Cognitive-Behaviour Therapy for Depressive Rumination

Dr Edward Watkins

Mood Disorders Centre

School of Psychology, University of Exeter

Depressive rumination, defined as "behaviour and thoughts that focus one's attention on one's depressive symptoms and on the implications of these symptoms" (Nolen-Hoeksema, 1991, p.569) has been identified as a core process in the onset and maintenance of depression. Rumination is elevated in both currently and formerly depressed patients and tends to be elevated in women relative to men, i.e., in groups known to be at increased risk for depression (Riso et al., 2003; Roberts, Gilboa, & Gotlib, 1998). Prospective longitudinal studies have found that self-reported depressive rumination predicts the onset and maintenance of major depression and depressive symptoms (Nolen-Hoeksema, 2000; Spasojevic & Alloy, 2001). Furthermore, there is evidence that increased rumination is associated with less therapeutic responsiveness to both antidepressant and cognitive-behavioural interventions (Ciesla & Roberts, 2002; Schmaling, Dimidjian, Katon, & Sullivan, 2002). This article will highlight key issues in understanding depressive rumination and review state-of-the-art treatment approaches.

The Phenomenology of Depressive Rumination

A typical presentation of depressive rumination involves repeated and recurrent thinking about the self, past upsetting events, unresolved concerns, and depressed symptoms. Depressive rumination is often characterised by evaluative thinking, with patients making negative comparisons between themselves and others ("Why do I have problems other people don't have?"), between their current state and desired state ("Why can't I get better?") and between the

current self and past self ("Why can't I work as well as before?"). The common reported consequences of rumination are increased sadness, distress and anxiety, reduced motivation, insomnia, and increased tiredness, self-criticism, pessimism and hopelessness.

Understanding Depressive Rumination

It is important to recognise that rumination is a common, normal, and sometimes functional response, not just limited to people with psychological disorders. We have all had the experience of ruminating about personal losses such as bereavements or break-ups, trying to understand why it happened to us. However, for most people, the rumination is relatively brief.

Current theoretical models hypothesize that unresolved concerns or unattained goals initiate recurrent thinking about the unresolved issue or goal in order to facilitate effective self-regulation towards the goal (Martin & Tesser, 1996). Thus, rumination is conceptualized as an attempt to make sense of an upsetting event or to solve a problem. Importantly, recent experimental research suggests that there are distinct styles of rumination, with distinct functional properties and consequences: a helpful style characterised by concrete, process-focused and specific thinking versus an unhelpful, maladaptive style characterised by abstract, evaluative thinking (Treynor, Gonzalez, & Nolen-Hoeksema, 2003; Watkins, 2004; Watkins & Baracaia, 2002; Watkins & Moulds, 2005a; Watkins & Teasdale, 2001; Watkins & Teasdale, 2004). This research suggests that when a depressed patient dwells on his symptoms and difficulties, analyzing and evaluating the meanings and implications of his experiences (e.g., "What does this failure mean about me?") increases overgeneralization (e.g., "I can never get it right"), impairs problem-solving, and exacerbates depressed mood. However, dwelling on symptoms and difficulties in a more concrete and specific way, reflecting on how to do something about the

difficulties, improves problem solving and reduces depression. This difference between thinking styles appears to be one factor determining the duration and usefulness of rumination since individuals prone to pathological rumination tend to be more abstract and evaluative.

There is also evidence that people prone to depressive rumination have elevated beliefs that rumination is useful for solving problems and resolving difficult emotions (Papageorgiou & Wells, 2001; Watkins & Baracaia, 2001; Watkins & Moulds, 2005b). These positive "meta-cognitive" beliefs about rumination may lead these individuals to engage in excessive rumination. However, a causal relationship between meta-cognitive beliefs and rumination has not yet been established.

Early experiences may also explain why some individuals get stuck in excessive and pathological rumination. Rumination can be learnt as a coping strategy to deal with difficult and abusive childhood experiences. When faced with criticism and/or abuse, a child may spend a lot of time analyzing and evaluating other people's motives and signals in order to predict their behaviour and to avoid criticism and punishment. In this context, rumination may be an adaptive strategy that reduces harm, such that it becomes reinforced, over-learnt, and indiscriminately applied to other situations. Rumination may also develop if a child is discouraged from expressing her thoughts and feelings or is powerless to influence the situation through her own actions, encouraging further turning inwards. Similarly, if a child fails to learn active behavioural coping strategies for dealing with difficulties and emotions because his parents are overcontrolling, there may be increased risk of rumination (Spasojevic & Alloy, 2002). Consistent with these hypotheses, reports of childhood sexual abuse, which involves hard-to-understand experiences, powerlessness, and prohibitions from talking about what happened, are associated with rumination (Conway, Mendelson, Giannopoulos, Csank, & Holm, 2004). Finally,

rumination may be modelled from a parent or significant carer. Many patients report that one or both of their parents were worriers and ruminators.

