; that said, some studies have failed to find these associations (Joukamaa et al., 1996; Lane et al., 1998; Parker et al., 1989). Moreover, the direction of effect remains unclear; perhaps highly alexithymic people do less well or have less interest in higher education, but it may also be the case that education may enhance verbal abilities and emotion regulation. There is some evidence that alexithymia is associated with lower intelligence levels, complicating matters further (Mattila, 2009).

From Sociodemographics to Culture

Owing to the availability of a well-translated and well-disseminated measure, there is now a robust international literature on the sociodemographic correlates of alexithymia. We have not yet fully engaged with culture, however. There are some hints: EOT has lessened with widespread cultural-historical change during the twentieth century; cultural norms about gender roles play a role in determining whether men or women have higher levels of EOT. Nonetheless, most studies cataloging sociodemographic group differences do not get very far with understanding them. In the parlance of cultural psychology, most of these studies do not "unpack culture": the authors have observed differences, they may attempt to explain them on a post hoc basis, but they rarely build potential explanations into the design of the study itself. We will shortly turn to some research that has started this process of unpacking cultural influences on alexithymia. First, however, we pause to consider: what exactly do we mean by *culture*, and what does it mean to understand alexithymia in *cultural* context?

What is Culture? Situating Alexithymia in Context

The word "culture" has long been used in psychology and psychiatry to stand for ethnic group or nationality, and invoked as a black-box explanation of group differences. Cultural psychology moves away from cataloging differences to understanding culture and how it shapes psychological variation (e.g., Betancourt & López, 1993; Norenzayan & Heine, 2005). Differentiating between culture and "cultural group" emphasizes how individual group members can partially adhere to or reject aspects of culture, recognizing that many people inhabit multiple cultural worlds. Let us consider first the implications of this shift for understanding culture in relation to mind and brain, and then turn to the place of alexithymia within this framework.

Culture, Mind, and Brain

The central tenet of cultural psychology is not simply that groups differ or "culture matters", but rather that human culture and human psychology mutually constitute one another: culture and mind "make each other up" (Shweder, 1991). The mind develops in cultural context, contexts that are themselves composed of minds. Neuroscience has taught us that we should not understand cognitions and behaviors as disembodied; cultural psychology adds that we cannot understand them as "dis-embedded", as isolated from their context. Here, "culture" can be understood as sets of meanings and practices, generally understood although not necessarily followed, in a local social world – and their instantiation in products (e.g., songs, magazine advertisements) and institutions (e.g., schools, the legal system). A given action is framed by the cultural meaning system and its enactment contributes to shaping this system (Ryder et al., 2011).

This view of culture has methodological implications. Identification of cultural group differences, birth cohort effects, ethnicity-by-sex interactions, and so on should only be the beginning, a hint of something worth studying in much more detail. The goals should be to go beyond identification to description, and beyond description to explanation. There are many ways of doing this, from the "thick description" of anthropologists, to the inclusion of contextual variables in studies, to experimental or longitudinal designs. When we take up the unpacking of alexithymia in the next section, we will nod towards thick description by situating the construct in its historical origins and then turn to the small number of cross-cultural studies that have included contextual variables as indirect effects.

First, however, we must consider the implications of mutual constitution for research. We cannot understand human minds unless we understand them in cultural context, and we cannot understand human culture unless we understand minds (Shweder, 1991). Moreover, it is untenable to propose models of mental health that have no room for the brain, as shaped by the genome and in turn by evolutionary processes. We therefore understand culture–mind–brain as one dynamic multilevel system (Ryder et al., 2011). A given psychological construct, such as alexithymia, can be understood as an emergent property of culture–mind–brain, with no ultimate cause at any one level. Better understanding of a man who is having difficulty describing his feelings might reference sex differences in neural activation patterns, individual variation in emotional awareness rooted in childhood socialization, or local gendered communication norms.

