Psychiatry Research 215 (2014) 75–81

Contents lists available at ScienceDirect

Psychiatry Research

journal homepage: www.elsevier.com/locate/psychres

Evaluative beliefs as mediators of the relationship between parental bonding and symptoms of paranoia and depression

Carmen Valiente [a,*], Nuria Romero [a], Gonzalo Hervas [a], Regina Espinosa [a,b]

[a] Department of Clinical Psychology, School of Psychology, Complutense University of Madrid, Campus de Somosaguas, 28223 Madrid, Spain
[b] Department of Psychology, School of Health Sciences, Camilo Jose Cela University, Spain

ARTICLE INFO

Article history:
Received 6 December 2012
Received in revised form
2 October 2013
Accepted 16 October 2013
Available online 23 October 2013

Keywords:
Parental practices
Self-schemas
Paranoia
Depression
Mediational effects

ABSTRACT

This study was aimed to explore the distinct pathways that lead to depression and paranoia. We first examined the association of dysfunctional parenting experiences and negative self-evaluations in depression and paranoia. Furthermore, we also examined whether different self-evaluative beliefs could mediate the relationships between dysfunctional parenting experiences (i.e. parental overprotection or lack of care) and the development of depression and paranoia. A sample composed of 55 paranoid patients, 38 depressed patients and 44 healthy controls completed the Parental Bonding Instrument (PBI), the Evaluative Beliefs Scale (EBS) and some clinical scales. Our analyses revealed that lack of parental care and negative self–self evaluations were associated with depression symptoms. Analyses also revealed that parental overprotection and negative other–self evaluations were associated with paranoid symptoms. Furthermore, negative self–self and other–self evaluations fully mediated the relationship of parental overprotection and paranoia, whereas negative self–self evaluations partially mediated the relationship between lack of parental care and depression. These findings suggest that distinct patterns of parental practices may contribute to the development of different dysfunctional schemas which in turn may lead to either depression or paranoia.

1. Introduction

Psychotic spectrum disorders, especially for paranoid symptoms, have shown strong connections to depression (e.g., Zigler and Glick, 1988). For example, some studies have found elevated scores of paranoia in depressed participants (e.g., Bentall et al., 2008) which again suggests a phenomenological overlap. Furthermore, depression has been identified repeatedly in factor analytical studies of psychotic spectrum disorders (e.g., Emsley, et al., 2003). Both depression and paranoia seem to share psychological mechanisms such as negative self-esteem and expectation of negative events (e.g., Bentall et al., 2008) that could be rooted in parental practices. The analysis of the developmental pathways of these forms of psychopathology can highlight common and distinct factors and provide us with a deeper understanding of the processes involved. With this aim, the present study examined parental bonding and negative evaluative beliefs in two clinical samples with paranoid and depressive symptomatology.

Theoretical approaches have linked early parental rearing behaviors with psychopathology (e.g., Bowlby, 1977). In general, empirical studies investigating parental practices confirm the relevance of early relationships in psychopathology (e.g., Mickelson et al., 1997). Recent models of psychosis have drawn attention to the significance of early interpersonal experiences and trauma in the development and maintenance of psychotic symptoms (Garety et al., 2001). It is not surprising to find, given the suspiciousness and high level of interpersonal difficulties associated with paranoia, that studies have shown a particular relationship between insecure attachment and paranoid beliefs (Pickering et al., 2008). Some studies have found that people with schizophrenia rated their parents as less caring and more overprotective (see review in Berry et al., 2007). More specifically, Rankin et al. (2005) found that both currently ill and remitted paranoid patients reported lower parental care or higher overprotection during childhood in comparison to healthy control groups. Additionally, a twin study found that the difference in paternal overprotection was the most important variable to discriminate between schizophrenic and non-schizophrenic twins (Onstad et al., 1994).

