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# 'Poor me' versus 'bad me' paranoia and the instability of persecutory ideation

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**Objectives.** To investigate whether there are two stable types of paranoia, 'poor me' and 'bad me', as described by Trower and Chadwick (1995), and whether beliefs about the deservedness of persecution are associated with psychological measures.

**Methods.** In-patients experiencing persecutory delusions were assigned either to 'poor me' (PM) or 'bad me'(BM) groups, according to their rating of a perceived deservedness scale, which was repeated on subsequent assessments. Participants were assessed for depression (BDI); construction of the self (Self-to-Others Scale); autonomy and sociotropy (PSI); perceived parental behaviour (PBI); attributional style (ASQ) and, meaningful daily events (DEI, devised for the study). A healthy control group was also assessed.

**Results.** Many patients' perceived deservedness of persecution varied across time, so that some patients were PM at one point in time but BM at another. BM paranoia was associated with high levels of depression. PM and BM patients groups both scored higher than the controls on the subscales of Self-to-Others Scale and on the PSI. PM patients exhibited a marked self-serving bias on the ASQ, and reported less parental care on the PSI, compared to the BM patients. Both groups reported less PBI mother care than the controls. BM patients reported more failure events than PM patients or controls. PM patients reported more loss of control events than the than BM patients and controls.

**Conclusions.** PM and BM paranoia may represent separate phases of an unstable phenomenon. The findings are consistent with an attributional account of paranoid thinking.

Persecutory (paranoid) delusions, the most common type of delusional system observed in psychiatric practice (Jorgensen & Jensen, 1994), have recently become the focus of attention from psychological researchers. Based on initial observations of an abnormal attributional (explanatory) style in paranoid patients (Kaney & Bentall, 1989), Bentall, Kinderman, and Kaney (1994) argued that delusions of persecution arise when patients attribute negative events to external, global, and stable causes, and that this style of

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constructing explanations enables the person to maintain consistency between their ideals and their current beliefs about the self. Hence, the person holding a persecutory delusion avoids self-blame and is able to maintain self-esteem at the expense of blaming others for their negative life events. Most studies that have examined attributional style in paranoid patients, either using a questionnaire such as the Attributional Style Questionnaire (Candido & Romney, 1990; Fear, Sharp, & Healy, 1996; Won & Lee, 1997) or using other techniques (Kaney & Bentall, 1992; Kinderman & Bentall, 1997; Lee, Randall, Beattie, & Bentall, 2004) have reported evidence consistent with this account.[1] However, conflicting evidence about whether self-esteem in paranoia is similar or lower than in normal people has led Garety and Freeman (1999) to question whether delusions have a defensive function. Candido and Romney (1990) found that non-depressed paranoid patients had similar ratings of self-esteem to healthy controls. Freeman *et al.* (1998) studied self-esteem longitudinally and concluded that most paranoid patients had lower self-esteem ratings than healthy people. In another study, Bentall and Kaney (1996) assessed paranoid and depressed patients' self-representations and found that, even though paranoid people overtly showed small discrepancies between their self-ideals and their actual self-image, they recalled preferentially more negative trait words, similarly to depressed people.

In a recent modification of the attributional model of paranoia, Bentall, Corcoran, Howard, Blackwood, and Kinderman (2001) have argued that causal attributions and self-representations interact in a dynamic process that they describe as an 'attribution-self-representation cycle'. Kinderman and Bentall (2000) tested this model by examining the effect of the priming of attributions on the self-concepts of healthy people. Results were consistent with Bentall *et al.*'s (2001) predictions, as they showed that attributions and self-representations influenced each other in the manner predicted. Because of these reciprocal effects, the revised model allows for either low or high self-esteem in paranoid patients, depending on recent experiences. For example, if a person experiences a failure event, this should activate underlying negative self-schemas, that will increase the probability of an internal attribution for any subsequent negative experience. However, if an external attribution is made for a negative experience (because an underlying negative self-schema is not sufficiently activated at that particular moment or because situational factors suggest that an internal attribution is inappropriate), this should further reduce the accessibility of negative self-schemas, thereby decreasing the probability of an internal attribution for future negative events. One implication of this analysis is that both attributional style and self-esteem should be highly unstable in paranoid patients. Consistent with this prediction, Bentall and Kaney (2005) recently observed that paranoid patients showed a marked internalizing shift for negative events when their attributional style was measured following a contrived failure experience.

A somewhat alternative account of persecutory delusions has been recently proposed by Trower and Chadwick (1995), who have argued that there are two types of paranoia. According to these authors, people with 'poor-me' (PM) paranoia 'tend to blame others, to see others as bad, and to see themselves as victims' (Trower & Chadwick, 1995, p. 265), as they believe others are plotting to harm them without any

[1] *An apparently inconsistent result was reported by Martin and Penn, (2002), who failed to find attributional differences between paranoid schizophrenic and non-paranoid schizophrenic patients; however, in a correlational analysis these investigators did find a relationship between paranoia scores and the number of external personal attributions made.*

justification. People with 'bad me/punishment' (BM) paranoia, on the other hand, are individuals who 'tend to blame themselves and see themselves as bad, and view others as justifiably punishing them' (Trower & Chadwick, 1995, p. 265).

Trower and Chadwick propose that paranoia is not a response to real threat, but a cognitive tendency to misperceive negative evaluation from others. They argue that people develop distinctive ways of dealing with these ultimately feared sources of threat to the self by either agreeing (BM paranoia) or disagreeing (PM paranoia) with them. They also suggest that two sorts of self-representation underlie the two types of paranoia: an 'insecure' self in the case of PM paranoia, and an 'alienated' engulfed self in the case of BM patients. On the basis of their clinical experience, they suggest that PM paranoia occurs in people who have a great need for reassurance and approval from others. Hence, these patients tend to exhibit an 'anxious-insecure' attachment style. This happens, according to the authors, because the person lacks an internal and stable representation of being cared for and, thus, in the absence of the loved one, is unable to maintain a reassuring sense of self. As a child, the individual might have suffered ambivalent or neglecting caring experiences. Therefore, their most significant fear concerns imminent abandonment and rejection (Chadwick, 1996; Dagan, Trower, & Gilbert, 2002; Trower & Chadwick, 1995).

