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An evaluation of the absolute and relative stability of alexithymia in women with breast cancer

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Abstract

Objectives: In the controversy for alexithymia as a state or a trait dimension, recent studies showed that, whereas absolute changes (i.e., extent of alexithymia scores change over time) were observed, alexithymia was relatively stable (i.e., extent to which relative differences among individuals remain the same over time). The present study extended this question by investigating a disease with highly threatening outcomes (breast cancer), by looking at changes in depression and anxiety, and by examining stability for total and factor alexithymia scores. **Methods:** One hundred twenty-two women in treatment for a first instance of breast cancer were assessed for alexithymia (TAS-20), depression, and anxiety (HADS) the day before surgery (T1) and six months later (T2). **Results:** Alexithymia scores changed from baseline to follow-up (lack of absolute stability). Strong evidence of relative stability was also demonstrated, as alexithymia scores at baseline correlated significantly with alexithymia scores at follow-up and were also a significant predictor of follow-up alexithymia scores, after partialling the effects of depression and anxiety severity. Changes in alexithymia were explained only to a small extent by changes in depression and anxiety from T1 to T2. Results at the factor level revealed that "difficulty identifying feelings" follow-up and change score accounted for the highest variations in depression and anxiety, and "externally oriented thinking" for the lowest ones. **Conclusions:** The finding of relative stability of alexithymia supports the view that this construct is a stable personality trait rather than a state-dependent phenomenon, even in a context of high threat for physical and psychological integrity.

Keywords: Alexithymia; Breast cancer; Temporal stability

Introduction

Alexithymia is a multifaceted construct comprising (a) difficulty identifying feelings and distinguishing between feelings and the bodily sensations of emotional arousal; (b) difficulty describing feelings to others; (c) a restricted imagination, as evidenced by a paucity of fantasies; and (d) a cognitive style that is literal, utilitarian, and externally oriented [1]. These cognitive and affective characteristics have been observed among patients with a variety of psychiatric disorders that involve disturbances in emotion regulation, including substance use disorders such as alcohol dependence [2], posttraumatic stress disorders [3,4], panic disorder [5], somatoform disorders [6], and eating disorders [7–9]. High alexithymia prevalence has also been found in medical disorders such as essential hypertension [10,11], functional gastrointestinal disorders [12], or inflammatory bowel disease [13].

Abbreviations: TAS-20, Toronto Alexithymia Scale; DIF, difficulty identifying feelings factor of the TAS-20; DDF, difficulty describing feelings factor of the TAS-20; EOT, externally oriented thinking factor of the TAS-20; HADS, Hospital Anxiety and Depression Scale.

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These observations suggested that alexithymia could be a possible vulnerability factor for medical and psychiatric disorders (e.g., Refs. [14–16]). There is a debate in the literature, however, as some authors have suggested that alexithymia is rather a state reaction to the presence of a disorder or any accompanying distress (e.g., Refs. [17–21]).

Some early longitudinal studies [22–24] showed decreases in mean psychological distress, depression, or disease severity, while no significant changes were observed for mean total alexithymia scores, suggesting stability in alexithymia. In some studies, however, a significant decrease of alexithymia was observed [25]. There are two important limitations to these studies. First, they only evaluated the absolute stability of alexithymia and did not distinguish it from relative stability. Absolute stability refers to the extent to which personality scores change over time, whereas relative stability indicates the extent to which the relative differences among individuals remain the same over time [26]. A first treatment study showed relative stability of alexithymia in the context of change in disease activity [27]. This result supports the view that alexithymia could serve as a possible vulnerability factor for the disease under examination, i.e., inflammatory bowel disease. One limitation of the study is that only relative stability was investigated, while a simultaneous investigation of relative and absolute stability is called for.

An additional condition was also specified by Luminet et al. [28] in order to assess relative and absolute stability in a valid manner. These authors suggested using contexts in which large magnitude of change in distress and/or illness is expected to examine relative and absolute stability in alexithymia. We identified seven studies that corresponded to this criterion in the literature, which are briefly reviewed below.

First, 41 patients with bulimia nervosa were administered an alexithymia scale (TAS) and a depression scale (Hamilton Rating Scale for Depression), and assessed for bulimic symptomatology, before and after 10 weeks of treatment with an antidepressant medication [29]. Although there was a significant improvement in bulimic symptomatology, there were no significant changes in mean alexithymia and depression scores. The correlation between TAS scores at baseline and at follow-up was significant (r=.58, P<.001). Luminet et al. [28] found evidence for absolute change together with relative stability in a sample of 46 patients with major depression. This was demonstrated by regression analyses showing that alexithymia assessed at baseline still predicted alexithymia assessed at treatment completion even after controlling for the effects of depression.

Absolute changes in alexithymia together with relative stability were also found in a treatment study of 70 patients with alcohol dependence followed for 14–18 days [30] and in a treatment study of 112 patients with functional gastrointestinal disorders followed for 6 months [31]. A 5-year longitudinal study with 116 patients with major depression found similar results, except that anxiety was not considered [32]. A very recent study with a small group (N=34) of patients diagnosed with obsessive-compulsive disorder and followed for over 6 years showed very high correlations (for total scores, r=.84 for intraclass correlations; for factor scores, r's ranged from .65 to .78 for intraclass correlations) [33]. This study also found that while absolute changes were observed for the factors "difficulty identifying feelings" (DIF) and "difficulty describing feelings" (DDF), no changes were observed for "externally oriented thinking" (EOT).

Finally, Mikolajczak and Luminet [34] followed 75 students for 12 weeks. One specific aspect of the study was that increase in current psychological distress was expected as Time 1 corresponded to a no-stress period and Time 2 to an exam period. Results showed no changes in mean alexithymia score, suggesting absolute stability. Relative stability was demonstrated by the fact that although a significant amount of variance of follow-up total alexithymia scores could be predicted by psychological distress severity (11%), the greatest part of variance was predicted by baseline total alexithymia scores (55.5%), over and above the variance already explained by psychological distress severity.

In summary, these seven studies systematically support the relative stability of alexithymia. Results for absolute stability were less clear; some studies showed changes in mean scores, while others did not. The present study aimed to replicate and extend these results to breast cancer, a context that has not yet been examined in relation to alexithymia and which involves highly threatening outcomes. This is the first study in the literature that has investigated the stability of alexithymia in the context of a disease with a high prevalence of death.

For women, breast cancer is the number one cause of death due to cancer. In a large survey Eurocare-3 conducted in 22 European countries, the rate of death after 5 years was 22% [35]. The disease itself and the treatment that is required also involve severe threats to the physical integrity and bodily image of women [36]. Almost one third of patients with breast cancer develop chronic psychological disorders [37], mainly anxiety and mood disorders [38]. Such highly threatening outcomes can be viewed as events that would likely lead to changes in alexithymia scores due to strong variations in psychological states, such as anxiety (see below). If stability is still observed, this would be a strong case in favor of alexithymia as a vulnerability factor.

Another new dimension to the present work, in comparison with previous studies, was that a high decrease in anxiety was expected from Time 1 to Time 2. Indeed, previous studies usually have not considered changes in anxiety or have not found significant changes [28]. In the present study, Time 1 corresponded to the period of highest stress, as it occurred the day before surgery, which is considered as one of the three most stressful experiences, together with the time the person receives the diagnosis, and the waiting time for the results of the diagnostic testing [39]. A later decrease in anxiety could thus be expected, although