

An Exploration into Depression-Focused and Anger-Focused Rumination in Relation to Depression in a Student Population

Paul Gilbert, Mimi Cheung, Chris Irons and Kirsten McEwan

Kingsway Hospital, Derby, UK

Abstract. Research has shown an important link between depression and rumination. This study set out to explore depression-focused rumination and anger-focused rumination in relation to shame and entrapment, and depression. 166 undergraduate students completed a battery of self-report questionnaires measuring current depression, rumination on depressive symptoms, rumination on anger, and the frequency of shame-focused and entrapment-focused thoughts. Both depression-focused and anger-focused rumination were related to depression, and to the frequency of shame and entrapment thoughts. In a mediational model, the link between depression-focused rumination and depression was partially mediated by feeling trapped by, and wanting to escape from, one's thoughts and feelings. Thus the link between rumination and depression is complex. Although rumination may contribute to depression by generating a spiral of negative thinking and negative feeling, feeling trapped and unable to control one's rumination, and being flight motivated, may add a further dimension to the depressogenic qualities of rumination.

Keywords: Depression, rumination, anger, shame, entrapment.

Introduction

There has been increasing research on depression exploring the role of repetitive thoughts (rumination) about one's depression and symptoms (Nolen-Hoeksema, 1991; Nolen-Hoeksema and Davis, 1999; Nolen-Hoeksema and Morrow, 1991; Nolen-Hoeksema, Grayson and Larson, 1999; Nolen-Hoeksema, Marrow and Fredrickson, 1993; Wells, 2000). Lyubomirsky and Tkach, (2003) reviewed the literature on the consequences of rumination, with evidence for poor problem solving, impaired motivation and inhibition of instrumental behaviour, impaired concentration and cognition, increased stress and problems, threats to physical health (i.e. delays in seeking medical advice), impaired social relationships and emotional adjustment. They also found that individuals who ruminate show more chronic and severe depression.

Rumination, however, is a complex process that can differ from self-reflection (Trapnell and Campbell, 1999), and analytic versus non-analytic focus (Watkins and Teasdale, 2004). A key question is whether other forms and foci of rumination can be depressogenic. For example, depressed men in particular may ruminate on anger and injustice (Cochran and

Reprint requests to Paul Gilbert, Mental Health Research Unit, Kingsway House, Kingsway Hospital, Derby DE22 3LZ, UK. E-mail: p.gilbert@derby.ac.uk.

© 2005 British Association for Behavioural and Cognitive Psychotherapies

Rabinowitz, 2000, 2003) or depression can be associated with a fear of anger and ruminating on concerns with hurting others (Brody, Haag, Kirk and Solomon, 1999). Sukhodolsky, Golub and Cromwell (2001) developed an anger rumination scale to measure different aspects of anger rumination (angry memories, thoughts of revenge, angry afterthoughts and understanding of causes). All elements of anger rumination were found to correlate negatively with a satisfaction of life scale.

People can also ruminate on the self, revisiting thoughts and feelings of a negative and shamed sense of self (Andrews, Qian and Valentine, 2002; Gilbert, 1992, 2000a; Tangney, 1995). Indeed, Beck, Emery and Greenberg (1985) argued that one of the distinguishing features between social anxiety and shame was that social anxiety decreases after an anxious event, whereas shame may increase after an event due to rumination about how badly one (thinks one) did in a situation. Ruminating on negative self-cognitions is key to the cognitive theory of depression (Beck, Rush, Shaw and Emery, 1979), and shame has long been linked to depression (Kaufman, 1989). There are, however, different types of shame. Internal shame focuses on the negative beliefs about the self, and external shame focuses on what one thinks others think of the self (Gilbert, 1998, 2003).