Conversely, BM paranoia is believed to be a way of managing an inner need for acceptance and appreciation from others. Trower and Chadwick (1995) describe the people who experience this type of paranoia as constantly struggling to avoid criticism by others and therefore relating to other people through an 'avoidant' attachment style. This, in turn, is understood to be a learned self-protective style of relating which, in adulthood, is manifested in the expectation that interpersonal relationships will always be demanding and punitive. Thus, these patients are said to experience intense apprehension about the possible failure to meet parental expectations, and therefore prefer to avoid relationships in order to prevent themselves being defined and constructed as bad by others (Blatt & Zurroff, 1992).

Bentall *et al.* (2001) argue that the latest, dynamic version of their attributional model of paranoia might be extended to account for both PM and BM delusions. According to this model, 'bad me' paranoia may occur when negative self-schemas have been activated by recent negative events and so externalizing attributions are not made to subsequent negative events. If this is the case, it should not be assumed that the paranoid defence is a stable phenomenon; rather, it may be a changeable and complex process, whereby the individuals' perception of deservedness of persecution is expected to fluctuate across time.

The aim of the present study was to empirically test Trower and Chadwick's (1995) and Bentall *et al.*'s (2001) assumptions about the two types of paranoia. Trower and Chadwick's theory (1995) predicts that perceived deservedness of persecution will be a stable trait. Each adult paranoid patient is expected to have had imprinted distinct vulnerabilities during childhood, which result in one type of paranoid ideation or the other. However, according to Bentall *et al.*'s (2001) model, it is expected that the type of paranoia experienced by a patient may change over time in response to daily events.

Trower and Chadwick's account (1995) predicts that BM paranoia will be associated with an alienated/engulfed self and an autonomy personality mode (in which the individual judges the self according to career success and independence from others), and that PM paranoia will be associated with an insecure self and a sociotropic personality mode (in which the individual judges the self according to the quality of interpersonal relationships). Based on the attributional model, however, Bentall and

Swarbrick (2003) predicted that currently ill PM paranoid patients would score high on autonomy, reflecting defensive separation from others, whereas remitted PM patients would score high on sociotropy, reflecting an underlying vulnerability to rejection by others. However, in an empirical test of these predictions in which no attempt was made to distinguish between PM and BM subgroups, they found that both currently ill and remitted paranoid patients scored highly on autonomy but not sociotropy.

With respect to attachment style, Trower and Chadwick's (1995) and Bentall *et al.*'s (2001) predictions are once again contradictory. The former theory predicts BM paranoia to be highly related to parental affectionless control (leading to a 'dismissive-avoidant' attachment style) and PM paranoia to be highly related to parental neglect (leading to an 'insecure anxious-ambivalent' attachment style). However, following a review of the literature on attachment and psychosis, Bentall *et al.* (2001) argue that a paranoid attributional style is associated with a dismissive-avoidant attachment style.

Trower and Chadwick (1995) acknowledge that the attributional model gives a good account of PM paranoia, and therefore their theory accords with Bentall *et al.*'s (2001) account in predicting a robust self-serving bias in this group. Similarly, although neither group has made explicit predictions about BM paranoia, both theories imply that the self-serving bias will be less evident than in the case of PM paranoia.

## Method

### *Participants*

Sixty-five participants were recruited into two groups. The clinical participants ($N = 44$; 33 male and 11 female) comprised acutely ill in-patients who had been diagnosed as suffering from delusional disorder, schizophrenia or schizoaffective disorder, according to DSM-IV criteria (American Psychiatric Association, 1994). Diagnostic information was collected through a combination of structured psychiatric interview, the Schedules for Clinical Assessment in Neuropsychiatry, version 2.1 (SCAN; World Health Organization, 1997) and the examination of casenotes. SM received formal training in the SCAN for this purpose (a small number of patients were very guarded and did not answer all SCAN psychosis questions). All of the participants reported persecutory delusions, scoring at least 2 on the relevant questions in Section 19 of the SCAN. In addition, a number of other delusional ideas were reported, including delusions of reference (21), delusions of being spied upon (30), delusional misinterpretations (12), quotation of ideas (14), delusional misidentifications (15), delusions of guilt (16), religious delusions (5), delusional paranormal explanations (13), and delusional physical explanations (8). In addition, 20 participants reported hallucinations. All the patients were in receipt of antipsychotic medication.

Initially, the clinical participants were assigned to either PM paranoia or BM paranoia subgroups according to their first ratings on the Perceived Deservedness of Persecution (PDP) analogue scale (see below). However, as we describe in more detail in the Results section, approximately 35% of the participants' initial scores on the scale were found to vary (sometimes dramatically) across later testing sessions. Hence, it was reasoned that assigning participants to the PM or BM subgroups on their initial scores alone would be misleading. Because ratings on the PDP scale were highly skewed (see Results section), and because Trower and Chadwick assume that the difference between PM and BM paranoia is taxonomic (that is, that patients either think that their persecution is deserved or it is not), clinical participants were included in an 'BM-ever' (BM-E) subgroup if they rated themselves as deserving persecution (as defined by rating

themselves 4 cm or above on the 12 cm line of the analogue scale) at any point in the baseline or follow-up assessments. The remaining participants were assigned to an 'PM-always' (PM-A) subgroup. The PM-A subgroup consisted of 26 participants, 17 men, and 9 women, whose mean age was 34.84 years ($SD = 8.93$). The BM-E subgroup included 18 participants, 16 male and 2 female and their mean age was 34 years ($SD = 14.35$).

