

Paranoid Beliefs and Self-Criticism in Students

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Paranoid beliefs are associated with negative and malevolent views of others. This study, however, explored hostile and compassionate self-to-self relating in regard to paranoid beliefs. A total of 131 students were given a series of scales measuring paranoid ideation, forms and functions of self-criticism, self-reassurance, self-compassion and depression. Test scores were subjected to correlation and hierarchical regression analyses to explore the relative contribution of study variables to paranoid beliefs.

In this population, paranoid beliefs were associated with forms and functions of self-criticism, especially self-hating and self-persecution. Paranoid beliefs were also negatively correlated with self-kindness and abilities to be self-reassuring. These variables were also associated with depression (as were paranoid beliefs). A hierarchical regression found that self-hatred remained a predictor of paranoid ideation even after controlling for depression and self-reassurance. Paranoid beliefs seem to be associated with a critical and even hating experience of self. These inner experiences of self may be profitable targets for therapeutic intervention. Copyright © 2007 John Wiley & Sons, Ltd.

INTRODUCTION

There has been an increasing interest in the cognitive components of paranoid beliefs and attributions (McKay, Langdon, & Coltheart, 2005). Fenigstein and Venable (1992) defined subclinical paranoia as a mode of thought marked by exaggerated self-referential biases that can occur in normal everyday behaviour. Bentall, Kinderman, and Kaney (1994) suggested that paranoia is associated with an external attributional style, which can act to defend against a negative self-focus. In other words, paranoia is marked by heightened sensitivity to threats to the self, with a malevolent other-focused explanatory style. Kinderman and Bentall (1996) found that paranoid patients describe themselves with mainly positive words but believed their parents would describe them more negatively. This is in contrast to depressed people who describe themselves in negative words

and expect others to do the same. Thus, in a major review, Bentall, Corcoran, Howard, Blackwood, and Kinderman (2001) suggested that patients with paranoia have 'an exaggeration of the self-serving bias and/or a tendency to attribute negative events to powerful others' (p. 1158). In contrast, Trower and Chadwick (1995) believe there is a subgroup of paranoid patients who have a sense of shame and being 'bad'.

There are some overlaps of Bentall et al.'s (1994) attributional model with those of object relations theory. Object relations theory suggests that paranoia is related to the paranoid-schizoid, defensive position (Gilbert, 1992; Greenberg & Mitchell, 1983). In this position, individuals split good and bad, with good being on the inside and bad on the outside. However, McKay et al. (2005) did not find an attributional bias in students with paranoid beliefs. Studies have also shown that whilst paranoid beliefs are associated with an external bias (i.e., there is external blame), people with paranoid beliefs also tend to have an internal bias in the form of low self-esteem (Garety & Freeman, 1999; Martin & Penn, 2001).

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Another way of exploring paranoid beliefs is to focus on the evolved nature of threat sensitivities and defensive behaviours (Gilbert, 1989, 2001a, 2001b). In essence, paranoid beliefs indicate that the social world is experienced as threatening rather than helpful, with a need to defend self against social threats. Indeed, Freeman, Garety, Kuipers, Fowler, and Bebbington (2002) have developed a model of paranoia based upon the core process of threat. In their model, it is the anomalous or emotionally significant stimuli which stimulate a search for meaning, and this process activates various paranoid beliefs and further stimulates a sense of threat. It is also possible that such experiences have more direct access to basic threat systems and it is the inner experience of threat that then generates paranoid-type explanations. Hence, paranoid beliefs may sometimes be associated with blaming others because anger and aggression are primed basic defences to elevated threat sensitivity. As these threat detection mechanisms, and their subsequent responses are activated, they automatically direct processing to others as causes of harm. It has been found, for example, that if one's immediate response to a threat is anger then not only will the anger come with various action tendencies but also with dispositions for information processing that affects subsequent processing (Lerner & Keltner, 2001). Lerner and Keltner (2001) call this *appraisal tendency*, appraisals that are guided by the aroused affect (see also McNally, 2001 for a discussion of such issues). In the evolutionary model, it is threat sensitivities (be these genetic, conditioned and/or metacognitively influenced) that are crucial for the formation of vulnerabilities to psychopathology. Moreover, externally focused threat sensitivity may be linked to depression, low esteem and self-criticism (Gilbert & Irons, 2005). In a mixed clinical population, Gilbert, Boxall, Cheung, and Irons (2005) found that paranoid beliefs were also associated with high social anxiety and submissive behaviour.