The danger is that researchers end up assuming that their

preferred level is the only one that matters. In psychology and psychiatry, there has been a steady move over the past several decades towards the lowest available level as the best locus of explanation. Yet it does not follow that a problem at one level means pathology at a lower level. A problem in living will of course be reflected in neural circuits, but this does not require that the circuits be 'broken'– any more than a broken circuit requires broken neurons, or broken neurons require broken atoms. Indeed, sometimes a problem at one level can best be understood through reference to disorder at a higher level (Ryder et al., 2011). For example, cultural norms, economic conditions, and political response might interact to produce violent conflict, with consequences that include damage to brains from traumatic stress. It is incomplete at best to claim that psychological consequences of that damage are simply caused by lesions without acknowledging the conflict.

Cultural-Historical Origins of Alexithymia

With the central importance of context in mind, let us turn now to a brief description of how the alexithymia construct emerged in a particular cultural-historical moment (see Chapter 1). The term was coined by Sifneos (1973) in the early 1970s, based on clinical observations of patients with "classic" psychosomatic diseases at the Massachusetts General Hospital in Boston (Nemiah & Sifneos, 1970). The word itself stems from Greek roots: "a", lack; "lexis", words; and "thymos", emotion. As suggested by this etymology, these authors were struck by the apparent inability of many of their "psychosomatic" patients to find words to describe their emotions.

Early discussions also emphasized the ways in which alexithymic patients differed from "neurotic patients". The latter provided rich descriptions of their emotional lives and psychological struggles, displayed "appropriate" emotional responses, and were found to be "interesting" (Sifneos, Apfel-Savitz, & Frankel, 1977, p. 49). In contrast, descriptions such as "inappropriate", "trivial", and "frightfully dull" (Apfel & Sifneos, 1979, p. 182) feature prominently in early discussions of alexithymia, perhaps a consequence of frustrations with the treatment difficulties, and especially the interpersonal style, experienced with these patients. Moreover, these discussions occurred within the psychodynamic framework that dominated North America and Western Europe during this time. In particular, the construct was inherently tied to psychodynamic therapies, with alexithymic patients standing out by failing to be "good patients" (Kirmayer, 1987).

In one of the first examinations of the social context of alexithymia, Borens et al. (1977) present their clinical observations from a psychosomatic hospital in Germany, focusing on patients with "classic" psychosomatic diseases and/or eating disorders. They compare lower versus upper socioeconomic status (SES) backgrounds, and report that emotion-related difficulties and utilitarian thinking are much more common among the lower SES group. Drawing on this work, Lesser (1981) discusses the importance of taking social factors into account when examining alexithymia and suggests that such factors might play an important role in the etiology of alexithymia. He raises particular concerns over the lack of alexithymia research among diverse groups, observing for example that alexithymia research in Japan lacked engagement with the local cultural context.

Kirmayer (1987) explores these issues further, emphasizing the need to pay attention to local patterns of emotional expression and the presentation of distress. In particular, the value placed on emotional self-expression varies across cultural contexts, and is particularly high in North America and Western Europe. Alexithymia is thus grounded in a cultural framework in which self-expression is fundamental to psychological well-being. The potential danger here is that some patterns of emotional experience and expression might be seen as normal in at least some other cultural contexts, but as pathological in precisely those "Western" contexts that set the agendas for research, diagnosis, and intervention.

Recently, Kirmayer (2006) has documented how very different healing practices emerge in contexts that foster different models of the self. Where the individual, bounded, "idiocentric self" is prioritized, individual awareness and expression of private thoughts and feelings are important, and various psychotherapies are understood as viable treatment options. Through processes of mutual constitution, the institutionalization of psychotherapy can further propagate this model. Other models of self have very different implications; for example, it might be important to pay attention to interpersonal nuances rather than intrapersonal experiences, and to act in accordance with social role rather than emotional state.