A non-psychiatric healthy control (HC) group consisted of 21 participants, 16 men, and 5 women, whose mean age was 40.10 years ($SD = 14.20$). Participants from this group were recruited from non-professional staff of the University of Manchester and were screened for past and present psychiatric symptoms using the SCAN. Those with any significant psychiatric history were excluded from participation.

The groups did not differ significantly on any of the demographic variables except for IQ, $F(2, 61) = 3.38$, $p < .05$. The BM-E group had a significantly lower mean IQ (87.83; $SD = 8.16$) than the healthy control group (95.29; $SD = 9.37$), $p < .05$, with the mean IQ of the PM-A patients falling in between (91.16, $SD = 9.20$).

## Measures

The *Perceived Deservedness of Persecution* (PDP) analogue scale (devised for this study) was administered to the clinical participants only and was used to differentiate those participants who perceived their 'persecution' was deserved and those who perceived it was not deserved. The 12 cm scale had a left anchor labelled 'I don't deserve to be persecuted' and a right anchor labelled 'I deserve to be persecuted'.

*Schedules for Clinical Assessment in Neuropsychiatry* (2.1 version; World Health Organization, 1997): The SCAN is a semi-structured interview measure, developed to assess and classify psychopathology in adults. The interviewer questions the participant to ascertain whether they have experienced particular symptoms during a specific time period (the last 28 days) and their degree of severity. This measure has previously been shown to demonstrate relatively high levels of reliability and inter-rater consistency.

The *Beck Depression Inventory* (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) is a reliable measure of severity of current depression and is widely employed in psychiatric and healthy populations. It is a 21-item questionnaire, with a 4-point Likert scale.

The *Parental Bonding Instrument* (PBI; Parker, Tupling, & Brown, 1979) has been used extensively to study early attachment experiences in psychiatric patients, including patients with psychosis (Parker *et al.*, 1979; Rankin, Bentall, Hill, & Kinderman, 2005). It consists of a 25-item scale, which measures parental behaviours and attitudes prior to the respondent's 16th birthday through retrospective self-report. The items assess two bipolar constructs: 'care versus indifference/rejection', measured by the 'care' subscale, and 'overprotection versus allowance of autonomy', which is measured by the 'over-protection' subscale. Rankin *et al.* (2005) have observed that both currently ill and remitted paranoid patients report low parental care and high over-protectiveness during childhood on this scale.

The *Personal Style Inventory* (Robins *et al.*, 1994) is a 48-item measure of personality modes, employing a 6-point Likert scale. It is composed of two scales: sociotropy and autonomy, which include six subscales ('concern about what others think', 'dependency', 'pleasing others', 'perfectionism/self-criticism', 'need for control' and 'defensive separation'). The PSI has been shown to have good internal consistency, construct definition and validity. In a previous study, Bentall and Swarbrick (2003) reported that acutely ill paranoid patients scored higher than healthy participants on the

PSI autonomy scale; however, this difference became non-significant when depression was included as a covariate.

The *Self-to-Other Scale* (SOS; Dagnan *et al.*, 2002) is a 14-item scale designed to assess both the participants' most important vulnerabilities (endorsement of intensity of threat) and the extent to which these have been experienced most recently (frequency of threat experience). It includes seven items referring to the fear of exclusion (related to what the authors designate as 'insecure self') and seven addressing the fear of intrusion (related to the 'engulfed self'). The SOS has shown good psychometric properties (Dagnan *et al.*, 2002). The scale is reverse scored, so that low scores represent higher ratings on the relevant psychopathological constructs.

The *Attributional Style Questionnaire* (ASQ; Peterson *et al.*, 1982) describes 12 situations (six positive and six negative), which participants are asked to explain before rating them on three dimensions: internality versus externality dimension (the extent to which events are imputed on self or to external causes, like circumstances or others), stability versus instability dimension (the degree to which the causes of the events are expected to continue to be present in the future or are viewed as random), globalness versus specific dimension (the degree to which the causes are perceived as implicated in the occurrence of other events). For the purposes of the present study, two further dimensions were added: self-esteem (the extent to which the event is self-descriptive) and meaningful versus meaninglessness (the degree of personal significance of the event); these dimensions were taken from the Cognitive Styles Questionnaire, an expanded version of the ASQ developed by Alloy *et al.* (1999).

The *Daily Events Interview* (DEI; devised for the study) was designed to enable the collection of contextual incidental data. Participants are questioned about whether certain types of events had occurred in the preceding 2 to 3 weeks. These events were chosen to express typical situations that may arise in the clinical participants' environment. Twenty-six events were included. In line with other researchers' theories (Bieling, Beck, & Brown, 2000; Blatt & Zuroff, 1992; Trower & Chadwick, 1995), these were chosen to reflect six categories thought to be psychologically important, namely, 'gaining control' (e.g. 'In the last couple of weeks, have you gained more space for yourself, for example, have you moved into a bigger room or to a new house?'); 'achievement' (e.g. 'In the last couple of weeks, have you started a new job, occupation or daily activity?'); 'loss of control' (e.g. 'In the last couple of weeks, have you been forced to do something against your will?'); 'failure' (e.g. 'In the last couple of weeks, have you had difficulties in doing work or anything else, like reading, watching television, showering, etc?'); 'approval' (e.g. 'In the last couple of weeks, has someone told you that he or she likes you?') and 'rejection' (e.g. 'In the last couple of weeks, has someone close to you/someone you love refused to spend time with you?'). The interview took approximately 20 minutes to complete.

