

Lausberg H, Helmich I, Sassenberg U, Petermann K.

Gender-Specific Implicit Emotional Processing In Alexithymic Individuals

Alexithymia is a personality trait characterized by a decrease of emotional functions, paucity of fantasy, and the inability to express feelings verbally. The Alexithymic individuals' ability to express emotions nonverbally is subject to controversial discussions. Some authors report a deficit in nonverbal expression, while others describe a high amount of "action tendencies" including gestures and facial expression.

To address this controversy, hand movement behaviour of healthy individuals with Alexithymia (TAS, BVAQ) (16 f, 17 m) and of a matched Control Group (16 f, 17 m) was investigated during two standardized interviews: (i) on emotional scenarios (LEAS), and (ii) as a control condition, intelligence questions (HAWIE). The participants' videotaped hand movement behaviour was coded without sound by two independent certified raters with the NEUROGES-ELAN system Module I, which assesses the amount of hand movement activity, the degree of conceptualization and the focus of attention in hand movement.

A significant effect of the interaction of Group x Gender x Interview showed no significant Group differences in hand movement behaviour during the HAWIE, but only during the LEAS. The Alexithymic males increased the number of *movement* units / minute as compared to the Control males, specifically they displayed more position *shifts*. The Alexithymic females showed the reversed trend for *movement* units. In particular, they displayed significantly less *phasic* and *repetitive* units (conceptual hand movements) than the Control females. Furthermore, they displayed less *on attached object* (e.g., playing with the bracelet) and less *in space* (gesture) units than the Control females.

The present results clearly attribute the two propositions about the Alexithymic individuals' nonverbal behavior, i.e., reduction versus increase, to the two genders. When confronted with emotional scenarios Alexithymic males become more active, specifically, more restless, while Alexithymic females decrease in hand movement activity. They show a reduction of conceptual hand movements and of preening and gestural expression, reflecting a decrease in cognitive complexity and external orientation. Since these alterations are not prevalent during the HAWIE, but only during the LEAS, the findings evidence in Alexithymic individuals gender-specific reactions to the demand to think about emotional processes.