Likewise, the development of depression has been related to early disruptive parental practices by different theoretical approaches (Beck, 1967; Blatt et al., 1979). Extensive research using different methods seem to indicate that parent–child interaction is essential to understand the origins of depression (see review in by Blatt and Homann, 1992). Early disruptive parental practices (lack of care, overprotection or both) seem to be

* Corresponding author. Tel.: +34 91 394 3135x636 708 210; fax: +34 91 394 3189.
E-mail address: mcvalien@pdi.ucm.es (C. Valiente).

0165-1781/$ - see front matter © 2013 Elsevier Ireland Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.psychres.2013.10.014

associated to depressive symptomatology during adulthood (Enns et al., 2000; Avagianou and Zafiropoulou, 2008) and are able to predict the presence of depression (Eberhart et al., 2006; Grotmol et al., 2010). Some studies have found that the bonding dimension of maternal care is a particularly strong predictor of severe depression (Grotmol et al., 2010).

Psychopathology may be the by-product of negative schema of self and others as a result of early disruptive parental practices. Thus, self-evaluations may be a relevant link between parental practices and the development of psychopathology (Parker, 1993). Many theoretical approaches pose that early family factors, the subsequent sense of internalized self and the development of psychopathology are interconnected (e.g., Beck, 1967; Bowlby, 1980). Moreover, interactions with significant others seem to be the base of self–other representations (Bartholomew, 1990). These self and self–other representations are internalized and give rise to a set of beliefs about the self and others that are central determinants of psychological and behavioral functioning. Research indicates that higher levels of parental acceptance and care are associated with more positive self-evaluations, whereas higher levels of parental rejection, restraint, and inconsistent affect are associated with more negative self-evaluations (Liu, 2003).

Persecutory delusions and depression have been associated with negative evaluative self-beliefs. According to the cognitive model (Beck, 1967), depressed individuals exhibit dysfunctional negative self-related schemas. Numerous studies have shown that depression is associated with increased negative thinking, enhanced accessibility of negative information, and negative biased information processing (see review in Ingram et al., 1998). The relationship between negative self-schemas and paranoia is not so clear, but disturbances in self-perceptions are clearly present in paranoia (Bentall et al., 2008) and have been found to be both a consequence of the illness as well as a maintaining (Freeman et al., 1998) and predisposing component (Krabbendam et al., 2002). Moreover, self-evaluation discrepancies (Valiente et al., 2011) and instability (Thewissen et al., 2008) have been identified as typical features of people who experience paranoia. In addition, individuals suffering from paranoia have strong negative evaluations of others (Gracie et al., 2007).

In non-clinical population, there is some support for the role of self-related schemas in mediating negative parental practices and psychopathology. Studies have found that dysfunctional parenting increases the risk of depression by negatively impacting self-esteem (e.g., Avagianou and Zafiropoulou, 2008; Restifo et al., 2009; Grotmol et al., 2010). Campos et al. (2010) established a differential meditational pattern for care and overprotection practices. They found that the relationship between care and depression was mediated by self-criticism, while the relationship between overprotection and depression was mediated by neediness. Furthermore, McGinn et al. (2005) reported in a clinical sample that the association between dysfunctional parenting styles and depression was mediated by dysfunctional cognitive styles, as measured by the Young's Schema Questionnaire (Young and Brown, 1990). In the area of paranoia, Gracie et al. (2007) found, in a student sample, that negative beliefs about the self and others mediated the relationship between trauma and paranoia. Despite this finding, there is a lack of empirical studies addressing this question in a clinical population. Additional research is necessary to improve our understanding of the associations between developmental pathways and different psychological disturbances.