The *Quick Test* (Ammons & Ammons, 1962) was used to estimate the pre-morbid intelligence of the participants. The adult version comprises a list of 20 words presented in a successive order of increasing complexity, which had to be matched to four different pictures. Scores have been shown to approximate closely to pre-morbid levels of IQs.

## Design and procedure

Assessment was planned in two phases in order to assess the stability of PM versus BM status: baseline and follow-up. The baseline assessment included the SCAN, followed by

the PDP scale, the BDI, the SOS, the Personal Style Inventory, the PBI, the ASQ and the DEI. When two or more sessions were necessary to complete the battery, participants were asked to complete the PDP scale at each session. It should be noted that this testing took place in the context of a concerted effort by the researcher to establish the trust of the clinical participants; this often involved considerable periods of time discussing the patients' life stories and their experience of psychiatric treatment.

At the follow-up assessment, approximately 2 weeks later, participants first completed the PDP scale. If they responded to this scale differently from their first assessment, they were also asked to complete the BDI, the SOS, the ASQ, and the DEI. Otherwise, they were only required to complete the DEI. Twenty-six of the clinical participants took part in the follow-up assessments; the rest were either unavailable (5) or declined to take part (13). Twenty-four of these assessments took place on the psychiatric ward in which the patients were initially assessed as the patients remained acutely ill; the remaining two were carried out in the community following the patients' discharge.

Because the patients were mostly quite ill at the time of assessment, it was not always possible for them to complete all of the assessments as planned. The actual numbers of patients available for each test are shown in the various data tables below.

## Results

Histograms of initial scores on the PDP analogues scale, and mean scores on the scale across the assessment points, are shown in Fig. 1. It can be seen that, on both graphs, scores are highly skewed towards the 'poor me' end of the scale. However, intermediate scores are recorded, indicating that not all patients classified themselves consistently as either 'poor me' or 'bad me'.

After collecting some data on the clinical participants' ratings of perceived deservedness of persecution the researchers realized that scores on the measure tended to fluctuate unexpectedly over the course of time. Figure 2 shows this diagrammatically, indicating scores on the PDP analogue scale at each test session for each patient. In the light of the skew in the distribution of scores, it was decided to take the conservative criterion of greater than 4 cm on the analogue scale as indicating that persecution is perceived as to some degree deserved. Of those patients who made more than one rating, 20/38 were consistently 'poor me', 5/38 were consistently 'bad me', and 13/38 reported both types of beliefs at different points in time according to this criterion. Taking more criteria for stability, 15 patients remained persistently PM with scores less than 1 cm and 2 were persistently BM with all scores of 10 cm or more. These scores give an initial indication that, in some patients at least, PM versus BM status is highly unstable.

The intra-individual ranges of deservedness ratings within those clinical participants in the sample who were assessed more than once gives a further indication of the instability of PM versus BM status. Whereas just under half of the patients showed no shift at all, a substantial minority show large changes in their deservedness judgments; the mean intra-individual range was 2.67 cm and 10 of the participants had deservedness scores that ranged in excess of 4 cm. A highly significant correlation was observed between mean deservedness scores and the intra-individual range scores (Spearman's $r = .67$, $p < .001$), confirming that patients who rated themselves as PM tended to maintain this position over time. Hence, when dividing the patients into subgroups, a distinction between ever-BM (BM-E) and always PM (PM-A) seemed most meaningful.

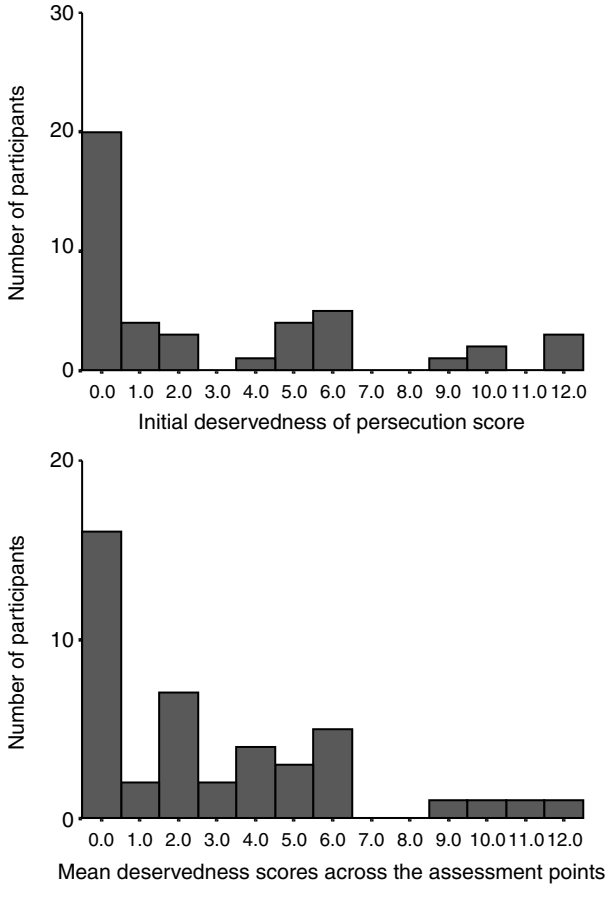


**Figure 1.** Initial and mean deservedness scores for the patient sample.

Insufficient numbers (four participants) had full data sets during both bad me and poor me phases to allow a repeated measures analysis comparing the two types of paranoia. However, the observation of unstable deservedness scores, created difficulties when conducting between-groups comparisons of PM and BM participants on the various psychological measures. To overcome this problem, it was decided to carry out a more precise data analysis. Therefore, when analysing performance on each psychological measure, participants were classified according to their deservedness scores (PM $<$ 4 cm; BM $\geq$ 4 cm) at the time that the particular psychological measure was administered. In practice, this meant that there was some variation in the numbers in each of the groups for the different measures. In addition, similar analyses were conducted comparing the participants assigned to the BM-E and PM-A groups (that is, with clinical participants classified according to whether they had ever been 'bad me' or not during the course of the study).