In a biopsychosocial approach to depression, Gilbert (1992, 2004) suggested that life events associated with depression are commonly experienced as traps. A person can have strongly aroused feelings of wanting to escape (flight), but feel unable to – termed “entrapment”. Brown, Harris and Hepworth (1995) and Farmer and McGuffin (2003) found that social events that are experienced in some way as humiliating or shaming (loss of rank/status), and from which the person feels unable to escape (e.g. an abusive or unsupportive spouse), are more depressogenic than loss events alone. Using self-report assessments of defeat and entrapment, where entrapment was measured as having strong desires to escape but feeling unable to, Gilbert and Allan (1998) found both were highly associated with depression, and more so than hopelessness. Swallow (2000) and Gilbert (2000b) describe how the theme of entrapment is common in working cognitively with depressed people. Hence, people may ruminate on their feelings of entrapment, inability to escape and sense of being defeated (Gilbert and Allan, 1998; Gilbert, Allan, Brough, Melley and Miles, 2002). Entrapment and ruminating on escape has been linked to suicide (Baumeister, 1990; O’Connor, 2003).

Using a questionnaire measure, Gilbert and Allan (1998) found that internal entrapment (feeling trapped by one’s own thoughts and feelings and wanting to get away from them) was highly related to depression. In recent qualitative research, depressed people have suggested that they can feel trapped “in a depression” and/or by their thoughts/feelings (Gilbert and Gilbert, 2003). Gilbert et al. (2001) found that feeling trapped with, and wanting to escape from, malevolent voices was significantly associated with depression in psychotic voice hearers. It is possible that rumination impairs mental health when flight motivation is aroused but blocked (Gilbert, 2001). In this context the “flight/escape” system (e.g. of the amygdala and hypothalamic-pituitary-adrenal system; Panksepp, 1998) may be chronically aroused, contributing to a depressed state (Gilbert, 2001, 2004).

This study set out, first, to explore how depression-focused and anger-focused rumination are linked in depression. Second, to explore the relationship between shame, rumination and depression. Third, to explore the link between depression, depressive rumination and feelings of entrapment and wanting to get away from/stop one’s thoughts. Finally, we explored whether the desire to get away from repetitive depressive thinking mediated the link between rumination and depression?

Method

Participants

One hundred and sixty-six undergraduate psychology students (138 females, 28 males) were recruited from the University of Derby, with age ranging between 18 to 65 years (mean = 22.07, $SD = 7.24$).

Procedure

Participants were given a series of self-report questionnaires at the end of their lectures. Upon completion of the questionnaires, the students received course credit for their participation. In line with the university's ethical requirements, it was emphasized that their co-operation was voluntary and that their answers were confidential and used only for the purpose of this study.

Measures

Rumination on symptoms

The Response Styles Questionnaire (RSQ) was developed by Nolen-Hoeksema and Morrow (1991) and contains 41 items. For this study we used the 22-item Ruminative Response Scale (RRS), a subscale for measuring the frequency of ruminative thoughts and action in response to depressive symptoms. Respondents are asked to "indicate what you generally do . . . when you feel down, sad or depressed" on a 4-point scale (1 = almost never, to 4 = almost always) to items such as "Think about how alone you feel" or "Think about how sad you feel". The scale has shown to have a good Cronbach alpha of 0.89 (Nolen-Hoeksema and Morrow, 1991).

Anger rumination

The Anger Rumination Scale (ARS) was developed by Sukhodolsky et al. (2001) to measure how often individuals ruminate about previous anger episodes and how they engage in anger-provoking scenarios. This is divided into four subscales: Angry Memories, Understanding of Causes, Angry Afterthoughts, and Thoughts of Revenge. For example, items of each of the domains are as follows: "I keep thinking about events that angered me for a long time"; "I have had times when I could not stop being preoccupied with a particular conflict"; "I re-enact the anger episode in my mind after it has happened"; and "When someone makes me angry I can't stop thinking about how to get back at this person". The 19 items are measured on a 4-point scale from 1 = almost never to 4 = almost always. The test-retest reliability over a one-month period was 0.77 and the Cronbach alpha for the total scale was 0.93 (Sukhodolsky et al., 2001).

