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A processing theory of alexithymia

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Abstract

This paper presents a processing theory of alexithymia in terms of failure of report across the components of emotional processing and the nature of explicit and implicit knowledge. The typical features of alexithymia (e.g., failure of cue recognition, flattened expression, inability to articulate emotional states) correspond to disruptions at the interfaces of components in emotional processing. The output of various components of emotional processing requires explicit representations in a variety of forms: it is these structured outputs which have suggested to some that alexithymia is a deficit of awareness or of emotional representations in working memory. This combination of information transfer and explicit/implicit knowledge leads to clarifications of the nature of alexithymia, the severity of the syndrome, and methods of measurement and intervention. These insights in turn suggest a broader consideration of alexithymia in terms of the vocabulary of cognitive science. © 2001 Elsevier Science BV. All rights reserved.

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1. Alexithymia, emotion blindness, and processing accounts

Alexithymia is a disturbance of the experience and expression of emotions, resulting in flattened or highly restrained affect and lack of awareness of emotions (see, e.g., Taylor, 1984; Lesser, 1985; Sifneos, 1994; Taylor & Taylor, 1997). It was first observed among patients who expressed classical psychosomatic disorders – so-called infantile personalities (Ruesch, 1948) and emotional illiterates (Freedman & Sweet, 1954) – and has since been observed in and associated with a variety of conditions, including post-traumatic stress syndrome, alcoholism, and drug addiction (Krystal, 1968; Rybakowski, Ziolkowski, Zasadska, & Brzezinski, 1988).

There remains ongoing debate as to the proper empirical evidence for the condition (Roedema and Simons, 1999) and the best overall theoretical account (compare Taylor, Bagby, & Parker, 1997 with Lane, Ahern, Schwartz, & Kazniak, 1997). Still,

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decades of research have revealed a number of representative behavioral and cognitive features of the condition:

- inability to recognize and verbally describe one's own emotions;
- markedly reduced symbolic thought restricting expression of attitudes, feelings, wishes, and drives;
- inability to use feelings as signs of emotional problems;
- utilitarian thought concerned with the minutiae of external events;
- reduced recall of (often colorless and routinized) dreams;
- difficulty in discriminating between emotional states and bodily sensations;
- stiff posture;
- lack of affective facial expressions;
- impaired capacity for empathy and self-insight.

In clinical assessments, alexithymics report decreased or absent emotional experience and little or no sense of emotions as an object of awareness. They perform poorly on measures of emotional recognition, significance, labeling, and behavior (Taylor et al., 1997).

In many ways, alexithymics have lost the 'feel of their feelings'. They arguably have 'some rudimentary form of emotional experience' (Lane et al., 1997, p. 838), but are not aware of, or are unable to use, this emotional information. The connection between alexithymia and loss of awareness has suggested to some that the disorder may be the emotional equivalent of other 'blind syndromes' disruptions of conscious report of sensory information, such as blindsight, blindtouch, and prosopagnosia (Lane et al., 1997). In 'blind syndromes', individuals deny awareness of sensory experience even though they may display behavior appropriate to experience in that sensory domain, as if they had covertly processed the information (Weiskrantz, 1986; some contrasting results for emotions, however, come from Roedema and Simons, 1999, who report decreased, though not absent, emotive bodily response for alexithymics). Since alexithymics deny or vaguely characterize the experience of emotions, but nonetheless can report that they feel something - if a restricted affective experience (Roedema & Simons, 1999) – alexithymia looks to be emotion processing without report to consciousness – a kind of *blindfeel* (to use Lane et al.'s, 1997, term).

Blind syndromes are typically explained as deficits in the processing of implicit and explicit information (Köhler & Moscovitch, 1997). The relevant information is computed at a low level, implicitly, but the results of this computation are defectively reported out in explicit form to some processing space (like working memory) for uptake and use by other cognitive domains (more subtle characterizations of the implicit/explicit deficit are mentioned below: see Köhler and Moscovitch, 1997). Consequently, individuals with blind syndromes covertly process information, but fail to have the attendant awareness of that information as it comes to consciousness through explicit form. This processing explanation is adopted for alexithymia by Lane et al. (1997), who argue that in alexithymics, emotional events trigger low-level affective responses, but the condition involves a 'deficient [emotional] representation in working memory' (Lane, personal communication). As a result, 'When emotionally aroused, the alexithymic individual will manifest behavioral and autonomic responses' (Lane et al., 1997, p. 838) from the implicit processing of emotional stimuli, but 'based on the deficit in interoceptive awareness, that person will typically say either that he does not feel anything or does not know how he feels' (Lane et al., 1997, p. 838).¹

We believe that this kind of processing explanation is correct in principle, but lacks detail on two crucial counts. First, a close examination of the range

¹For the more philosophically inclined, alexithymics look remarkably like an empirical illustration of the theoretical zombies of the thought-experiments motivating the absent qualia argument in cognitive science and the philosophy of mind (see, e.g., the papers in Lycan, 1990). In these thought-experiments, you are asked to imagine your twin, exactly like you molecule for molecule, except that while you know *what it feels like* to have experiences, your twin does not. You have experiential qualia, but your zombie twin lacks the qualia of experience and so is a mere information processor. Because alexithymics appear to experience emotions implicitly, they might be described as individuals with blunted, dulled or otherwise defective emotional qualia (this phraseology is ours, not Lane et al.'s). Alexithymics would thus be a nice test case for issues in the sincerity and veridicality of emotions (see Griffiths, 1997, pp. 153–54).

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