Related to these issues is the question of how people with paranoid beliefs treat themselves. For example, people can detect and respond to threats with a general aggressive and defensive style that can be directed internally, externally or both. This idea is not new and relates to an older research paradigm, which focused on intrapunitiveness (punishing the self) and extrapunitiveness (punishing others). Both can coexist and can be associated with psychopathology (e.g., Blackburn, Lyketsos, & Tsiamntis, 1979; Clay, Anderson, & Dixon, 1993).

There is evidence that self-criticism, and the inability to be self-soothing and self-reassuring in the face of life difficulties, are associated with vulnerability to a variety of psychopathologies (Blatt & Zuroff, 1992; Gilbert & Irons, 2005; Gilbert, Clarke, Hempel, Miles, & Irons, 2004; Neff, 2003a, 2003b).

Currently, the relationship between self-evaluation (relating to self-descriptions) and the abilities to be self-reassuring or self-critical in the face of mistakes and setbacks, is not well understood. Although, as noted by Bentall et al. (2001), people with paranoia can describe themselves in positive ways and others in more negative terms, there is no reason to assume that they are not also self-critical, especially if they make mistakes. Indeed, Gilbert and Miles (2000) found that when people were asked about how they respond if they are criticized, they found no correlation between blaming self and blaming others for the criticism; in other words, any combination is possible. It is possible that people with paranoid beliefs may feel vulnerable to others *and* their own self-criticism. For example, making a mistake might generate a lot of anger with oneself for having let oneself down or having made oneself vulnerable to others. In any event, there can be a generalized activation of 'attack sensitivity' that can arise from both outside and inside the self. Moreover, such individuals may find it difficult to be self-reassuring, especially if they lack internal memories and schema of others as being reassuring and helpful (see Baldwin & Dandeneau, 2005; Mikulincer & Shaver, 2004) for reviews). Hence, this study set out to explore the relationship of self-criticism and self-reassurance with paranoid beliefs in a student population.

METHOD

Participants

Participants were recruited from the University of Derby and Aston University. A total of 131 participants (107 undergraduates from Aston University and 24 from the University of Derby) were recruited for this study. No significant differences were found in age, gender or ethnicity between the two groups; therefore, these were combined for the purposes of the study. The mean age of the sample was 22.10 years (standard deviation [SD] = 6.00), with 83 females and 48 males. Ethical approval for the study was obtained from the University of Derby and Aston University Research Ethics Committees. Participation in the study was voluntary

and students were informed of the study by announcements made at the end of lectures. A complete description of the study was given to the participants, who then gave their written informed consent. Following this, all participants completed a series of self-report questionnaires.

Measures

Paranoid Ideation Scale

Developed by Fenigstein and Venable (1992), this scale measures subclinical paranoid ideation, a mode of thought which is highly self-referential and characterized by stable tendencies in attributing malevolence to others and external control. The scale consists of 20 items, measuring paranoid experiences (e.g., 'I sometimes feel as if I'm being followed') and paranoid beliefs (e.g., 'It is safe to trust no-one'). Items are answered on a 5-point Likert scale, ranging from 1 = not at all to 5 = extremely. Responses are summed to produce a score, which ranges from 20 to 100; higher scores reflect higher levels of subclinical paranoia. In a factor analysis of non-clinical groups, Fenigstein and Venable (1992) found the scale to comprise of a single factor with Cronbach's alpha of 0.81 to 0.87. The scale has been used in a number of other studies (Combs, Penn, & Fenigstein, 2002; Ellett, Lopes, & Chadwick, 2003; Martin & Penn, 2001). Cronbach's alpha for this study are presented in Table 1.