Scores on the BDI, SOS, and PSI are shown in Table 1. A one-way ANOVA on the BDI scores indicated that there was a significant group effect, $F(2, 60) = 20.39$; $p < .001$. *Post hoc* tests (Tukey's *T*) demonstrated that all groups differed significantly from each other on BDI scores ($p < .05$), with BM patients the most depressed, followed by the

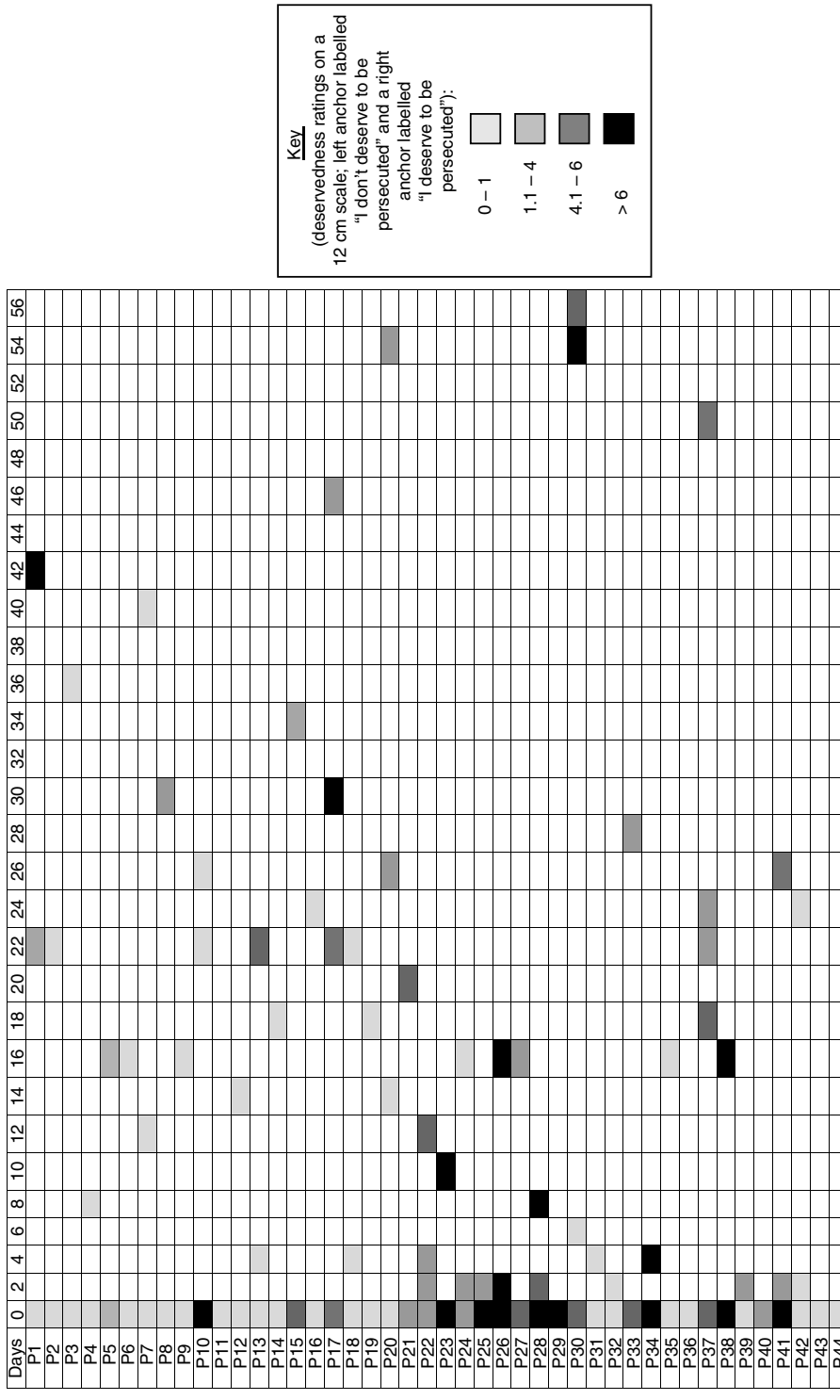


**Figure 2.** Results from the PDP analogue scale across time.

**Table 1.** BDI, SOS, and PSI data (*Ns* in upper row, means and *SD*s in lower row)

| | 'Poor me' group<br>*N* × (*SD*) | 'Bad me' group<br>*N* × (*SD*) | Control group<br>*N* × (*SD*) | Significance of *F*<br>*p* |
|---|---|---|---|---|
| BDI | 27 | 15 | 21 | .000 |
| | 19.15 (9.88) | 27.53 (13.73) | 7.29 (4.29) | |
| SOS* | | | | |
| Frequency – Insecure | 28 | 15 | 21 | .002 |
| | 21.86 (6.40) | 17.80 (6.99) | 25.38 (5.04) | |
| Frequency – Engulfed | 28 | 15 | 21 | .000 |
| | 19.21 (5.34) | 17.73 (7.146) | 25.43 (5.06) | |
| Endorsement – Insecure | 27 | 15 | 21 | .001 |
| | 19.63 (6.368) | 16.53 (6.46) | 24.57 (5.51) | |
| Endorsement – Engulfed | 27 | 15 | 21 | .000 |
| | 18.19 (6.59) | 15.93 (5.51) | 24.29 (6.19) | |
| PSI | | | | |
| Sociotropy | 24 | 13 | 21 | .004 |
| | 107.92 (15.87) | 108.77 (19.88) | 90.95 (19.52) | |
| Autonomy | 24 | 13 | 21 | .015 |
| | 101.79 (24.64) | 96.38 (14.80) | 84.57 (14.26) | |

*This scale is reverse-scored.