Empirical Research

Unfortunately, these provocative ideas have been taken up in only a few empirical studies. In a rare direct comparison of ethnocultural groups on alexithymia, Dion (1996) used the TAS-20 to study a culturally diverse sample of undergraduate students in Canada. He found that those who reported a Chinese dialect as their most proficient language showed higher scores on the TAS-20 and its three subscales as compared to native speakers of English and other European languages. Dion (1996) grounds his interpretation of these results in the participants' local social worlds, emphasizing cultural variations in somatic versus psychological modes of emotional expression. He proposes that observed group differences in alexithymia might be related to variation in the cognitive appraisals of emotions that tend to be made in a given cultural context. These possibilities were not directly tested.

In a comparison of European American, Asian American,

and Malaysian undergraduate students, Le, Berenbaum, and Raghavan (2002) found higher levels of self-reported alexithymia in the Asianorigin groups. These groups also showed a stronger relation between alexithymia and somatization as compared with the European American group. A follow-up study of European and Asian American university students again found higher levels of alexithymia in the Asian-origin groups, along with a lower tendency for Asian Americans to retrospectively report that their parents verbalized positive emotions and displayed physical affection. Cultural group showed an indirect effect on alexithymia through these parental socialization variables, suggesting a role for cultural transmission of emotion norms through the family in the shaping of alexithymia. Unfortunately, the study did not break down alexithymia in order to consider each component of the construct separately.

More recently, Lo (2014) expanded on this work by considering specific Confucian values from the Chinese Values Survey (Chinese Culture Connection, 1987) rather than from measures of "Asian" or "European American" values more generally. Asian Canadian undergraduate students once more showed higher levels of alexithymia compared with their non-Asian Canadian counterparts, along with more endorsement of values reflecting purity and order. There was an indirect effect of Asian versus non- Asian background on alexithymia through these two values, again underscoring the role of the cultural context. Again, however, the study did not break down alexithymia into its components.

Each of these studies shows that self-reported alexithymia levels are higher in East Asian versus North American cultural contexts, and suggests that there is something about the cultural context that might help to explain these group differences. Unfortunately, the one study that broke alexithymia into its constituents did not include any variables to help unpack culture; the two more recent studies tested indirect effects, but only did so for alexithymia as a whole. These studies are limited, moreover, by their reliance on undergraduate student samples. We therefore turn to an ongoing line of research, based primarily on clinical samples, that explicitly aims to unpack alexithymia and its components. This program is embedded in a larger research program investigating the tendency for Chinese depressed patients to emphasize somatic symptoms.

Unpacking Alexithymia: The Case of "Chinese Somatization"

The literature on "Chinese somatization" parallels that on culture and alexithymia in several ways. Indeed, the two topics share a common origin, in clinical investigations of so-called psychosomatic patients accompanied by discussions of why these patients did not present psychological symptoms in the "correct" way. The major difference lies in the attention paid to somatization as a possible explanation of a cultural group difference that was observed in many studies from the 1970s through the 1990s: strikingly low rates of depression in Chinese contexts (Kleinman, 1982; Parker, Cheah, & Roy, 2001; Weissman et al., 1996).

While some researchers inquired as to why Chinese people were unusually protected from depression, others wondered whether reporting biases or differences in symptom presentation might play a role. "Neurasthenia", a once-popular but now vanished diagnosis in modern "Western" diagnostic systems, was still widely used in China to describe a pattern of chronic fatigue, sleep problems, pain, and other physical complaints. Although emotional disturbances were part of the diagnosis, they were distinctly secondary to fatigue. In a now-classic study, Kleinman (1982) studied 100 consecutive neurasthenia patients in a Chinese psychiatric outpatient clinic. While he found that 87% of these patients were suffering from some sort of depressive disorder, the symptom presentations were very different from typical "Western" cases – somatic symptoms were the most common chief complaints, and depressed mood was infrequently reported. The question was: why?

