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## Introduction

Borderline personality disorder (BPD) is associated with aberrant processing of emotional facial expressions and emotional memory which may contribute to patients' interpersonal difficulties. However, findings are conflicting and warrant further investigation.

## Aims

To clarify whether patients with BPD show deficits in facial expression recognition and self-referent incidental memory.

## Objectives

To examine facial expression recognition and/or in emotional categorization and recall of self-referent personality characteristics in a cohort of female patients with BPD in comparison with healthy controls.

## Methods

14 patients and 11 healthy controls were given a facial expression recognition task and a self-referent emotional categorization and recall task using positive and negative personality characteristics; both tasks were from the Emotional Test Battery (P1Vital, Oxford).

## Results

BPD patients showed general impairment of facial expression recognition as reflected by increased response latency ( $F(1,23)=4.58$ ,  $p=0.043$ ). Examination of each emotion across different intensity levels revealed specific reduction in the sensitivity to happy expressions ( $F(1,23)=4.74$ ,  $p=0.040$ ). Patients also demonstrated reduced categorization accuracy for positive versus negative self-referent words ( $F(1,23)=5.15$ ,  $p=0.033$ ) and generally increased response latency on this task relative to controls ( $F(1,23)=4.46$ ,  $p=0.046$ ). This was associated with subsequent reduction in overall recall of these self-referent words in patients versus controls ( $F(1,23)=7.69$ ,  $p=0.011$ ).

## Conclusions

These preliminary findings highlight deficits in facial expression recognition and emotional categorization and recall as potential biomarkers of BPD, which may contribute to patients interpersonal difficulties.