External shame

The Other as Shamer Scale (OAS) was developed from Cook's (1993) Internalized Shame Scale by Allan, Gilbert and Goss (1994) and Goss, Gilbert and Allan (1994). It assesses global judgments of how people think others see them (e.g. "I think other people see me as inadequate") thus focusing on external shame rather than internalized shame. The scale

consists of 18 descriptions of feelings or experiences and respondents indicate the frequency on a 5-point Likert scale from 0 (never) to 4 (almost always). Goss et al. (1994) found the scale to have a good Cronbach alpha of 0.92. Because the scale asks about how often people think this way, it measures thought frequency.

Internal and external entrapment

The Entrapment Scale (ES) was developed by Gilbert and Allan (1998) and measures internal and external entrapment. The 6 items of the “internal” entrapment subscale relate to escape motivation in regard to internal feelings and thoughts such as “I would like to escape from my thoughts and feelings” or “I feel trapped inside myself”. The 10-item “external” entrapment subscale relates to perceptions of things in the outside world that induces escape motivation such as “I think I am in a trapped situation” or “I can see no way out of my current situation”. For this study, we changed the response scale (e.g. “the degree to which each statement is like you”) to a frequency scale (e.g. “the frequency you find yourself thinking or feeling”). The 5-point scale ranges from 0 = never to 4 = almost always. In their study, Gilbert and Allan (1998) found high internal consistencies for the internal and external subscales in a student group (Cronbach alphas = 0.93 and 0.88, respectively).

Depressive symptoms

The Centre for Epidemiological Studies Depression Scale (CES-D) was developed to measure depressive symptomology in non-psychiatric populations (Radloff, 1977), and has been recommended for use in the general population (Gotlib and Hammen, 1992). It is a 20-item scale that measures a range of symptoms (e.g. feelings of low self-esteem, depressed mood, restless sleep). Respondents indicate on a 4-point scale (0–3) the frequency of having had the symptoms in the past week. Scores range from 0 to 60 with higher scores indicating greater depressive symptoms. Radloff (1977) found this scale to have a Cronbach alpha greater than 0.84.

Results

All analyses were carried out using the SPSS package version 10 for PCs. Data were screened for normality of distribution and outliers. Preliminary analysis revealed a normally distributed sample (Skewness values ranged from -0.10 to 1.27 and Kurtosis values ranged from -0.06 to 1.29) and no extreme outliers.

Descriptives

The means and standard deviations for this study are presented in Table 1. The means and standard deviations for depression, entrapment and shame were similar to previous studies with non-clinical populations (Gilbert and Allan, 1998; Goss et al., 1994). The ruminative response scale and anger rumination mean scores were also similar to previous studies (Nolen-Hoeksema et al., 1999; Sukhodolsky et al., 2001).

Table 1. Correlations (two-tailed Pearson's r) for all measures

Variables	RRS	ARS	AM-ARS	TR-ARS	AA-ARS	UC-ARS	OAS	INT-E	EXT-E
ARS	.56***								
AM-ARS	.52***	.80***							
TR-ARS	.20*	.68***	.40***						
AA-ARS	.50***	.88***	.58***	.48***					
UC-ARS	.53***	.84***	.55***	.48***	.69***				
OAS	.55***	.51***	.49***	.24**	.41***	.47***			
INT-E	.68***	.52***	.56***	.14	.47***	.43***	.64***		
EXT-E	.65***	.51***	.51***	.18*	.46***	.43***	.60***	.81***	
CES-D	.63***	.42***	.44***	.10	.37***	.39***	.56***	.68***	.65***
Mean	45.22	34.94	9.83	6.01	10.86	8.25	19.63	6.79	12.61
SD	14.09	8.25	2.74	1.80	3.18	2.39	13.49	6.64	9.17

* $p < .05$; ** $p < .01$; *** $p < .001$.

RRS, Ruminative Response Scale; ARS, Anger Rumination; AM-ARS, Angry Memories; TR-ARS, Thoughts of Revenge; AA-ARS, Angry Afterthoughts; UC-ARS, Understanding of Causes; OAS, Other as Shamer; INT-E, Internal Entrapment; EXT-E, External Entrapment; CES-D, Centre for Epidemiological Studies Depression.