Centre for Epidemiological Studies Depression Scale (CES-D)

Developed by Radloff (1977), this scale measures depressive symptomatology in a non-psychiatric

population. The 20 items assess a range of symptoms, such as feelings of guilt, sleep disturbance and depressed mood. The responses are given on a 4-point Likert scale, describing feelings over the past week. Scores range from 0 to 60, with higher scores representing a more depressed mood. Radloff (1977) found internal consistency coefficients of greater than 0.84. This scale has been recommended for use in a general population (Gotlib & Hammen, 1992). Cronbach's alpha for this study are presented in Table 1.

Forms of Self-Criticizing/Attacking and Self-Reassuring Scale

This scale was developed by Gilbert et al. (2004) to measure self-criticism and the ability to self-reassure. It is a 22-item scale, which measures different ways people think and feel about themselves when things go wrong for them. The items make up three components. There are two forms of self-criticizing: inadequate self, which focuses on a sense of personal inadequacy ('I am easily disappointed with myself'); and hated self, which measures the desire to hurt or persecute the self ('I have become so angry with myself that I want to hurt or injure myself'). The third component is the ability to reassure the self ('I am able to remind myself of positive things about myself'). Responses are given on a 5-point Likert scale (0 = not at all like me, to 4 = extremely like me). Cronbach's alpha for this study are presented in Table 1.

Functions of Self-Criticizing/Attacking

This 21-item scale measures the functions and reasons people offer for being self-critical (Gilbert

Table 1. Means, standard deviations (SD) and Cronbach's alpha

Variables	Mean	SD	Alpha
Paranoid ideation scale	34.20	16.56	0.94
Forms: Inadequate self	15.30	7.90	0.89
Forms: Reassure self	19.60	5.86	0.82
Forms: Hated self	3.00	3.60	0.78
Functions: Self-correction	18.69	9.40	0.88
Functions: Self-persecution	3.91	5.64	0.92
Self-compassion scale: Self-kindness	13.27	3.95	0.79
Self-compassion scale: Common humanity	11.80	3.47	0.75
Self-compassion scale: Mindfulness	11.42	3.47	0.80
Self-compassion scale: Self-judgement	13.00	3.80	0.77
Self-compassion scale: Isolation	10.76	3.40	0.78
Self-compassion scale: Over-identification	10.92	3.70	0.77
Centre for Epidemiological Studies Depression	18.53	11.57	0.80

et al., 2004). Factor analysis suggests two very different functions for being self-critical. The first, termed 'self-correction', is to try and improve the self and to stop the self from making mistakes (e.g., 'To make me concentrate'). The second factor, termed 'self-persecution', is to express anger with the self (e.g., 'To cope with feelings of disgust with myself'). The responses are given on a 5-point Likert scale (ranging from 0 = not at all like me, to 4 = extremely like me). Cronbach's alpha for this study are presented in Table 1.

Self-Compassion Scale

This scale was developed by Neff (2003b) to measure self-compassion. There are six subscales, three measuring self-compassion and three measuring coldness towards the self. The self-compassion subscales (13 items) consist of common humanity ('When things are going badly for me, I see the difficulties as part of life that everyone goes through'); self-kindness ('I try to be loving towards myself when I'm feeling emotional pain'); and mindfulness ('When something upsets me I try to keep my emotions in balance').

The self-coldness subscales (13 items) consist of self-judgment ('I'm disapproving and judgmental about my own flaws and inadequacies'); over-identification ('When I'm feeling down I tend to obsess and fixate on everything that is wrong'); and isolation ('When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world'). The 26 items are all answered on a 5-point Likert scale (1 = almost never to 5 = almost always). Cronbach's alpha for this study are presented in Table 1.

RESULTS

All analyses were carried out using the SPSS package version 11.5. Data were screened for normality of distribution and outliers. Preliminary analysis revealed a largely normally distributed sample. There were two subscales (hated self and self-persecution), both from the forms and functions of the self-criticism scale, which were slightly positively skewed. Skewness values ranged from 0.09 to 1.78 and Kurtosis values ranged from -0.04 to 2.37, with no extreme outliers on either scale.

