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ALEXITHYMIA, DEFENSIVENESS AND CARDIOVASCULAR REACTIVITY TO STRESS

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Abstract—This article attempts to further our understanding of alexithymia by testing two conceptual questions about the construct: (a) Is alexithymia characterized by reduced autonomic activity? and (b) Can it be clearly distinguished from defensiveness? Eighty healthy university students completed a battery of personality scales including the Toronto Alexithymia Scale, measures of self-deception and impression management, depression, and anger-in. They also participated in three lab stress tasks: isometric handgrip; mental arithmetic; and a negative affect provocation task. Blood pressure and heart rate were monitored throughout the lab procedure. Analyses were conducted with tercile groups of low, medium, and high alexithymia scorers. The "high alexithymia" tercile showed smaller heart rate responses to the stress tasks and more anger-in behavior. Blood pressure responses did not differentiate the low/medium/high alexithymia subgroups. Alexithymia scores were unrelated to defensiveness, that is, there was no relationship between alexithmia and impression management or self-deception, and alexithymia was unrelated to depression. We conclude that students defined as "high alexithymia" on the Toronto Alexithymia Scale are not self-deceptive nor do they try to leave a particular impression; they tend to be somewhat hypoaroused autonomically, and they report as many psychological distress symptoms as do subjects with lower TAS scores. *Copyright © 1996 Elsevier Science Inc.*

Keywords: Alexithymia; Cardiovascular reactivity; Response styles; Symptom reporting.

INTRODUCTION

The term "alexithymia" was coined 20 years ago [1, 2] and a considerable body of literature has developed since then [3, 4]. Reviewers agree, however, that there are more unresolved questions than answers. In 1981, Lesser [3] concluded that there were no reliable and valid measures at that time and that the available research was of questionable usefulness. More recently, reviewers [4] found that at least two measures, the Beth Israel Questionnaire (BIQ) [1] and the Toronto Alexithymia Scale (TAS) [5], possessed sufficient reliability and validity to be recommended for further research. The existence of an acceptable measure of alexithymia also provides a justification for further work on the construct and it sets up an opportunity to test the consistency of findings in light of differential trustworthiness of the existing measures.

Throughout the literature on alexithymia there are numerous attempts to provide an in-depth understanding of the phenomenon with the ultimate goal to detect a

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pathway for the linkage of affect and somatic complaints, and finally, to facilitate the development of effective interventions [2, 6]. Nemiah [2] suggested two lines of theory (developmental and deficit models) that might help explain the link between alexithymia and the "so-called classical psychosomatic diseases." At the time of writing this article, we see three core conceptualizations of what alexithymia may be.

One argument is that the term is superfluous, and that alexithymia is essentially a form of defensiveness [2, 7, 8]. Here, we would like to alert the reader that although many investigators use the terms "repression" and "repressive coping" in their research on alexithymia, we have systematically avoided this term because of its specific root and place in psychoanalytic theory. We prefer the term "defensiveness," and view it as a personality trait that is not tied to one specific theory of personality [cf. 9, 10]. If alexithymics were inherently defensive, then at least two predictions can be made: (a) they will score lower on measures of psychological and physical symptom reporting than do otherwise comparable nonalexithymics; and (b) they will score high on measures of defensiveness. There is already some evidence suggesting that neither of these predictions hold true for alexithymia. Bagby et al. [11], for example, reported a positive correlation of depression and alexithymia scores. Kauhanen et al. [12] noted more physical symptom reporting with high alexithymia, and Myers [13] observed elevated anxiety scores. Similarly, repressive-defensiveness in Newton and Contrada's work [8] was associated with low alexithymia scores, not with elevated ones.

A second line of research seeks to confirm that alexithymia is a correlate of autonomic underarousal and that the limited display of affect is an accurate reflection of low systemic arousal. The hypoarousal theory of alexithymia predicts that, under conditions of comparable emotional provocation, there is less physiological activation in individuals with alexithymic tendencies. Although numerous studies on acute arousal responses and alexithymia have been conducted [7, 14–18], their conclusions do not uniformly point in the same direction. Studies using the Schalling–Sifneos Personality Scale (SSPS) measure of alexithymia tended to reveal enhanced physiological arousal in high alexithymia subjects [5, 14, 17]. But, the studies using the MMPI-based alexithymia scale [15] and the TAS [8, 16] showed lower heart rate (HR) response in subjects with high alexithymia tendencies, and Wehmer et al. [16] also reported less electrodermal activity. Because the SSPS- and MMPI-based alexithymia scales are now considered to possess insufficient reliability and validity [4, 19] it was considered possible that the differential results might be a function of different conceptualizations of alexithymia as demonstrated in the development of various alexithymia measures. Therefore, it was unclear whether the hypoarousal finding could be replicated, provided that a reliable and valid measure, like the TAS was used.

A third possible explanation for alexithymia refers to a lack of skill in recognizing or labeling internal cues as emotion-related. A well-elaborated conceptualization of this third line of thinking is presented by Lane and Schwartz [20] who argued that alexithymia is akin to a developmental delay in the Piagetian sense and that it specifically refers to a lack of acquired skill in the recognition and expression of distinct emotional states. This approach is supported by Newton and Contrada's findings [8] that, when stressed in the lab, high alexithymia subjects display anxiety ratings that are desynchronous with their cardiac activation.