Correlational analysis

The Pearson Product Moment Correlation coefficients are presented in Table 1. We investigated potential difficulties in co linearity and found that the Variance Inflation Factors indicated no major co linearity within these variables.

Types of rumination. As other studies have found, ruminating on depressive symptomatology was highly correlated with depression ($r = 0.63$). In addition, all forms of anger rumination are significantly associated with depression ($r = 0.44$, $-r = .37$), apart from thoughts of revenge, which was not correlated with depression ($r = 0.10$). Perhaps revenge rumination is empowering in some way. We also found a moderate correlation ($r = .56$) between anger-focused and depression-focused rumination. Clearly, depressed people do not ruminate only about their depression – but anger and shame too.

Shame. The degree to which one thinks others look down on the self, and negatively evaluate the self (external shame thoughts), is significantly associated with depression, entrapment, depression-focused rumination and anger-focused rumination.

Entrapment. As found in other studies (e.g. Gilbert and Allan, 1998, Gilbert et al., 2002), depression was highly correlated with internal entrapment ($r = 0.68$) and external entrapment ($r = 0.65$). The entrapment scale measures how often one thinks in this way and thus it is the frequency of thinking about being trapped that is highly related to depressive rumination. Experiences of entrapment are also related to anger rumination, although it is notable that (as for depression) rumination on revenge is not related or only minimally so to entrapment.

Regression analysis

To explore the relative contribution of the two types of rumination (depression-focused rumination, and anger-focused rumination) and the experiences of shame thoughts and

Table 2. Standard multiple regression analysis for shame, rumination, entrapment and anger rumination as predictors of depression

	<i>Beta</i>	<i>sr</i>
RRS	0.26**	0.17
ARS	-0.04	-0.03
OAS	0.14*	0.10
INT-E	0.29**	0.15
EXT-E	0.19*	0.10

* $p < .05$; ** $p < .01$.

Beta = Standardized regression coefficient; *sr* = Semi-partial correlation.

RRS, Ruminative Response Scale; ARS, Anger Rumination; OAS, Other as Shamer; INT-E, Internal Entrapment; EXT-E, External Entrapment.

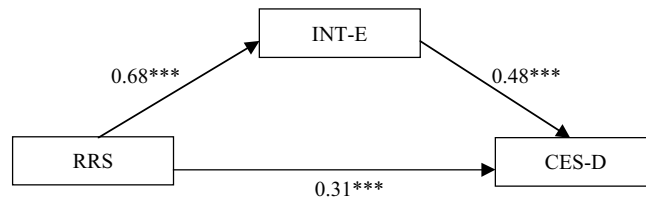


Figure 1. Path analysis showing the effect of entrapment on the relationship between ruminative response and depression. *** $p < .001$. RRS, Ruminative Response Scale; INT-E, Internal Entrapment; CES-D, Centre for Epidemiological Studies Depression.

entrapment thoughts to depression, a standard multiple regression was conducted. The results are presented in Table 2. There was no indication of inappropriate Skewness or Kurtosis that would invalidate this analysis.

The regression equation accounted for 54% of the variance in the prediction of depression [$F_{(5,160)} = 37.87$; $p < .0001$]. It can be seen that when all research variables were entered, only anger rumination failed significantly to contribute to the variance. Internal entrapment yielded the highest beta value ($\beta = 0.29$, $p < 0.01$) in the prediction of depression, with depression-focused rumination obtaining the next highest beta value ($\beta = 0.26$, $p < 0.01$). Thus, entrapment is a powerful predictor of depression even after controlling for rumination.

Mediational analysis

In view of the findings, we were particularly interested in whether internal entrapment mediated the relationship between depression-focused rumination and depression. That is, ruminating on one's symptoms may be more depressogenic if people also feel trapped by their thoughts and feelings (find them unpleasant) and are flight motivated – want to stop or get away from them. Using the four steps recommended by Baron and Kenny (1986), we conducted a path analysis. The path diagram is given in Figure 1.