PM patients and, finally, the control group. Essentially identical results were obtained when the BM-E and PM-A groups were compared. Consistent with these findings, there was a significant positive correlation (Spearman's $r = .37$; $p < .02$, 2-tailed) between the BDI scores and mean deservedness ratings, and a weak but non-significant correlation between initial deservedness ratings and depression (Spearman's $r = .26$, $p = .08$, two-tailed). The more depressed the individual, the more they believed themselves to deserve persecution.

The SOS scores of our control group were somewhat higher (i.e. less pathological) than the scores reported by Dagan *et al.* (2002). However, it should be noted that Dagan *et al.*'s sample of undergraduate students was somewhat different demographically to the control participants in the present study. An analysis of the present participants' scores on the SOS revealed significant differences across all subscales: $F(2, 61) = 6.70$ and $p = .002$ for frequency-insecure-self; $F(2, 61) = 10.09$ and $p < .001$ for frequency-engulfed-self; $F(2, 60) = 8.08$ and $p < .001$ for endorsement-insecure-self; $F(2, 60) = 9.274$ and $p < .001$ for endorsement-engulfed. *Post hoc* tests revealed that the BM paranoia group scored significantly higher on the frequency subscale of 'insecure self' than the healthy control group ($p < .05$), with the scores of the PM group falling between these two extremes without differing significantly from either. There were no significant differences in the scores between the clinical groups on any of the other subscales of the SOS but both groups differed from the controls ($p$ at least $< .02$). Again, essentially the same findings were observed when the BM-E and PM-A groups were compared.

Analysis of PSI scores demonstrated significant differences between the groups for both sociotropy, $F(2, 55) = 6.06$; $p < .005$, and autonomy, $F(2, 55) = 4.52$; $p < .02$. *Post hoc* tests confirmed that, although the BM group and the PM group did not differ from each other on either scale, they both had significantly higher scores ($p < .02$; $p < .01$, respectively), than controls on the 'sociotropy' subscale. In addition, the PM

group but not the BM group had higher scores on the 'autonomy' subscale than the control group ($p < .02$). Again, comparable findings were obtained when the BM-E and the PM-A groups were compared. However, no significant correlations were observed between deservedness ratings and the scores on any of the PSI subscales.

No significant difference was found between the groups on 8 of the 10 dimensions assessed on the ASQ (see Table 2). However, a group effect was found for internality for negative events, $F(2, 55) = 7.118$; $p < .005$, and for the globalness dimension for negative events, $F(2, 55) = 7.129$; $p = .002$. *Post hoc* tests revealed that for negative events, the PM paranoia group tended to externalize significantly more than both the BM paranoia group ($p < .005$) and the control group ($p < .01$). The BM paranoia group and the control group did not show any significant difference between each other on this subscale ($p = .914$). Consistent with this, there was a significant correlation (Spearman's $r = .34$; $p < .05$, two-tailed) between internality scores for negative events and ratings of deservedness. In the case of globalness scores for negative events, both clinical groups exhibited higher scores than the control group ($p < .05$ for each comparison). There was no significant correlation between globalness scores for negative events and perceived deservedness. When comparable analyses were carried out on the BM-E and PM-A groupings, the poor me paranoia group again made more external attributions for negative events than either the bad me or the control groups ($p <$ at least .01), but only the bad me patients showed higher globalness scores for negative events than the controls ($p < .001$).

**Table 2.** ASQ data (*N*s in upper row, means and *SD*s in lower row)

| ASQ subscale | 'Poor me' group *N* × (*SD*) | 'Bad me' group *N* × (*SD*) | Control group *N* × (*SD*) | Significance of *F* *p* |
|---|---|---|---|---|
| Positive internality | 26 | 9 | 20 | .86 |
| | 30.23 (5.52) | 29.44 (3.40) | 30.45 (3.52) | |
| Positive stability | 26 | 9 | 20 | .55 |
| | 31.88 (5.77) | 29.22 (8.41) | 31.45 (5.92) | |
| Positive globalness | 26 | 9 | 20 | .37 |
| | 30.69 (7.24) | 33.67 (5.00) | 30.15 (5.56) | |
| Positive self-esteem | 26 | 9 | 20 | .17 |
| | 21.46 (9.10) | 21.00 (8.79) | 25.95 (7.66) | |
| Positive meaning | 26 | 9 | 20 | .90 |
| | 30.50 (8.84) | 29.44 (9.33) | 30.95 (6.79) | |
| Negative internality | 26 | 9 | 20 | .01 |
| | 17.42 (7.99) | 24.67 (8.25) | 23.65 (6.10) | |
| Negative stability | 26 | 9 | 20 | .85 |
| | 29.77 (7.12) | 31.11 (6.81) | 30.45 (5.36) | |
| Negative globalness | 26 | 9 | 20 | .02 |
| | 25.27 (8.417) | 27.78 (6.70) | 19.50 (7.64) | |
| Negative self-esteem | 26 | 9 | 20 | .29 |
| | 17.77 (9.27) | 22.78 (10.01) | 17.70 (7.09) | |
| Negative meaning | 26 | 9 | 20 | .42 |
| | 29.04 (9.17) | 33.22 (7.55) | 30.05 (6.81) | |

Data from the PBI and DEI are shown in Table 3. On the PBI, a significant difference was found between the groups on the mother-care subscale, $F(2, 51) = 3.457$; $p < .05$,