CBT Treatments for Rumination

CBT for depression did not explicitly focus on treating rumination in detail, until the development of "third wave" CBT therapies such as Behavioural Activation, Rumination-focused CBT and Mindfulness-Based CBT. The clinical experience accumulated in our clinic through treating highly ruminative chronic depressed patients over the last 10 years is that the classic CBT approach for depression (Beck, Rush, Shaw, & Emery, 1979) can be an effective intervention for rumination but that it has a number of limitations and difficulties. First, it appears that focusing on challenging individual thoughts is not very effective when dealing with the stream of negative thoughts found in rumination. Trying to stop one thought does not prevent the full flow of rumination, because the first negative thought is simply followed by another thought in the chain, often in the form of a "Yes, but" thought. Thought challenging is only successful at preventing rumination when it catches the very start of the chain of rumination and nips it in the bud.

Second, thought challenging can itself act as a further trigger to rumination. For example, having successfully challenged the evidence for a negative automatic thought with a depressed client, the client may then dwell on "Why couldn't I do that before? Why am I so stupid?", and the cycle of recurrent thinking is off and running again. Third, with patients highly prone to rumination, any form of discussion and disputation, unless done very skilfully, can become focused on ***talking about*** what has happened and what it might mean to the patient. Unfortunately, this means that it is very easy to become trapped in ruminating aloud with the

patient, where sequences of negative thinking are repeatedly discussed in detail without any therapeutic change. One indicator of such "co-rumination" is the realization that large amounts of a treatment session have passed, without any sense of progress.

These observations are consistent with the outcome evidence which finds that standard CBT interventions are less effective at treating depression in high ruminators compared to low ruminators (Ciesla & Roberts, 2002; Schmaling et al., 2002). Furthermore, to date, there is no reported evidence from randomised controlled trials that standard CBT can reduce rumination, not least because rumination has not been an outcome measure in treatment trials.

However, there is emerging evidence from recent CBT developments that therapy can directly reduce depressive rumination. First, behavioural activation (BA) was originally one component of the full CBT intervention, consisting of activity monitoring and activity scheduling. A trial comparing the different components of CBT found that BA alone was as effective at reducing symptoms as BA plus thought challenging and as the full CBT protocol (Gortner, Gollan, Dobson, & Jacobson, 1998; Jacobson et al., 1996). As a consequence of this positive outcome, BA has been elaborated into a full treatment, focusing on understanding the function and context in which depression occurs and targeting avoidance behaviours in depression (Martell, Addis, & Jacobson, 2001). Importantly, BA includes an explicit focus on reducing rumination from a functional-analytical perspective (Addis & Martell, 2004). BA has been found to be an effective intervention for depression, producing outcomes as good as pharmacotherapy and better than CBT for severe depression (Dimidjian et al., 2006).

Second, rumination-focused CBT (RFCBT) shares the functional-contextual approach developed in BA. However, an additional, novel element not shared with either BA or standard CBT is an explicit focus on shifting thinking style during rumination, derived from the

experimental research noted earlier. A recent case series investigated 12 weekly 60-minute sessions of RFCBT for 14 consecutively recruited patients meeting criteria for medication-refractory residual depression (Watkins et al., 2006). Treatment produced significant improvements in depressive symptoms and co-morbid disorders: mean reduction in Beck Depression Inventory of 20 points, pre-to-post treatment within-subject effect size (Cohen's d) of 2.5, 50% of patients achieving full remission from depression, and a 71% reduction in co-morbid Axis I diagnoses. Importantly, RFCBT significantly reduced self-reported rumination, with rumination at pre-treatment equivalent to that found in currently depressed patients but the range of scores at post-treatment equivalent to levels of rumination observed in never-depressed participants. This study provides initial evidence that RFCBT may be an efficacious treatment for depressive rumination. The preliminary results from a randomised controlled trial comparing RFCBT versus treatment-as-usual (antidepressant medication) confirm the efficacy of RFCBT.

