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How are memory complaints in functional memory disorder related to measures of affect, metamemory and cognition?☆

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Abstract

Objective: Memory complaints are a common finding in outpatients, especially in psychosomatic and neurological practice. In a substantial group of patients persistent memory complaints are found in the absence of abnormal neuropsychology. Different labels such as "functional memory complaint" have been suggested for this phenomenon. We characterise a group of patients with such memory complaints, which we termed *functional memory disorder* (FMD). The aim of the present study is to describe patients with FMD. **Methods:** Thirty-nine patients with FMD were compared to 38 control subjects. Data were collected on the German version of the Rey Auditory Verbal Learning test and the Zahlenverbindungstest (cognitive speed), subscales of the Metamemory in Adulthood questionnaire (MIA), the Perceived Stress Questionnaire (PSQ), the Global Severity Index (GSI) of the Symptom Checklist, the Beck Depression Inventory (BDI), and other psychological questionnaire measures. **Results:** We found significant group differences on all psychological questionnaire measures, with more pathological scores in the patient group. GSI and PSQ were the best predictors of memory self-efficacy. MIA-Memory Self-Efficacy (MSE), MIA-Achievement, and BDI were the best predictors of group membership (FMD vs. control group). When MSE was excluded, MIA-Achievement and BDI or GSI were the only predictors of group membership. Neuropsychological measures predicted neither MSE nor group membership. **Conclusions:** Pathological scores on measures of metamemory, stress, and depression are typical of FMD. Low MSE and a high memory-related achievement motivation seem to be key features of FMD. Other important features are increased perceived stress, general psychosomatic complaint, and elevated depression scores. Neuropsychological test performance is not associated with FMD symptoms.

Keywords: Functional memory complaints; Subjective memory; Somatoform; Neuropsychology; Depression; Metamemory

Introduction

Memory complaints are a common phenomenon in general medical practice. Commissaris et al. [1] found that 29% of the general Dutch population aged between 25 and 35 years had memory complaints. In the age group 40–50 34% complained about memory deficits, compared to 41% of the subjects aged between 55 and 65 and 52% in the age group 70–85. It appears that memory complaints increase with age. Although memory complaints do not have to be linked to any kind of disorder, they can be symptoms of various neurological (e.g., dementia, epilepsy) or major psychiatric disorders (e.g., depression). Memory complaints that are caused by such disorders are often a manifestation of underlying cognitive impairment. However, in a considerable number of patients presenting with memory complaints, no underlying organic or psychiatric cause can be found. These patients are often seen in general medical practice or in specialised memory clinics. In memory clinics, the percentage of patients with memory complaints without organic or major psychiatric disorders varies between 6% and 12%

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[2–4]. Up until recently, a common way of dealing with such patients has been to inform them of their normal performance on neuropsychological tests of memory. In the absence of a diagnosis, no treatment suggestions were available. However, these patients suffer considerably in their daily lives due to the memory and attention failures that correspond to their complaints. The everyday memory impairment they experience can and should be labelled as a psychosomatic disorder. It can lead to embarrassment, anxiety, reported occupational shortcomings, and ultimately, the fear of suffering from an organic illness. The memory lapses could initially be caused by psychosocial stress [5,6]. Functional memory disorder (FMD) patients typically report stressful life-events (e.g., death of a relative, job loss) or life situations related to chronic stress (e.g., mobbing, chronic disease) [5]. When FMD patients notice their memory failures, anger, and fear (e.g., fear of dementia) can be the result. Ultimately, this leads to heightened stress levels, which, in turn, increase the risk of memory lapses. This vicious circle capturing the sufferers is best characterised by an adapted version of explanatory models of *somatoform disorders* [4,7,8] (Fig. 1). Therefore, we suggest the term *functional memory disorder* [5] in reference to Berrios et al. [4] and Ponds et al. [6] to characterize this patient group as a possible *subgroup of somatoform disorders*. We hypothesize that as in other somatoform disorders, psychosocial stress could be at the core of the symptoms.