Step 1 assesses whether the predictor variable (symptom rumination) is significantly related to the dependent variable (depression). The analysis found that symptom rumination was significantly related to depression ($F_{(1,164)} = 107.20, p < .000, R^2 = .40$). Step 2 ascertains whether the predictor variable is significantly related to the hypothesized mediator (internal entrapment). The regression analysis produced a significant model ($F_{(1,164)} = 141.12, p < .000, R^2 = .46$). Step 3 examines whether the hypothesized mediator is significantly related to depression when controlling for the effect of symptom rumination. Again, this analysis produced a significant model ($F_{(2,163)} = 87.28, p < .000, R^2 = .51$). The final part of the analysis assesses the degree to which the hypothesized mediator (in this case feeling trapped and wanting to get away from one's thoughts) actually mediates the relationship between rumination and depression. Results suggest that entrapment does partially mediate the link between depression-focused rumination and depression.

Discussion

The cognitive model of depression suggests that people's depressions can worsen due to an interacting cycle of negative thoughts and moods (Beck et al., 1979; Wells, 2000). Nolen-Hoeksema and her colleagues (Nolen-Hoeksema et al., 1993, 1999) have shown that an element of this process is due to a ruminative style of thinking, especially about one's depression. This study has added to these findings in three ways. First, we have found that anger rumination may also play a role in depression and that anger-focused and depression-focused rumination are linked. Interestingly, the subscale "thoughts of revenge" did not correlate with depression. Perhaps having fantasies of revenge is empowering in some way, and it is feeling powerless that is particularly depressogenic (Gilbert, 1992). Revenge involves thinking about what one is going to do or what one could do, and gaining some kind of victory over another person. This is clearly different from ruminating on oneself as failed and as ashamed.

Second, shame has long been linked to depression (Andrews et al., 2002; Gilbert, 1992, 2000a; Tangney, 1995), and again this study shows this relationship. In addition, shame thoughts are linked to both depression-focused rumination and anger-focused rumination. Tangney, Wagner, Barlow, Marschall and Gramzow (1996) found shame to be related to felt-anger and anger rumination, and we also found (using different measures) that shame is linked to anger rumination. Also in relation to shame, Blatt (1995) points out that perfectionists ruminate about their reputations and concerns with external shame, with a loss of status, sometimes precipitating suicide as a form of escape.

Third, within a biopsychosocial (Gilbert, 1992, 2001, 2004) and ecological approach to depression, issues of power, freedom and entrapment are seen to play an important role in mood regulation. Like other studies, this study found that entrapment was powerfully linked to depression (Brown et al., 1995; Farmer and McGuffin, 2002; Gilbert and Allan 1998; Gilbert et al., 2002). Furthermore, experiences of entrapment are linked to rumination. It would seem that although ruminating on one's depression is related to feelings of wanting to escape from them (internal entrapment), these two psychological processes also make independent contributions to the variance of depression. A key question is whether people passively accept their ruminations, or whether they experience their ruminations as unwanted intrusions and metacognitions from which they want to escape. Baumeister (1990), for example, suggests that people can be so distressed by their own thoughts and ruminations that suicide is a means

of escape. Indeed, in the regression analysis internal entrapment was the most potent variable in predicting depression.

These findings are in line with a study of negative thoughts in depression and malevolent voices in psychotic voice hearers. Gilbert et al. (2001) found that for both patient groups, the strength of the desire to escape one's negative thinking or hostile voice(s) was significantly related to depression. Thus, the degree to which people experience their ruminations as distressing and uncontrollable, can lead to a degree of felt entrapment and flight motivation to their own thoughts, which may play an important role in depression.

To assess the degree to which internal entrapment may mediate the link between depression-focused rumination and depression, we conducted a mediation analysis. We found a partially mediated model; that is, although depression-focused rumination has a direct impact on depression, the relationship is also partially mediated through internal entrapment. This may mean that as depressive rumination builds and continues, it leads to an increasing desire to get away from these depressing thoughts/feelings. As it becomes apparent that the individual can't stop and hence can't escape from this internal mood and set of ruminations, depression spirals down. Learning control or detached acceptance of one's rumination (e.g., via mindfulness, Watkins and Teasdale, 2004) could turn off flight motivation, and this may be one of a number of mechanisms of how reducing rumination also reduces depression (e.g. one is no longer in an arrested flight mode to one's own thoughts, Gilbert, 2001, 2004).