1.1. Aim of the study

This study investigated the pathways that lead to depression and paranoia. First, we examined the association of dysfunctional parenting experiences and negative self-evaluations in depression and paranoia. It was hypothesized that depression will be associated with low parental care (Grotmol et al., 2010), and that paranoia will be associated with both low parental care and particularly overprotection (Onstad et al., 1994). Secondly, we examined whether negative evaluative beliefs mediated the relationships between early parental practices, depression and paranoia. Depression usually involves negative self-esteem and, accordingly, negative self–self evaluative beliefs could mediate the relationship between parental bonding and depressive symptoms. On the contrary, paranoia has not been consistently associated with low self-esteem (e.g., Valiente et al., 2011), but a negative representation of others may be more significant to paranoid ideation (e.g., Lincoln et al., 2010). Thus, we predicted that negative self–other and other–self evaluative beliefs will be mediators of the relationship between a negative parental style and paranoid symptoms.

2. Methods

2.1. Participants and procedure

The inclusion criteria for all participants included a signed informed consent and ages within 18–65. All participants were from the same geographical area. Depressed participants were recruited from an outpatient mental health center. Paranoid participants were recruited from an acute psychiatric inpatient unit from the same hospital. The healthy controls were recruited via the 'snowball' technique in which psychology students invited their acquaintances to voluntarily participate in the study. Three groups of participants were formed.

The persecutory beliefs group (PG) included 55 participants (28 males), who were treated in an inpatient psychiatric unit. All participants were currently suffering persecutory beliefs as assessed by the Present State Examination (PSE-10, SCAN, Sections 18 and 19, WHO, 1992) and had a score of ≥ 4 (i.e. level of severity) on the suspiciousness item of the Positive and Negative Syndrome Scale (PANSS; Kay et al., 1987). None of the patients had brain disorders. Patients were selected through hospital records and diagnoses were confirmed with a clinical structured interview (MINIPLUS, Sheehan and Lecrubier, 2002). According to the DSM-IV criteria (APA, 1994), patients met diagnostics for the following categories: paranoid schizophrenia ($n=28$), delusional disorder ($n=8$), schizophreniform disorder ($n=9$), schizoaffective disorder ($n=6$), brief psychotic disorder ($n=2$), residual schizophrenia ($n=1$) and non-specific psychotic disorder ($n=1$). All patients were receiving antipsychotic medication at the time of participation in the study. The mean age of the paranoid sample was 34.6 years (S.D.=11.3; Table 1). The mean age of illness onset for this group was 28.1 years (S.D.=7.8) whereas the average mean illness duration was 73.4 months (S.D.=105.2).

The depression group (DG) included 38 participants (nine males), who met DSM-IV criteria for a current depressive disorder. Participants were primarily outpatients who had never experienced persecutory delusions, brain disorders, or any other schizophrenia spectrum diagnoses. Diagnoses were confirmed in a clinical structured interview (MINIPLUS, Sheehan and Lecrubier, 2002). According to DSM-IV criteria, patients met diagnostic criteria for the following categories: major depressive disorder (single episode) ($n=11$), major depressive disorder (recurrent episode) ($n=22$) and bipolar I disorder ($n=5$). All patients but four were currently receiving anti-depressive medication at the time of participating in the study. The mean age of the depression group was 42.8 (S.D.=11.5; Table 1). The mean age of illness onset for this group was 34.8 years (S.D.=9.7) whereas the average mean illness duration was 92.6 months (S.D.=113.5).

The control group (CG) included 44 participants (20 males), who were screened for the absence of any clinical syndrome by a trained research assistant using an 'ad hoc' structured interview based on the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I; First et al., 2002). The controls had never required psychological assistance for any mental disorder, or had any concurrent medical condition. These participants did not report any previous history of mental health problems and were matched with the paranoid and depression groups in terms of sex and age. The mean age of the control group was 37.4 years (S.D.=13.0; Table 1).

2.2. Measures

All participants were evaluated with the following measures:

Evaluative Beliefs Scale (EBS; Chadwick and Birchwood, 1995). This scale contains 18 items that measure global and stable negative evaluative beliefs. Participants are asked to indicate their agreement with each statement on a 5 point scale ranging from strongly agree to strongly disagree. This scale is composed of three subscales, with six items for each subscale. The range of possible scores for each scale is 0–18. The first subscale measures negative beliefs about the