The means and SDs are presented in Table 1. The means and SDs for depression, forms and functions of self-criticism and self-reassuring were similar to previous studies with non-clinical populations (Gilbert et al., 2004).

Correlation Analysis

Pearson's correlation coefficients are presented in Table 2. Potential difficulties in collinearity were investigated and it was found that there was no major collinearity within these variables.

Paranoid Beliefs

As other studies have found (Gilbert et al., 2005; Martin & Penn, 2001; McKay et al., 2005), paranoid thinking was correlated with depression ($r = 0.40$). The key finding of this study, however, is that paranoid beliefs are correlated with both forms (how people self-criticize) and functions (why people self-criticize) of self-criticism. Self-persecution ($r = 0.40$) and hated self ($r = 0.44$) are highly related to paranoid ideation in this sample. The negative factors of the self-compassion scale (self-judgement, isolation and over-identification) tell a similar story and are significantly correlated with paranoid beliefs. It appears that both the external world *and* the internal world can be experienced as hostile.

With regard to being able to reassure the self and have warm feelings for the self to setbacks, the data suggest that people with paranoid beliefs may struggle with this. Paranoid beliefs had a small but significant inverse relationship with self-reassurance, and were negatively correlated with self-kindness on the self-compassion scale.

Depression

There was a similar story for the associations between depression and the forms and functions of the self-criticizing and reassuring scale and the self-compassion scale. Depression was highly correlated with both forms and functions of self-criticism, in particular inadequate self ($r = 0.66$) and hated self ($r = 0.60$). Depression was negatively associated with self-reassurance. This suggests that a critical self-to-self relating style and a lack of self-reassurance may act as a vulnerability to depression. The negative factors of the self-compassion scale (self-judgement, isolation and over-identification) were highly correlated with depression, whilst the positive factors of the self-compassion scale (self-kindness, common humanity and mindfulness) showed weak, negative relationships with depression.

Hierarchical Regression

Hierarchical regression was performed to explore the impact of self-hating (the highest correlate with

Table 2. Pearsons' correlations (two-tailed) for all measures

Variables	PIS	IS	RS	HS	SC	SP	SCS: SK	SCS: CH	SCS: M	SCS: SJ	SCS: I	SCS: O
Forms and functions of self-criticizing and reassuring scale												
IS	0.32**											
RS	-0.27**	-0.44**										
HS	0.44**	0.58**	-0.50**									
SC	0.33**	0.50**	-0.22*	0.37**								
SP	0.40**	0.45**	-0.44**	0.77**	0.46**							
Self-compassion scale (SCS)												
SCS: SK	-0.23*	-0.39**	0.55**	-0.23**	-0.20*	-0.19*						
SCS: CH	-0.16	-0.19*	0.45**	-0.12	0.06	-0.11	0.61**					
SCS: M	-0.12	-0.22*	0.49**	-0.12	0.13	-0.14	0.55**	0.70**				
SCS: SJ	0.20*	0.70**	-0.46**	0.53**	0.49**	0.47**	-0.24**	-0.11	-0.17			
SCS: I	0.25**	0.68**	-0.44**	0.43**	0.40**	0.36**	-0.26**	-0.18*	-0.25**	0.69**		
SCS: O	0.17*	0.67**	-0.40**	0.39**	0.32*	0.33**	-0.21*	-0.21*	-0.30**	0.67**	0.78**	
Depression scale												
CEES-D	0.40**	0.66**	-0.52**	0.60**	0.42**	0.45**	-0.38**	-0.18*	-0.19*	0.52**	0.61**	0.49**

p* < 0.05. *p* < 0.01.

PIS = paranoid ideation scale. IS = inadequate self. RS = reassure self. HS = hated self. SC = self-correction. SCS: SK = self-kindness. SCS: CH = common humanity. SCS: M = mindfulness. SCS: SJ = self-judgement. SCS: I = isolation. SCS: O = over-identification. CES-D = Centre for Epidemiological Studies Depression.

paranoid beliefs), and self-reassurance on paranoia, whilst controlling for depression but entering it first. The independent variables accounted for 23% of the variance in the dependant variable, and were significant predictors of paranoia ($F = 12.35$; degrees of freedom [df] = 3, 122; $p = 0.00$). When entered into the regression model, self-hating and depression were significant predictors of paranoid beliefs. Self-hating is the most important predictor with the highest beta value ($\beta = 0.33$), followed by depression ($\beta = 0.23$). Thus, it would seem that self-hating may play an important role in paranoid beliefs even after controlling for depression.