Third, mindfulness-based cognitive therapy (MBCT) consists of the incorporation of elements of a mindfulness-based stress reduction program (Kabat-Zinn, 1990) into CBT to create a relapse prevention treatment (Teasdale, Segal, & Williams, 1995). MBCT is delivered in weekly group training sessions, in which participants practise and develop a moment-by-moment awareness of sensations, thoughts and feelings, through the use of formal and informal meditation exercises. In two randomized controlled trials, for patients with a history of three or more episodes of major depression, but who were currently symptom-free, MBCT significantly reduced risk of relapse/recurrence over 1 year compared to treatment as usual (Ma & Teasdale, 2004; Teasdale et al., 2000). There was a suggestion that MBCT was not effective, and possibly unhelpful, for patients with a history of two or less previous episodes of depression, indicating a differential effect across history of depression. Again, there is evidence that mindfulness

meditation can reduce rumination in patients with a history of depression (Ramel, Goldin, Carmona, & McQuaid, 2004). Future research will need to determine whether MBCT is effective for patients with acute symptoms of depression, and the extent to which an extensive mindfulness practice on the part of the group facilitator is a necessary condition for effective treatment.

A key difference between the standard CBT for depression and all the novel CBT therapies targeting rumination is that CBT focuses on thought *content* and on changing cognition at the level of each individual thought, whereas BA, RFCBT and MBCT focus on changing the *process and sequence* of thinking rather than individual thoughts. To effectively treat rumination, we may need to focus on helping patients to step back and decentre from the thought process itself, rather than from an individual thought.

Key Principles in CBT for Rumination

Across all forms of CBT, there are a number of key principles when treating rumination. First, it is important to normalise the experience of rumination with patients, by noting how it is a frequent, common and sometimes useful way of responding to difficulties. Despite recognising the negative effects of rumination, many patients find it difficult to contemplate stopping it. For example, for a woman ruminating about her painful divorce, there is a strong investment in trying to understand why it happened and to make sense of why her partner treated her this way. Asking her to not think about this event is not realistic and likely to be counterproductive. It is better to acknowledge that it is normal to dwell on such an event and that therapy will seek to find a more helpful way to do this. Similarly, an individual whose rumination involves a hectoring and critical voice that highlights the imperfections and mistakes in his work, and who describes the rumination as “spurring me on and stopping me from becoming a scallywag”, will be resistant to

direct attempts to reduce it. By acknowledging the normality and functionality of rumination, we improve engagement with patients and avoid getting into arguments about changing valued behaviours. Furthermore, normalising rumination can reduce the secondary negative responses to rumination itself, in the form of "rumination about rumination", e.g., "Why do I keep dwelling on my problems?" Once a shared, collaborative view of the advantages and disadvantages of rumination has been reached, there is more scope to review more useful alternatives.

Second, it is important at the start of therapy to directly address the likelihood of rumination interfering with the process and effectiveness of therapy itself. Patients who are prone to rumination are almost certain to ruminate about the therapy, before, after and during treatment sessions, e.g., on how they are coming across to the therapist (e.g., "Does he think I'm boring and stupid?"), or on the progress of therapy. Before the session, anticipatory rumination may increase anxiety and reduce attendance. During the session, rumination may obstruct engagement and new learning, as the patient is only able to pay a fraction of his attention to what is being discussed. After the session, post-mortem rumination may result in unhelpful misinterpretations and interfere with homework. It is helpful in the first session to acknowledge that rumination is likely to occur during therapy and to ask the patient to flag it up whenever he or she notices it, whilst noting that if you think he or she is ruminating during a session, you will also point it out. Identifying rumination in vivo provides a golden opportunity to increase direct engagement within the session and to directly experiment with alternative responses.

Third, it is important to focus on encouraging thoughts and behaviours that are action-focused, concrete, specific and directly engaged in experience (summarised as **ACES: Action, Concrete, Experiential, & Specific**). Ruminators tend to be passive, abstract and evaluative, focused on analysing and intellectualising events in their life, with overgeneral and global

thinking. Therefore, therapy needs to shift patients away from this pattern, by directly coaching them to be more concrete, specific and grounded in experience, and by the therapist modelling such behaviour. Thus, given the choice between talking about something versus trying something out in an experiential/imagery exercise or behavioural experiment, choose the latter as it shifts the patient away from the thinking style associated with unhelpful rumination. Similarly, when exploring a recent event, the focus needs to be on the specific and precise details of how it happened moment-by-moment (i.e., a micro-level analysis) rather than on a general summary.