**Table 3.** PBI and DEI data (*N*s in upper row, means and *SD*s in lower row)

| | 'Poor me' group<br>*N* × (*SD*) | 'Bad me' group<br>*N* × (*SD*) | Control group<br>*N* × (*SD*) | Significance of *F*<br>*p* |
|---|---|---|---|---|
| PBI | | | | |
| Mother care | 25 | 11 | 21 | .04 |
| | 20.68 (9.14) | 22.64 (7.24) | 27.10 (7.76) | |
| Mother overprotectiveness | 25 | 11 | 21 | .14 |
| | 15.80 (8.65) | 17.73 (6.87) | 12.81 (4.34) | |
| Father care | 21 | 9 | 21 | .05 |
| | 16.67 (11.71) | 24.33 (7.31) | 22.62 (6.50) | |
| Father overprotectiveness | 21 | 9 | 21 | .16 |
| | 17.24 (11.54) | 10.56 (7.50) | 14.05 (5.88) | |
| DEI | | | | |
| Approval | 25 | 9 | 20 | .77 |
| | 3.04 (1.88) | 3.56 (1.33) | 3.125 (1.92) | |
| Rejection | 25 | 9 | 20 | .10 |
| | 1.44 (1.16) | 1.11 (.93) | .75 (.91) | |
| In control | 25 | 9 | 20 | .20 |
| | 2.08 (1.29) | 3.11 (3.14) | 1.85 (1.42) | |
| Loss of control | 25 | 9 | 20 | .003 |
| | 3.64 (2.27) | 2.33 (2.00) | 1.60 (1.28) | |
| Accomplishment | 25 | 9 | 20 | .94 |
| | 2.44 (1.90) | 2.56 (2.51) | 2.3 (1.49) | |
| Failure | 25 | 9 | 20 | .001 |
| | 1.20 (1.08) | 2.67 (1.50) | .35 (.49) | |

but results failed to reach statistical significance for the father-care subscale, as well as for both over-protectiveness subscales. *Post hoc* tests confirmed that the PM paranoia group scored significantly lower than the control group on mother-care ($p < .05$), with the scores of the BM patients falling between those of the other two groups. Comparing the BM-E and PM-A groups did not alter these findings.

Finally, analysis of the DEI revealed significant differences for both the failure, $F(2, 51) = 16.921$; $p < .001$, and loss of control, $F(2, 51) = 6.484$; $p < .05$, subscales. *Post hoc* tests confirmed that the BM paranoia group disclosed the occurrence of more failure experiences than the other groups ($p < .001$ for each comparison), followed by the PM paranoid group ($p < .02$ in comparison with the control group). The PM patients disclosed more loss of control events than the control group ($p < .002$). Additionally, there was a significant negative correlation (Spearman's $r = -.35$; $p < .05$, two-tailed) between the disclosure of loss of control daily events and ratings of deservedness. The more the individual reported experiencing loss of control in daily situations, the more they perceived themselves as not deserving persecution. Despite the absence of a clear group difference on the rejection subscale of the DEI, there was also a significant negative association between deservedness and disclosure of rejection events (Spearman's $r = .37$, $p < .5$, two-tailed). When the BM-E and PM-A groups were compared, both the BM ($p < .001$) and PM patients ($p < .02$) reported more failure events than the controls, but did not differ from each other on this measure, whereas only the poor me patients reported greater loss of control experiences than the controls ($p < .001$).

## Discussion

Trower and Chadwick's theory suggests that paranoid patients can be divided into two main types: PM and BM. Our observations in this study broadly support their hypothesis that there are two types of paranoid presentation. However, our findings suggest a more complex picture than Trower and Chadwick's model supposes. First, some patients rated themselves at intermediate points on the PDP scale, whereas Trower and Chadwick's account could be interpreted as implying that all ratings should be at one end of the scale or the other. More importantly, some paranoid patients' perceptions that their persecution is deserved varied across time. In some cases, extreme shifts in perceived deservedness were observed, reflecting some apparent ambivalence about the origins of persecution. For example, one patient who started out as a BM paranoid and, after 16 days, flipped into PM paranoia, when asked about the reason for this change replied that 'It's none of their business what I've done in the past. . . everybody has got bad and good inside'. In the sample of patients assessed, consistent bad me beliefs were particularly rare, as most patients reporting this type of belief also reported that their persecution was undeserved on another occasion. It should be noted that the present findings almost certainly underestimate the instability of deservedness beliefs as some patients were assessed on only a few occasions, providing very limited opportunities for belief shifts to be observed. Consistent with this observation, a significant association was observed between the number of assessments and the range of deservedness scores, those patients with most assessments showing the greatest range (Spearman's $r = .43$, $p < .01$). Moreover, it should also be noted that an extreme, consistent BM presentation appears to be quite rare; indeed only two of our sample could be classified in this way.

It might be objected that the present findings of instability reflect poor reliability in our main measure, the PDP scale. However, if this were the case, significant group differences between the PM-A and BM-E subgroups would not have been expected. In fact, robust differences were observed, and most of these were as predicted. As expected on the basis of both Trower and Chadwick's account, and also the attributional model proposed by Bentall *et al.* (2001), bad me beliefs were associated with greater levels of depression than poor me beliefs, and poor me beliefs were associated with external attributions for negative events (such events were often attributed to the intentions of others), whereas bad me beliefs were not.