Explanations for Somatization

Older explanations tended to emphasize that people in different cultural groups experience depressive symptoms in very different ways, with somatic symptoms as an inferior mode of presentation. The term "somatization" was introduced by psychoanalysts to refer to a defense mechanism in which anxious affect is permitted to reach consciousness only through visceral expression (Craig & Boardman, 1990). This view implies that something else, a psychological experience closer to the true problem, is being somatized: an immature defense. Cultural contexts in which somatic symptoms are emphasized were thus understood as psychologically less sophisticated (Ryder & Chentsova-Dutton, 2012). In a competing perspective, languages differ in terms of their capacity to describe emotions and other abstract psychological constructs in detail (Leff, 1977). English is at the top of this hierarchy, whereas Chinese is much lower down. Chinese patients might have depression, but lacking the language to describe it they must rely on somatic metaphors (Leff & Vaughn, 1981).

Yet other explanations for "Chinese somatization" posit that the fundamental experience of depression is not so different across cultural contexts, but reflects rather the need to use different strategies to navigate different social worlds. Somatic metaphors can help people to talk indirectly about threatening ideas; they can also be understood as "ticket behavior", emphasizing the symptoms that will provide access to care. Somatic symptoms are commonly reported in primary care across a range of countries, including Western Europe and North America (Simon et al., 1999). Chinese people in distress may simply have an even greater tendency

to seek help from general medical practitioners when distressed, and emphasize those somatic symptoms seen as relevant to a medical setting (Cheung & Lau, 1982).

Somatization, Alexithymia, and Cultural Values

More than two decades of theorizing passed before direct cross-group comparisons were attempted. Yen, Robins, and Lin (2000) found more somatic and fewer psychological symptoms in Chinese students seeking counseling compared with Chinese student controls. They also found fewer somatic symptoms in a Chinese student sample compared with Chinese American and European American student samples, however, concluding that the Chinese emphasis on somatic symptoms is specific to people seeking help. The first direct comparison of clinical patients found that a somatic chief complaint was much more common in a depressed Malaysian Chinese sample than in a depressed European Australian sample (Parker et al., 2001). Chinese respondents had somewhat higher endorsement rates for somatic symptoms; European Australian respondents had much higher endorsement rates for psychological symptoms.

In a multi-method clinical study of this question, Ryder et al. (2008) used clinical interview, structured interview, and questionnaire approaches in Chinese and Euro-Canadian psychiatric outpatients. This study also included the TAS-20, in a first step towards addressing potential explanations of somatization. If Chinese people, or at least Chinese patients, suffer from an immature defensive style, communication obstacle, or other genuine emotional difficulty, then this would be associated with higher levels of DIF and DDF, as well as EOT. If they instead have different cultural norms about emotional life, one might instead expect elevations on the EOT subscale without particular difficulties being reflected on the DIF and DDF subscales.

There was again support for greater somatic symptom reporting in the Chinese sample, and stronger support for greater psychological symptom reporting in the European Canadian sample. Higher TAS-20 scores were found for the Chinese group, replicating previous findings (i.e., Dion, 1996; Le et al., 2002). Moreover, this latter finding was specifically attributable to a group difference on the EOT subscale, with no statistically significant differences on the DIF or DDF subscales. EOT may be higher within Chinese cultural contexts because of the relative de-emphasis of individual emotional experience and expression, in favor of interpersonal relations and social harmony. Together, this finding and proposed explanation raise the possibility that the EOT component of alexithymia may vary across cultural contexts for reasons unrelated to emotional processing deficits. Seemingly high overall levels of alexithymia among certain groups may be driven by higher levels of EOT specifically, which in turn may be shaped by aspects of the cultural context.