Clearly the linkage between rumination and depression is complex. First, rumination can act as a mediator for depression but other relevant variables have been reported to mediate rumination. For example, Spasojevec and Alloy, (2001) found that rumination mediated predictive relationships of the risk factors; negative cognitive styles, self-criticism, neediness and history of past depression, to the number of subsequent depressive episodes. Second, Teasdale and Green (2004) and Watkins and Teasdale (2004) have drawn attention to the complex interaction between rumination and memory, both process and affect mood congruent memory. Third, rumination can "spiral" people down into depression via its negative content, attentional focus and reducing adaptive coping behaviours (Nolen-Hoeksema et al., 1993, 1999). Fourth, if people withdraw as they become dysphoric, they may ruminate more due to social isolation and inward directed attention and feel more trapped in their dysphoria/depression. It is possible that social withdrawal would precede rumination, and this would be important to explore in groups vulnerable to depression because of social isolation. Finally, people may find it difficult to stop thinking about, and reflecting on, their depression, if this experience operates as "an intrusion". They may then feel trapped and become flight motivated to their own depression-focused thinking/feeling. Indeed, depressed patients have suggested this as an important part of the experience of depression (Gilbert and Gilbert, 2003). Not only may this lead to maladaptive coping (e.g. use of drugs, alcohol or suicide as escape; Baumeister 1990), but in so far as they are unable to get away from their own thoughts, they are in an "arrested flight" situation. This may produce further disturbance in neurophysiological systems that regulate defence behaviour, such as fight and flight (Gilbert, 2001, 2004). Interestingly, new therapies for depression that focus on "mindfulness training" (e.g. Teasdale et al., 2000) do not teach people to alter their thoughts or ruminations but to accept them "mindfully". One benefit of this may be that it reduces the experience of being trapped by one's thoughts, from which one must escape, and thus reduces flight motivation and turns off arrested flight systems in the brain.

Although this study has drawn attention to the multifaceted nature of depression, there are a number of cautions. First, this is a student population, and thus one cannot necessarily assume that the same will apply in a clinical population. However, these processes are typically encountered in depressed patients. Second, the small number of males did not allow us to test for gender differences in these processes. This may be important, especially in regard to anger rumination. It is unclear if women ruminate more on their affect and men ruminate more on social conflict/anger, although Nolen-Hoeksema et al. (1993) found evidence that women were more likely to ruminate than men and had more severe, long-lasting depression. Third, the shame and entrapment measures are frequency measures and not metacognitive ruminative measures as such. Fourth, this study focused on external shame (shame related to what one thinks *others* think about oneself). Future research may need to explore shame in terms of internal experience (what one thinks of oneself). It is, however, important to keep these two evaluative systems separate (Gilbert, 1998, 2003). Fifth, one cannot illuminate the causative relationship between these variables via a correlational study.

In conclusion, the study indicated that depression-focused rumination was linked to anger-focused rumination, and both played an important role in depression and shame. Entrapment was powerfully linked to depression even after controlling for rumination. Finally, the relationship between depression and depressive-rumination was mediated through feelings of entrapment. Such findings suggest expanding the domains and focus of rumination related to depression.