Trower and Chadwick's theory predicts higher scores on the engulfed self measures of the SOS and on the autonomy subscale on the PSI for bad me paranoia than for poor me paranoia. In fact, few differences between the two types of paranoia were found on these measures, which is probably most consistent with the idea that they are two different manifestations of the same phenomenon. However, bad me paranoia was associated with the highest scores for the insecure self, and (consistent with the account of paranoia given by Bentall *et al.*, 2001) poor me paranoia was associated with the highest autonomy scores. The use of the PBI in the present study did not allow us to test competing predictions about the attachment representations associated with the two types of beliefs, as there is no clear way of translating PBI scores into attachment categories. However, poor me delusions were clearly associated with abnormal accounts of relationships with parents (as measured by the mother-care scale), whereas bad me delusions were not. These results are dissimilar to those obtained by Rankin *et al.* (2005), who found significant differences between paranoid patients (not subdivided according to type of paranoia) and healthy controls

on all four dimensions of the PBI, although, as in the present study, the greatest difference between patients and controls was observed for the mother-care scale. Comparison of the healthy control data from this study and that from Rankin *et al.* (2005) indicates broadly similar scores, but that Rankin *et al.*'s paranoid patients gave more extreme scores than the clinical participants in the present study. As Rankin *et al.*'s data was obtained in the context of a lengthy assessment of attitudes towards parents, which included an in-depth interview, it is possible that negative beliefs about parents were especially activated in that study.

The data from the DEI suggests that daily experiences may (at least in part) drive these kinds of changes, as patients espousing poor me beliefs tended to report recent loss of control experiences, whereas patients espousing bad me beliefs tended to report recent failure experiences. Of course, the present data are retrospective and it is possible that patients' reports on the DEI reflect different ways in which their perceptions of the world are distorted by the poor me and bad me delusional systems (for example, selective recall of failure experiences as a consequence of being depressed during the bad me phase). However, Bentall and Kaney (2005) have recently reported an experimental demonstration that shifts in paranoid thinking can be responses to real events. Consistent with the present findings, paranoid patients showed a marked increase in their internality judgments for negative events (that is, they became more bad me-like) when exposed to a contrived failure experience (an insoluble anagram task).

An important limitation of this study is that there was quite a lot of missing data, mainly caused by the reluctance or inability of patients to complete tests while in a highly disturbed state. (Because of the difficulties in testing patients, the fixed timetable of assessments that we originally planned was largely abandoned. However, this had a serendipitous consequence, as our decision to measure deservedness as often as possible led to the important observation that these judgments are unstable.) There was therefore insufficient data to allow within-participant comparisons of patients during poor me and bad me phases. Moreover, when participants were grouped according to whether they had ever (in the period of the project) espoused bad me beliefs or not, the results hardly differed from those obtained when grouping patients according to their deservedness ratings at the time at which the particular tests were administered. Hence, it is not possible to determine from the present findings the extent to which scores on the psychological measures might change as patients shift from espousing poor me beliefs to bad me beliefs or vice versa. It is possible that the differences on the psychological tests reflect trait differences between those who are vulnerable to shifts in perceived deservedness and those who are not (stable poor me patients). Alternatively, it is possible that patients' responses to some or all of the measures would shift along with their belief shifts. The Bentall *et al.* (2001) model predicts that attributional responses will shift along with shifts in deservedness.

A further limitation of the present study concerns the range of psychological measures employed. In retrospect, it would have been very useful to have ratings of self-esteem throughout the study, as beliefs about the self play a central role in many accounts of paranoia (particularly the attributional model, which argues that paranoid attributions about others partly arise from dysfunctional attempts to maintain a positive representation of the self). It would also have been useful to assess patients' conviction, distress and preoccupation with their delusions, to ascertain whether these characteristics systematically varied with deservedness.

Despite these limitations, overall the present findings do not support Trower and Chadwick's (1995) assumption that there are two stable types of paranoid delusional system. They are more consistent with Bentall *et al.*'s (2001) dynamic account of paranoia, which assumes that persecutory beliefs arise from dysfunctional strategies for regulating self-esteem, leading to high self-esteem, low estimates of deservedness and hence poor me paranoid beliefs on some occasions, and low self-esteem, the assumption the persecution is deserved and hence bad me paranoia on other occasions. The apparent effects of failure and loss of control experiences can also be explained by this model. According to Bentall *et al.* (2001), these kinds of influences are to be expected, as failure experiences will activate internal explanatory schemas for negative events, whereas loss of control experiences (especially when these reflect the intrusive actions of other people) will activate external, other-blaming explanatory schemas. At a more general level, it might be argued that the present findings are also consistent with Zigler and Glick's (1988) suggestion that paranoia is a form of camouflaged depression, with the underlying depression being revealed during bad me periods but remaining latent during poor me periods.

Several lines of further research are strongly indicated by the present findings. Longitudinal investigations are required to determine which, if any of the psychological processes associated with paranoia shift along with changes in patients' deservedness beliefs. To test predictions derived from the attributional model it will be particularly important to include measures of attributional style and self-esteem in such studies. It will also be important to further examine the extent to which life events really do influence patients' beliefs, using more objective measures of daily experience than those provided by the DEI.

A dynamic account of paranoia, if supported by further research, would have a number of clinical implications. Therapists should be aware of the potential for patients to shift in their evaluations of themselves, and their beliefs about the motives of their imagined tormentors, especially in response to challenging events in their daily lives. The findings underline the importance of addressing self-esteem issues, which are already addressed to some extent in modern cognitive-behavioural interventions for psychotic patients (Fowler *et al.*, 1995; Morrison *et al.*, 2003). Transitory bad me phases of symptomatology might be exploited by therapists, as it is in this phase that dysfunctional self-schemas may be more apparent. If dysfunctional strategies of regulating self-esteem are implicated in a patient's beliefs, more functional strategies may lead to more stable self-esteem, a reduction in symptoms, and reduced risk of relapse. If particular life experiences such as failure events or the experience of loss of control are implicated, therapeutic strategies to ameliorate these effects might be designed; for example, by addressing patients' assumptions about the implications of these kinds of events. Finally, where attachment issues are implicated in paranoid patients' symptoms, therapists may consider exploring their recall of early experiences with their patients, and their attitudes towards emotionally important figures in their current life.

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