Indeed, EOT stands out among the components of alexithymia. First, there are the issues with EOT subscale reliability in some cross-cultural samples, as previously discussed. Most of these studies do not go into detail about possible explanations, cultural or otherwise, for this issue. In one notable exception, a psychometric evaluation of the Spanish TAS-20 in Peru was followed by qualitative interviews (Loiselle & Cossette, 2001). In these interviews, participants completed the TAS-20 while being questioned extensively about the reasons they had selected each option. The authors reported that somatic idioms were often used to express distress, and that externally oriented thinking was favored over introspection. As well, several of the interviewees expressed confusion with reverse-phrased items. The majority of such items on the TAS-20 load onto the EOT factor.

Second, in exploratory factor analyses of the TAS- 20, when a fourth factor emerges it is generally due to a further division in EOT, meaning that EOT does not replicate as reliably as a single factor. For example, Franz et al. (2008) found an additional factor which they called "importance of emotional introspection". Gignac, Palmer, and Stough (2007) argued that separate factors for "lack of importance of emotions" and "pragmatic thinking" fit the data best (although see rebuttal by Bagby et al., 2007). Most importantly, EOT is generally less associated with pathology compared with DIF and DDF (Dere, Falk, & Ryder, 2012). This is arguably part of the definition of EOT, and certainly reflects the way the TAS-20 items are worded: emphasizing interests and preferences rather than deficits. EOT may instead reflect a cognitive style rooted in cultural values about emotion.

To begin evaluating this possibility, Dere et al. (2012) examined the extent to which cultural values were implicated in these group differences in EOT, in a comparison of European Canadian and Chinese Canadian undergraduates. Once again, Chinese Canadians reported higher levels of EOT than did European Canadians. No statistically significant group differences were observed for DIF and DDF. Moreover, in both European Canadian and Chinese Canadian groups, adherence to cultural values consistent with modernity and/or values understood as typically European American values negatively predicted EOT. The relation between cultural group and EOT showed an indirect effect through these cultural values, suggesting these values as a potential explanation for group differences on EOT.

A follow-up study in depressed Chinese outpatients showed a similar pattern using structural equation modeling (SEM). Again, EOT, but not DIF or DDF, was associated with cultural values. Note that SEM was necessary in this case to overcome issues of measurement error, as the internal consistency of EOT was extremely low in this sample (Dere et al., 2013). The proposed models showed acceptable to good fit, and, once again, modernization and European American values showed significant associations with EOT.

The Cultural Shaping of Externally Oriented Thinking

These findings raise the possibility that high levels of EOT may be the result of different factors or processes depending on cultural context. It may be the case that people with a high degree of DIF and/or DDF have high levels of EOT, across various contexts, since emotional deficits may foster a tendency to focus outwards rather than inwards. However, in contexts that promote attention away from internal emotional experiences, relatively high levels of EOT may reflect healthy adherence to cultural norms (Dere et al., 2013).

Rather than assuming that explanations positing cultural variation in the subjective experience of symptoms always reflect stereotypes about the best way of presenting symptoms, we can instead consider how this variation reflects different value priorities. In this view, depressed people living in Chinese cultural contexts who report EOT for culturally meaningful reasons are not pathological, 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 important to communicate to others.

Studies of actual emotional expression have similarly shown that conscious suppression is not necessarily problematic and may in fact reflect culturally normative functioning in certain contexts. Depression in European American cultural contexts is generally characterized by dampened emotional reactivity to either negative or positive stimuli (Bylsma, Morris, & Rottenberg, 2008). In Chinese American cultural contexts, in contrast, that effect is not observed – and on some measures of emotional expression there is actually evidence of more reactivity in depressed people, even when the stimulus is positive (Chentsova-Dutton et al., 2007, Chentsova-Dutton, Tsai, & Gotlib, 2010).

Conscious suppression is not always a problem: depression might instead involve patterns of emotional reactivity that differ from cultural norms. Indeed, depression might actively impede one's ability to enact cultural norms about emotion. North American depression thus represents failure to adhere to norms of open or exaggerated emotions whereas Chinese depression represents failure to adhere to norms of moderated emotions. Although not directly pointing to somatic symptom presentation, these findings challenge the common assumption that conscious emotional suppression is problematic. Combined with work on EOT, there is an emerging view that depression interacts with cultural context. Norms shape how depressed people attend to particular experiences, while at the same time depressed people interpret some of these experiences as violations of norms.