References

- Allan, S., Gilbert, P. and Goss, K. (1994). An exploration of shame measures II: psychopathology. *Personality and Individual Differences*, 17, 719–722.
- Andrews, B., Qian, M. and Valentine, J. D. (2002). Predicting depressive symptoms with a new shame measure. *British Journal of Clinical Psychology*, 41, 29–42.
- Baron, R. M. and Kenny, D. A. (1986). The moderator-mediator distinction in social psychology: conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Baumeister, R. F. (1990). Suicide as escape from self. *Psychological Review*, 97, 90–133.
- Beck, A. T., Emery, G. and Greenberg, R. L. (1985). *Anxiety Disorders and Phobias: a cognitive approach*. New York: Basic Books.
- Beck, A. T., Rush, A. J., Shaw, B. F. and Emery, G. (1979). *Cognitive Therapy of Depression*. New York: J. Wiley and Sons.
- Blatt, S. J. (1995). The destructiveness of perfectionism: implications for the treatment of depression. *American Psychologist*, 50, 1003–1020.
- Brody, C. L., Haag, D. A. F., Kirk, L. and Solomon, A. (1999). Experiences of anger in people who have recovered from depression and never-depressed people. *Journal of Nervous and Mental Disease*, 187, 400–405.
- Brown, G. W., Harris, T. O. and Hepworth, C. (1995). Loss, humiliation and entrapment among women developing depression: a patient and non-patient comparison. *Psychological Medicine*, 25, 7–21.
- Cochran, S. V. and Rabinowitz, E. R. (2000). *Men and Depression: clinical and empirical perspectives*. New York: Academic Press.
- Cochran, S. V. and Rabinowitz, E. R. (2003). Gender-sensitive recommendations for assessment and treatment of depression in men. *Professional Psychology: Research and Practice*, 34, 132–140.
- Cook, D. R. (1993). *The Internalised Shame Scale Manual*. Menomonie, WI: Channel Press.

- Farmer, A. E. and McGuffin, P.** (2003). Humiliation, loss and other types of life events and difficulties: a comparison of depressed subjects, healthy controls and their siblings. *Psychological Medicine*, *33*, 1169–1175.
- Gilbert, P.** (1992). *Depression: the evolution of powerlessness*. Hove: Lawrence Erlbaum.
- Gilbert, P.** (1998). What is shame? Some core issues and controversies. In P. Gilbert and B. Andrews (Eds.), *Shame: interpersonal behaviour, psychopathology and culture* (pp. 3–38). New York: Oxford University Press.
- Gilbert, P.** (2000a). The relationship of shame, social anxiety and depression: the role of the evaluation of social rank. *Clinical Psychology and Psychotherapy*, *7*, 174–189.
- Gilbert, P.** (2000b). *Counselling for Depression* (2nd ed.). London: Sage.
- Gilbert, P.** (2001). Depression and stress: a biopsychosocial exploration of evolved functions and mechanisms. *Stress: The International Journal of the Biology of Stress*, *4*, 121–135.
- Gilbert, P.** (2003). Evolution, social roles, and differences in shame and guilt. *Social Research*, *70*, 1205–1230.
- Gilbert, P.** (2004). Depression: a biopsychosocial, integrative and evolutionary approach. In M. Power (Ed.), *Mood Disorders: a handbook of science and practice* (pp. 99–142). Chichester: Wiley.
- Gilbert, P. and Allan, S.** (1998). The role of defeat and entrapment (arrested flight) in depression: an exploration of an evolutionary view. *Psychological Medicine*, *28*, 585–598.
- Gilbert, P., Allan, S., Brough, S., Melley, S. and Miles, J.** (2002). Anhedonia and positive affect: relationship to social rank, defeat and entrapment. *Journal of Affective Disorders*, *71*, 141–151.
- Gilbert, P., Birchwood, M., Gilbert, J., Trower, P., Hay, J., Murray, B., Meaden, A., Olsen, K. and Miles, J. N. V.** (2001). An exploration of evolved mental mechanisms for dominant and subordinate behaviour in relation to auditory hallucinations in schizophrenia and critical thoughts in depression. *Psychological Medicine*, *31*, 1117–1127.
- Gilbert, P. and Gilbert, J.** (2003). Entrapment and arrested anger in depression: an exploration using focus groups. *Psychology and Psychotherapy: Theory Research and Practice*, *76*, 173–188.
- Goss, K., Gilbert, P. and Allan, S.** (1994). An exploration of shame measures I: the “other as shamer scale”. *Personality and Individual Differences*, *17*, 713–717.
- Gotlib, I. H. and Hammen, C.** (1992). *Psychological Aspects of Depression: toward a cognitive-interpersonal integration*. New York: Wiley.
- Kaufman, G.** (1989). *The Psychology of Shame*. New York: Springer.
- Lyubomirsky, S. and Tkach, C.** (2003). The consequences of dysphoric rumination. In C. Papageorgiou and A. Wells (Eds.), *Rumination: nature, theory, and treatment of negative thinking in depression* (pp. 21–41). Chichester: John Wiley and Sons.
- Nolen-Hoeksema, S.** (1991). Responses to depression and their effects on the duration of depressive episodes. *Journal of Abnormal Psychology*, *100*, 569–582.
- Nolen-Hoeksema, S. and Davis, C. G.** (1999). “Thanks for sharing that”: ruminators and their social support networks. *Journal of Personality and Social Psychology*, *77*, 801–814.
- Nolen-Hoeksema, S. and Morrow, J.** (1991). A prospective study of depression and posttraumatic stress symptoms after a natural disaster: the 1989 Loma Prieta Earthquake. *Journal of Personality and Social Psychology*, *61*, 115–121.
- Nolen-Hoeksema, S., Grayson, C. and Larson, J.** (1999). Explaining the gender difference in depressive symptoms. *Journal of Personality and Social Psychology*, *77*, 1061–1072.
- Nolen-Hoeksema, S., Morrow, J. and Fredrickson, B. L.** (1993). Response styles and the duration of episodes of depressed mood. *Journal of Abnormal Psychology*, *102*, 20–28.
- O’Connor, R. C.** (2003). Suicide behaviour as a cry of pain: test of a psychological model. *Archives of Suicide Research*, *7*, 292–308.
- Panksepp, J.** (1998). *Affective Neuroscience*. New York: Oxford University Press.
- 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.

