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Nonverbal communication sets the conditions for the relationship between parental bonding and the short-term treatment response in depression

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Abstract

The role of parental bonding and nonverbal communication in the short-term treatment response was investigated in 104 depressed outpatients. At baseline patients completed the Parental Bonding Instrument. We registered the nonverbal involvement behaviour of patients and interviewers from video recordings of baseline clinical interviews and calculated the convergence between patient–interviewer behaviour over the interview. The course of depression was assessed with the Beck Depression Inventory. As hypothesized, low maternal care and high paternal overprotection predicted a poor response to an 8-week treatment. Maternal care was positively correlated with nonverbal convergence. Moreover, convergence moderated the relationship between maternal care and the response to treatment: Lack of convergence between patients and interviewers turned out to annul the positive effects of maternal care on the treatment response. The findings link theories on early parenting to interpersonal theories of depression.

Keywords: Ethology; Attachment theory; Interpersonal theories of depression; Human; Adult

1. Introduction

Anomalous parental rearing styles have been posited to underlie the risk for depression in later life (e.g., Bowlby, 1969; 1980; Parker et al., 1979). Indeed, depression is associated with low levels of parental warmth, affection, and care, and to a lesser extent, with high levels of controlling and overprotective parental styles (e.g., Gerlsma et al.,1990; Oakley-Browne et al., 1995; Duggan et al., 1998; Parker et al., 1992; 1995; Sato et al., 2000). However, we know of only five prospective studies that demonstrate a relationship between parental rearing style and the course of depression (Gotlib et al., 1988; 1991; Kerver et al., 1992; Sakado et al., 1999; Riise and Lund, 2001). According to Bowlby's attachment theory (Bowlby, 1969; 1980), the association between early parental experiences and depression in later life is mediated by social interactions in adult life (e.g. Bowlby, 1988; Gittleman et al., 1998). For instance, childhood loss

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of the mother figure leads to depression in adulthood, especially when adult personal relationships go wrong (see Bowlby, 1988). However, adult social interactions that deviate from expectations based on early parenting behaviour may also moderate that relationship (Birtchnell, 1980; Parker and Hadzi-Pavlovic, 1984; Bowlby, 1988; Gittleman et al., 1998). In women who have lost their mother during early childhood, for instance, supportive partner relationships can buffer the negative effects of maternal loss on the risk of depression (Birtchnell, 1980; Parker and Hadzi-Pavlovic, 1984). Current research is focused on understanding the circumstances that determine these mediating or moderating effects (Bowlby, 1988; Gittleman et al., 1998).

In this study we investigated the association between parental bonding and adult interpersonal processes observing nonverbal behaviour in relation to the response to treatment of depression. Our interest in nonverbal interpersonal processes is based on three lines of evidence. First, our research group has demonstrated that nonverbal depressed patient–interviewer interactions can predict the subsequent course of depression. Specifically, we found that the more patient–interviewer nonverbal involvement behaviour converges, i.e. the more similar the levels of their behaviour become during the course of the interview, the more favourable the short-term outcome of depression turns out to be (Geerts and Bouhuys, 1998; Geerts et al., 1996; 2000). In remitted depressed patients, lack of nonverbal convergence predicts recurrence of depression (Geerts et al., 2006). Secondly, convergence of behaviour is associated with satisfaction with social interactions (Cappella and Palmer, 1990; 1992; Geerts et al., 2006) and rapport (Tickle-Degnen and Rosenthal, 1990). Also, in remitted depressed patients lack of nonverbal similarity predicts negative interpersonal life events during a 2-year follow-up (Bos et al., 2007). Thirdly, observational studies of mother–child interactions have shown that high synchronicity of mother and child nonverbal behaviour predicts secure attachment at a later stage (Isabella and Belsky, 1991; Isabella et al., 1989; Jaffe et al., 2001). Also, nonverbal coordination between 4-month-old infants and unfamiliar adults predicts attachment in 1-year-old children (Jaffe et al., 2001).

Assuming an association between the findings from child studies and our findings on nonverbal convergence, we address the questions of whether and how nonverbal convergence links parental bonding to the short-term response to treatment of depression. We hypothesize that:

1) Parental bonding, in particular low levels of care and high levels of overprotection, predicts an unfavourable treatment response.
2) Low levels of patient–interviewer nonverbal convergence during a baseline interview predict an unfavourable treatment response.
3) Nonverbal convergence is associated with parental bonding styles.
4) Nonverbal convergence has an impact on the association between recalled parenting and the treatment response. We explore whether the nature of this impact is via mediation or moderation.

2. Methods

2.1. Patient sample

Participants were a subgroup of 141 depressed outpatients included in a longitudinal study on psychosocial risk factors for depression. Nineteen patients (13.5%) dropped out because they stopped using anti-depressant medication. Of those remaining, 104 (74% of the original sample) completed the Parental Bonding Instrument (PBI, Parker et al., 1979). The sample comprised 69 women and 35 men (mean age 39.81 years ± 11.26 S.D., range 19–64 years). Patients who did and who did not participate in this study did not differ in baseline severity of depression and in parental bonding (as assessed by analysis of variance, ANOVA). All patients gave written informed consent. Participants were recruited from the outpatient wards of Mental Health Care Friesland — a mental health institute in the northern parts of The Netherlands ($n=102$) and from a private psychiatrist ($n=2$). Inclusion criteria were a diagnosis of unipolar non-psychotic depression or dysthymia (DSM IV, American Psychiatric Association, 1994) and a severity of depression at the start of the study ≥ 16 on the Hamilton Rating Scale for Depression (HRSD, 19-item version, Hamilton, 1967) and ≥ 18 on the Beck Depression Inventory (BDI, Beck and Steer, 1987). Exclusion criteria were age younger than 18 or older than 65 years, a history of psychotic disorder, organic cause of the depressive disorder, dysfunction of the central nervous system, cardio-vascular problems, or substance abuse within 12 months preceding the study. Women who were pregnant, lactating, or trying to become pregnant were also excluded.

2.2. Design

Patients stopped taking anti-depressant medication 1 week before the study began. The use of sedatives was reduced to a minimum possible dose. At baseline (T0) we assessed severity of depression with the BDI and the HRSD. Following assessment, patients received a prescription for sertraline (beginning dosage 50 mg daily) and a booklet with questionnaires including the PBI. Patients were asked to complete the questionnaires within a week and to return them by mail. Postage costs were paid for. We monitored the patients during the first 8 weeks of treatment. They completed a BDI on fixed days at 2, 4, and 6 weeks after T0. If the BDI score at week 2 exceeded the BDI at T0 by at least 5 points and