The Cultural Shaping of Alexithymia: Next Steps

Cultural research on alexithymia remains in its infancy, despite some early critiques and a few sporadic studies. Indeed, there is just enough to demonstrate, we hope, that much more is needed, and would be worth doing. In this section, we briefly consider a few next steps for this research beyond simply continuing to unpack indirect effects in East Asian samples. We begin by considering other approaches to explaining contextual variation. Then, we turn towards affective science to explore a number of approaches to emotion and emotion recognition.

Unpacking Culture

To the extent that the alexithymia literature includes studies that unpack culture, these studies proceed by introducing contextual variables and testing indirect effects. An important step is to introduce other methods of unpacking culture, as the available approaches vary according to how much descriptive richness versus how much explanatory control they provide. Attention to the culture and emotion literature, beyond alexithymia, may therefore prove important on two grounds: first, as models of how these research methods might be used; and second, to broaden our understanding of the ways in which culture shapes emotional life.

Psychological anthropologists have provided detailed ethnographic descriptions of several different cultural groups, and there is space for only a few brief examples. Lutz (1990) studied the Ifaluk people of Micronesia, and described how the local word that translates most closely to "anger" would be rendered more accurately as "justifiable anger". One implication is that a person cannot identify or describe this feeling without access to the local socio-moral world in which anger is justified. Geertz (1976), meanwhile, wrote extensively about "emotional smoothness" in Java, where an important skill is that of describing strong feelings to others in a way that is much less extreme than the actual experience. Difficulty describing feelings might look very different in such a context in which full disclosure is a sign of immaturity.

Cultural psychologists, meanwhile, have developed a number of experimental paradigms. For example, Chentsova-Dutton and Tsai (2010) demonstrated across three studies that priming European and Asian Americans with either self- or family-relevant tasks would lead to increased reactivity on an emotional film-clip if the prime matched the participant's cultural model of self. In other words, European Americans would be more reactive than Asian Americans if they had just completed a self-relevant task (e.g., writing about personal characteristics) – in keeping with other cross-cultural studies conducted in the United States. Yet, when participants had just completed a family-relevant task (e.g., writing about characteristics of a close family member), the

Asian Americans were more reactive. Rather than simply displaying more or less universal and innate emotions under particular circumstances, the response depended on both the general self-construal in their local cultural context and the specific self-construal that had been activated in the situation, and the ways in which these interacted.

Finally, although longitudinal approaches are not yet widespread in this literature, an important exception is the work of Mesquita et al. (e.g., Boiger & Mesquita, 2012; De Leersnyder, Boiger, & Mesquita, 2013). They argue that many emotional experiences emerge in the context of interpersonal relationships and occur as part of specific interactions. Cultural norms surrounding emotions, individual differences in temperament, and the specific relationship history are all brought into a given encounter. Macro-developmental techniques can be used to study how the emotional content of a given relationship shifts over months and years; they can also be used with migrants adjusting to the emotional norms of a new society (e.g., De Leersnyder, Mesquita, & Kim, 2011). Micro-developmental techniques can then be used to study how specific interactions unfold. A longitudinal approach could help researchers study alexithymia within the contexts of particular relationships – for example, the people to whom one has difficulty describing feelings. Such research might also help inform our understanding of how alexithymia comes to cause problems in psychotherapeutic dyads.

Culture and Emotion

An entire line of research could be based on applying various approaches to unpacking cultural variation in EOT, in Chinese societies and elsewhere. What about DIF and DDF, which have generally not shown evidence of cultural group differences? The easy answer is that more research is necessary, since there are so few comparative studies. These components of alexithymia may well yield important cross-cultural findings once we move beyond East Asia. Nonetheless, something more is at stake here: is culture only important when we seek to explain group differences?