DISCUSSION

This study found that paranoid beliefs in students are associated with a highly self-critical style and problems in being self-reassuring and kind to the self. In the hierarchical regression, self-hatred remains a significant predictor of paranoid beliefs even after controlling for depression. The general picture to emerge then is that paranoid beliefs are associated with an elevated sense of threat, both from others and also from within the self. This finding is not at odds with other models such as Bentall's model (Bentall et al., 2001) because people can have a positive view of themselves but also be intensely self-critical. For example, such individuals are sometimes those who are seen to have high perfectionistic or exacting standards (Dunkley, Zuroff, & Blankstein, 2003). This is not to say that paranoid people are perfectionistic but just to give an example of how people with positive self-views can be self-critical. Key for therapy may be to address the inability to feel safe with others and also to be reassuring within one's self. People with paranoid beliefs appear to live in a hostile, rather cold world, where a certain kind of affiliative emotion, both from others and within the self, may be constricted. If a sense of social safeness, care and support from others is an important feature for mental health (Baldwin, 2005; Mikulincer & Shaver, 2004), then seeking to generate these experiences may be an important therapeutic endeavour (Gilbert & Irons, 2005).

There are major concerns in extrapolating from a student (young and predominantly female) population to a clinical one. There are also concerns with the way persecutory and paranoid beliefs are measured (McKay et al., 2005). Nonetheless, this is the first study to show that paranoid beliefs are associated with an internal self-critical and

self-attacking style, and problems with self-reassurance, at least in contexts where things go wrong for people or they make mistakes. A possible implication of this finding is whether helping people with paranoid beliefs to reduce their self-criticism (reduce internal threat) and become more compassionate towards themselves and others would reduce these beliefs and the distress associated with them (Gilbert & Irons, 2005).