Functional Analysis

Within both BA and RFCBT, rumination is conceptualized as escape and avoidance behaviour that has been reinforced in the past by the removal of aversive experience or because it has perceived or actual functions. Commonly observed functions of rumination include avoiding the risk of failure or humiliation by thinking about a situation or behaviour rather than engaging in it in reality, attempting to problem solve or to understand a difficult situation, anticipating potential negative responses and criticism from others in order to avoid actual criticism and punishment, controlling unwanted feelings, motivating oneself to avoid unwanted attributes (e.g., "keeping me on my toes") and making excuses for not doing things.

Functional analysis looks at the **function and consequences** of thoughts, feelings and behaviours rather than their form and content, by focusing on their variability and situatedness: Examining what differences in context, environment and behaviour influence the patient's thoughts, feelings, behaviours and success at achieving goals. A functional analysis typically covers the following areas (summarised as **CUDOS**: Context, Usefulness, Development, OptionS):

(a) The **Context** that influences the rumination and associated behaviours– specifying when, where, what, how and with whom it happens and when, where, what, how and with whom with it does not happen.

(b) The **Usefulness/function** of the rumination. What is the purpose/goal of the rumination? What are the consequences of the rumination? What are the advantages and disadvantages of the rumination? What is avoided as a consequence of rumination?

(c) The **Development** of the behaviour. When did it start? How was it learnt? Who from?

(d) Other **Options** instead of rumination. A key focus here is on identifying and assessing variability, e.g., what is different between the times when rumination results in helpful versus unhelpful consequences? What is different between the times rumination is relatively brief versus extended? It is important to examine what is happening just before rumination stops, whether this is due to an external interruption (e.g., a friend calling) or a shift into more helpful thinking (e.g., "I started to think about what I could do next"). For example, identifying the useful thoughts at the end of a bout of rumination and encouraging their use as an explicit strategy earlier in the sequence can help patients to condense out the unhelpful section of a ruminative bout (e.g., "Can you deliberately ask yourself those more helpful questions when you have a problem and go straight to solutions rather than having to go through the 2 hours of distressing rumination first?").

Functional analysis and self-monitoring is used to help patients to recognise the warning signs and triggers for rumination. Recognising these signs will help patients to become more aware of when they are ruminating and better placed to engage in alternative behaviours. The functional analysis is then used to identify and alter any environmental and behavioural contingencies maintaining rumination. Common contextual factors associated with increased

rumination include early in the morning, late at night, being alone, feeling tired and bored, increased physical pain and tension, sitting and doing nothing (e.g., having a coffee or a smoke), feeling disorganised and under pressure, and withdrawing when upset, most typically to the bedroom. Using this information to alter routines and environments can reduce rumination. For example, if rumination is triggered first thing in morning just after waking up, it may be useful to look at ways of changing the early morning routine, such as getting up and being active rather than lying in bed brooding. In general, increasing structure and activity, and, especially, shifting the balance of activities from routine chores and obligations towards more self-fulfilling and absorbing activities, reduces rumination. Encouraging patients to slow things down, only focus on one thing at a time and to pace their activities without taking on too much, may help as this reduces the sense of "rushing around" and "being under pressure", which feeds into rumination.

The third step is to develop more functional alternative strategies and contingency plans to replace rumination – where appropriate, the alternative strategy will also serve the original function of the rumination. For one patient, the function of ruminating on her failings was to avoid becoming lazy, complacent and arrogant. This was consistent with her warning signs and triggers for rumination: tiredness, inactivity and irritability. Rumination was effective at preventing her from becoming complacent and arrogant but at the cost of making her depressed, reducing her motivation and eroding her self-confidence. Treatment focused on helping her to recognise the warning signs for rumination and on developing an alternative response to rumination that more constructively served the same function – in this case, the use of imagery and visualization exercises designed to increase feelings of compassion, first to others and then to herself. The training in compassion provided an effective and beneficial alternative to rumination, since it is antithetical to laziness and arrogance, yet at the same time positive and calming, and

provided an experience counter to her beliefs of being “a bad person”. For another patient, the function of rumination was to reduce angry and aggressive feelings. Whenever he became angry, even when justified, he would ruminate on why he over-reacted and blame himself for being oversensitive, which would replace his anger with depressed mood. This patient was particularly afraid of losing control of his anger and becoming like his father, who was violent, aggressive and abusive. For him, the use of relaxation and assertiveness was an effective replacement for rumination. Thus, rumination is often tied up with avoidance of an unwanted or feared self, and treatment interventions need to address this powerful motivation.