We believe that incorporating a cultural perspective into alexithymia research includes but goes beyond specific group comparisons. The burgeoning literature on affective science includes a robust debate on how, exactly, to define emotions – and on what people are doing when they are responding emotionally, identifying and labeling these emotions, and communicating them to others. A central question for all of these approaches is why emotions vary, from each other, from situation to situation, person to person, context to context. While this field includes numerous specific models, there are two overall perspectives. In various "basic emotion" approaches, each emotion is a natural kind, a discrete state usually thought to have evolved to deal with various threats and opportunities in the ancestral environment (Ekman, 1973; Panksepp, 1998). Arguably, both the original psychodynamic theory and the contemporary research literature on alexithymia implicitly endorse this perspective: some people have difficulty describing their emotions in an accurate and properly differentiated, way.

Let us now turn to constructionist approaches, which foreground the sociocultural context of a given emotional experience. Emotions here are not natural kinds, but rather emerge through interactions with other people. Social constructionist approaches are particularly common in anthropology. Such approaches emphasize the uniqueness of each human group and how they use emotion words to describe particular feelings that are important in that context: there is little discussion of individual differences. Psychological constructionist approaches concur that the social world is central to emotions but add individual sources of variation. In this view, emotions are built from more basic psychological components, but these components can be assembled in such a wide range of different ways that it makes little sense to talk about a small number of basic emotions. There is respect here for the importance of evolution, appraisals, and the social context, but with a marked emphasis on individual variability, across moments in time, particular emotional labels, individual people, local community, and so on (Barrett, 2009)

In one of the most prominent psychological constructionist models, the biological components of "core affect" can be organized according to the underlying dimensions of valence (positive to negative) and arousal (high to low) (Barrett, 2004; Barrett & Bliss- Moreau, 2009). Yet core affect is not emotion. Rather, it combines with appraisal of the immediate situation, display rules, beliefs about the implications of a particular response, cultural values surrounding emotions, and much more to push categorization of the core affect in a particular direction (Barrett et al., 2007). Categorization of emotion is central to this model. Particularly relevant to alexithymia researchers, categorization revolves around the emotion terms that are available to the person in a given community, and the culturally laden meanings of these terms. While core affect anchors this model, so that some categorizations might make for a better fit than others, there is no one-to-one correspondence between emotion terms and the states they aim to capture (Lindquist et al., 2006).

We believe that the psychological constructivist approach to emotions has potential importance for alexithymia researchers, certainly for those interested in the cultural shaping of alexithymia. Affective scientists spent a long time trying to find clear and consistent signatures, biological or otherwise, for a set of distinct emotions. This search has largely been in vain. Psychological constructionism has a role for evolution, and biology more generally, but the social world – and especially language – are central. Indeed, there is growing evidence that the use of language to categorize emotion words shapes the experience, perhaps even with feedback to

further shape core affect (e.g., Halberstadt, 2005; Lindquist et al., 2006; Roberson, Damjanovic, & Pilling, 2007). These issues are essential to the study of any construct assigning a central role to processes of identifying and describing emotions.

Concluding Remarks

We have characterized culture and alexithymia research as being in its infancy, but also noted that the ingredients for rapid progress are in place. Research on various sociodemographic groups suggest that measurement of the construct is in good shape – certainly for DIF and DDF – and that there are intriguing possibilities in need of further exploration and unpacking. An international community of researchers has emerged over the past two decades or more, using a common, well-translated, and well-validated measure. A small literature on alexithymia in East Asia has emerged, suggesting that EOT in particular may be shaped more by cultural values than by emotion processing difficulties. Finally, contemporary research in both cultural psychology and affective science points in a number of potentially fruitful directions. The task now is to ensure that cultural research joins clinical and neurobiological studies at the core of the international effort to understand alexithymia.

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