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REFERENCES

- Baldwin, M.W. (2005). *Interpersonal cognition*. New York: Guilford.
- Baldwin, M.W., & Dandeneau, S.D. (2005). Understanding and modifying the relational schemas underlying insecurity. In M.W. Baldwin (Ed.), *Interpersonal cognition* (pp. 33–61). New York: Guilford.
- Bentall, R.P., Corcoran, R., Howard, R., Blackwood, N., & Kinderman, P. (2001). Persecutory delusions: A review and theoretical integration. *Clinical Psychology Review*, 21, 1143–1192.
- Bentall, R.P., Kinderman, P., & Kaney, S. (1994). The self, attributional processes and abnormal beliefs towards a model of persecutory delusions. *Behaviour Research and Therapy*, 32, 331–341.
- Blackburn, I., Lyketos, G., & Tsiamntis, J. (1979). The temporal relationship between hostility and depressed mood. *British Journal of Social & Clinical Psychology*, 18, 227–235.
- Blatt, S., & Zuroff, D. (1992). Interpersonal relatedness and self-definition. Two prototypes for depression. *Clinical Psychology Review*, 12, 527–562.
- Clay, D., Anderson, W., & Dixon, W. (1993). Relationship between anger expression and stress in predicting depression. *Journal of Counselling and Development*, 72, 91–94.
- Combs, D.R., Penn, D.L., & Fenigstein, A. (2002). Ethnic differences in subclinical paranoia: An expansion of norms of the paranoia scale. *Cultural Diversity and Ethnic Minority Psychology*, 8, 248–256.
- Dunkley, D.M., Zuroff, D.C., & Blankstein, K.R. (2003). Self-critical perfectionism and daily affect: Dispositional and situational influences on stress and coping. *Journal of Personality & Social Psychology*, 84, 234–252.
- Ellett, L., Lopes, B., & Chadwick, P. (2003). Paranoia in a nonclinical population of college students. *Journal of Nervous and Mental Disease*, 191, 425–430.
- Fenigstein, A., & Venable, P.A. (1992). Paranoia and self-consciousness. *Journal of Personality and Social Psychology*, 62, 129–138.
- Freeman, D., Garety, P.A., Kuipers, E., Fowler, D., & Bebbington, P.E. (2002). A cognitive model of persecutory delusions. *British Journal of Clinical Psychology*, 41, 331–347.
- Garety, P.A., & Freeman, D. (1999). Cognitive approaches to delusions: A critical review of theories and evidence. *British Journal of Clinical Psychology*, 38, 113–154.
- Gilbert, P. (1989). *Human nature and suffering*. Hove: Lawrence Erlbaum Associates.
- Gilbert, P. (1992). *Depression: The evolution of powerlessness*. Hove: Lawrence Erlbaum Associates.
- Gilbert, P. (2001a). Evolutionary approaches to psychopathology: The role of natural defenses. *Australian and New Zealand Journal of Psychiatry*, 35, 17–27.
- Gilbert, P. (2001b). Evolution and social anxiety: The role of attraction, social competition and social hierarchies. In F.R. Schneier (Ed.), *Social anxiety disorder: The Psychiatric Clinics of North America*, (Vol. 24, pp. 723–751). Philadelphia: W.B. Saunders Co.
- Gilbert, P., Boxall, M., Cheung, M., & Irons, C. (2005). The relation of paranoid ideation and social anxiety in a mixed clinical population. *Clinical Psychology and Psychotherapy*, 12, 124–133.
- Gilbert, P., Clarke, M., Hempel, S., Miles, J.N.V., & Irons, C. (2004). Criticizing and reassuring oneself: An exploration of forms, styles and reasons in female students. *British Journal of Clinical Psychology*, 43, 31–50.
- Gilbert, P., & Irons, C. (2005). Focused therapies and compassionate mind training for shame and self attacking. In P. Gilbert (Ed.), *Compassion: Conceptualisations, research and use in psychotherapy* (pp. 263–325). London: Routledge.
- Gilbert, P., & Miles, J.N.V. (2000). Sensitivity to social put-down: Its relationship to perceptions of social rank, shame, social anxiety, depression, anger and self-other blame. *Personality and Individual Differences*, 29, 757–774.
- Gotlib, I.H., & Hammen, C. (1992). *Psychological aspects of depression: Towards a cognitive-interpersonal integration*. New York: Wiley.
- Greenberg, J.R., & Mitchell, S.A. (1983). *Object relations in psychoanalytic theory*. Cambridge, MA: Harvard University Press.
- Kinderman, P., & Bentall, R.P. (1996). Self-discrepancies and persecutory delusions: Evidence for a model of paranoid ideation. *Journal of Abnormal Psychology*, 105, 106–113.
- Lerner, J.S., & Keltner, D. (2001). Fear, anger and risk. *Journal of Personality and Social Psychology*, 81, 146–159.
- Martin, J.A., & Penn, D.L. (2001). Brief report: Social cognition and subclinical paranoid ideation. *British Journal of Clinical Psychology*, 40, 261–265.
- McKay, R., Langdon, R., & Coltheart, M. (2005). Paranoia, persecutory beliefs and attributional biases. *Psychiatry Research*, 136, 233–245.
- McNally, R.J. (2001). On the scientific status of cognitive appraisal models of anxiety disorders. *Behaviour Research and Therapy*, 39, 513–521.
- Mikulincer, M., & Shaver, P.R. (2004). Security-based self-representations in adulthood: Contents and process. In W.S. Rholes, & J.A. Simpson (Eds), *Adult attachment: Theory, research, and clinical implications* (pp. 159–195). New York: Guilford.

- Neff, K. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity, 2*, 223–250.
- Neff, K. (2003b). Self-compassion: An alternative conceptualisation of a healthy attitude toward oneself. *Self and Identity, 2*, 85–102.
- Radloff, L.S. (1977). The CES-D scale: A new self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401.
- Trower, P., & Chadwick, P. (1995). Pathways to defense of the self: A theory of two types of paranoia. *Clinical Psychology: Science and Practice, 2*, 263–278.