- Spasojevic, J. and Alloy, L. B.** (2001). Rumination as a common mechanism relating depressive risk factors to depression. *Emotion*, 1, 25–37.
- Sukhodolsky, D. G., Golub, A. and Cromwell, E. N.** (2001). Development and validation of the anger rumination scale. *Personality and Individual Differences*, 31, 689–700.
- Swallow, S. R.** (2000). A cognitive behavioural perspective on the involuntary defeat strategy. In L. Sloman and P. Gilbert (Eds.), *Subordination and Defeat: an evolutionary approach to mood disorders and their therapy* (pp. 181–198). Mahwah: Lawrence Erlbaum.
- Tangney, J. P.** (1995). Shame and guilt in interpersonal relationships. In J. P. Tangney and K. W. Fischer, *Self-Conscious Emotions: the psychology of shame, guilt, embarrassment and pride* (pp. 114–139). New York: Guilford.
- Tangney, J. P., Wagner, P. E., Barlow, D. H., Marschall, D. E. and Gramzow, R.** (1996). Relation of shame and guilt to constructive versus destructive responses to anger across the lifespan. *Journal of Personality and Social Psychology*, 70, 797–809.
- Teasdale, J. D. and Green, H. A. C.** (2004). Ruminative self-focus and autobiographical memory. *Personality and Individual Differences*, 36, 1933–1943.
- Teasdale, J. D., Segal, Z. V., Williams, J. M., Ridgeway, V. A., Soulsby, J. M. and Lau, M. A.** (2000). Prevention of relapse/recurrence in major depression by mindfulness-based cognitive therapy. *Journal of Consulting and Clinical Psychology*, 68, 615–623.
- Trapnell, P. D. and Campbell, J. D.** (1999). Private self-consciousness and the five factor model of personality: distinguishing rumination from reflection. *Journal of Personality and Social Psychology*, 76, 283–304.
- Watkins, E. and Teasdale, J. D.** (2004). Adaptive and maladaptive self-focus in depression. *Journal of Affective Disorders*, 82, 1–8.
- Wells, A.** (2000). *Emotional Disorders and Metacognition: innovative cognitive therapy*. Chichester: J. Wiley.