Shifting Thinking Style

Within both RFCBT and MBCT, there is a focus on shifting the style or mode of thinking in order to counter rumination. RFCBT uses experiential/imagery exercises and behavioural experiments designed to facilitate a shift into a more helpful thinking style. Patients use directed imagery to vividly recreate previous states when a more helpful thinking style was active, such as memories of being completely absorbed in an activity (e.g., “flow” or “peak” experiences of being creative, immersed in sensory experience or involved in highly focused physical activities like rock-climbing or skiing). Alternatively, patients may focus on experiences of being compassionate, tolerant and supportive to themselves or others. These mental states are characterised by a more concrete, process-focused thinking style and by reductions in evaluative, abstract and judgemental thinking. Therefore, such exercises generate mental states antithetical to rumination, which can be used as a more functional alternative strategy in response to warning signs for rumination. The effective generation of these alternative modes of processing involves holistically and vividly imagining all the elements contributing to the original experience and

desired mode: thoughts, feelings, posture, sensory experience, bodily sensations, attitudes, motivations, facial expressions, and urges. The patient recalls a vivid memory or generates an image that captures the desired experience and is then guided into a deeper, more elaborated experience via therapist questions focusing the patient's attention and imagination onto each detail of the experience. The patient is encouraged to imagine the event in the present tense and from a field perspective, as if they are looking from their eyes into the scene right now.

In parallel work, Paul Gilbert has been developing a compassionate training intervention, in which patients use imagery and visualization to develop self-soothing and self-nurturing skills (Gilbert & Irons, 2004). Given the high incidence of shaming, self-critical and intolerant thoughts in rumination, and considering the positive outcomes for RFCBT, this approach is also likely to be an effective intervention for rumination.

Mindfulness meditation also shifts the mode adopted in response to thoughts and feelings. Mindfulness meditation involves a particular kind of attention and mental stance: deliberately, intentionally and non-judgementally paying attention to the present moment. To achieve this state, there are both formal and informal mindfulness meditation exercises. Formal exercises include focusing attention on the breath and then returning the attention to the breath whenever the individual notices that his or her attention has been drawn away, as well as watching thoughts and feelings, moving attention through the body and a brief mindfulness exercise to use in response to difficulties (the 3-minute breathing space) (for full details on the treatment see Segal, Williams, & Teasdale, 2002). Repeated mindfulness mediation seems to help an individual to recognise and step out of his recurrent patterns of thinking, thus reducing rumination. Repeated practise can help an individual to learn that thoughts, feelings, sensations come and go. Mindfulness meditation also involves an attitude of acceptance to thoughts and feelings, whether

they are pleasant and unpleasant, and, thus, may reduce the experiential avoidance that maintains rumination. Finally, mindfulness involves direct contact with experience without evaluations and judgements – as such it will reduce the abstract, evaluative thinking characteristic of depressive rumination. For mindfulness meditation to be of optimal benefit it seems to require considerable commitment and regular practise (e.g., 45 minutes everyday).

Summary

Rumination is a key cognitive mechanism in the onset and maintenance of depression. CBT approaches are beginning to explicitly target this important vulnerability factor, with some preliminary success. Rumination can itself interfere with the delivery of CBT – however, a focus on working at the level of thought process and an emphasis on grounding therapy in concrete experience can help to tackle this common and disabling phenomenon.

Reference List

Addis, M. E. & Martell, C. R. (2004). *Overcoming Depression One Step at a Time: The New Behavioral Activation Approach to Getting Your Life Back.* New York: New Harbinger Press.

Beck, A. T., Rush, A. J., Shaw, B. F., & Emery, G. (1979). *Cognitive therapy of depression*. New York: Guilford Press.

Ciesla, J. A. & Roberts, J. E. (2002). Self-directed thought and response to treatment for depression:A preliminary investigation. *Journal of Cognitive Psychotherapy: An International Quarterly, 16,* 435-453.

Conway, M., Mendelson, M., Giannopoulos, C., Csank, P. A. R., & Holm, S. L. (2004). Childhood and adult sexual abuse, rumination on sadness, and dysphoria. *Child Abuse & Neglect, 28,* 393-410.