Patients with FMD typically perform within the normal range on neuropsychological tests of memory and attention [4,5]. This contrasts with an almost stereotypical pattern of reported everyday memory failures: prospective memory deficits (e.g., forgetting appointments), encoding deficits (e.g., conversations), mnestic block syndrome (e.g., names of colleagues or PIN numbers cannot be retrieved from memory; usually, they spring to mind later), and lack of the ability to concentrate [5]. These problems usually fluctuate with stress levels and have generally begun within the past 5–10 years.

Because of the lack of impairment on objective tests, the everyday memory problems can only be measured subjectively with self-report measures. FMD patients have a low esteem of their own memory capacity and therefore a lower memory-related self-efficacy than people without memory complaints [9]. Memory self-efficacy (MSE) is an aspect of metamemory. Low MSE in FMD patients (as measured with the Metamemory in Adulthood Questionnaire, see below) means that these patients do not only complain about

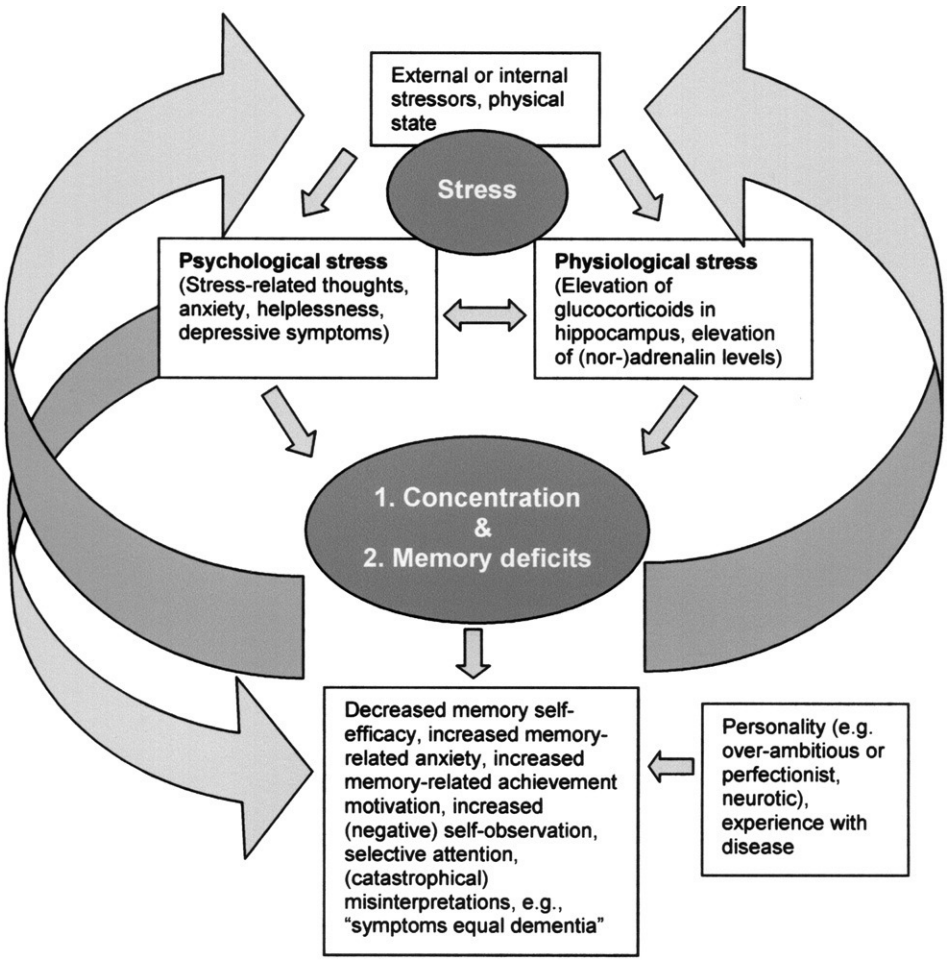

Fig. 1. Hypothetical model of FMD [adapted from *Behav Res Ther* 28 (1990) 105–117, *J Psychosom Res* 36 (1992) 515–529].