Dimidjian, S., Hollon, S. D., Dobson, K. S., Schmaling, K. B., Kohlenberg, R. J., Addis, M. E. et al. (2006). Randomized Trial of Behavioral Activation, Cognitive Therapy, and Antidepressant Medication in the Acute Treatment of Adults With Major Depression. *Journal of Consulting and Clinical Psychology, 74,* 658-670.

Gilbert, P. & Irons, C. (2004). A pilot exploration of the use of compassionate images in a group of self-critical people. *Memory, 12,* 507-516.

Gortner, E. T., Gollan, J. K., Dobson, K. S., & Jacobson, N. S. (1998). Cognitive-behavioral treatment for depression: Relapse prevention. *Journal of Consulting and Clinical Psychology, 66,* 377-384.

Jacobson, N. S., Dobson, K. S., Truax, P. A., Addis, M. E., Koerner, K., Gollan, J. K. et al. (1996). A component analysis of cognitive-behavioral treatment for depression. *Journal of Consulting and Clinical Psychology, 64,* 295-304.

Kabat-Zinn, J. (1990). ***Full Catastrophe Living: How to Cope with Stress, Pain and Illness Using Mindfulness Meditation***. New York: Delacorte.

Ma, S. H. & Teasdale, J. D. (2004). Mindfulness-based cognitive therapy for depression: Replication and exploration of differential relapse prevention effects. *Journal of Consulting and Clinical Psychology, 72,* 31-40.

Martell, C. R., Addis, M. E., & Jacobson, N. S. (2001). *Depression in context: strategies for guided action.* New York: Norton.

Martin, L. L. & Tesser, A. (1996). Some ruminative thoughts. In R.S.Wyer (Ed.), *Ruminative thoughts. Advances in social cognition Vol 9* (pp. 1-47). Hillsdale, NJ: Lawrence Erlbaum Associates.

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. (2000). The role of rumination in depressive disorders and mixed anxiety/depressive symptoms. *Journal of Abnormal Psychology, 109,* 504-511.

Papageorgiou, C. & Wells, A. (2001). Positive beliefs about depressive rumination: Development and preliminary validation of a self-report scale. *Behavior Therapy, 32,* 13-26.

Ramel, W., Goldin, P. R., Carmona, P. E., & McQuaid, J. R. (2004). The effects of mindfulness meditation on cognitive processes and affect in patients with past depression. *Cognitive Therapy and Research, 28,* 433-455.

Riso, L. P., du Toit, P. L., Blandino, J. A., Penna, S., Dacey, S., Duin, J. S. et al. (2003). Cognitive aspects of chronic depression. *Journal of Abnormal Psychology, 112,* 72-80.

Roberts, J. E., Gilboa, E., & Gotlib, I. H. (1998). Ruminative response style and vulnerability to episodes of dysphoria: Gender, neuroticism, and episode duration. *Cognitive Therapy and Research, 22,* 401-423.

Schmaling, K. B., Dimidjian, S., Katon, W., & Sullivan, M. (2002). Response styles among patients with minor depression and dysthymia in primary care. *Journal of Abnormal Psychology, 111,* 350-356.

Segal, Z. V., Williams, J. M. G., & Teasdale, J. D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse.* New York: Guilford Press.

Spasojevic, J. & Alloy, L. B. (2001). Rumination as a common mechanism relating depressive risk factors to depression. *Emotion, 1,* 25-37.

Spasojevic, J. & Alloy, L. B. (2002). Who Becomes a Depressive Ruminator? Developmental Antecedents of Ruminative Response Style. *Journal of Cognitive Psychotherapy: An International Quarterly, 16,* 405-419.

Teasdale, J. D., Segal, Z., & Williams, J. M. G. (1995). How Does Cognitive Therapy Prevent Depressive Relapse and Why Should Attentional Control (Mindfulness) Training Help. *Behaviour Research and Therapy, 33,* 25-39.

Teasdale, J. D., Segal, Z. V., Williams, J. M. G., Ridgeway, V. A., Soulsby, J. M., & 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.

Treynor, W., Gonzalez, R., & Nolen-Hoeksema, S. (2003). Rumination reconsidered: A psychometric analysis. *Cognitive Therapy and Research, 27,* 247-259.

Watkins, E. & Baracaia, S. (2001). Why do people ruminate in dysphoric moods? *Personality and Individual Differences, 30,* 723-734.

Watkins, E. & Baracaia, S. (2002). Rumination and social problem-solving in depression. *Behaviour Research and Therapy, 40,* 1179-1189.

Watkins, E. & Moulds, M. (2005a). Distinct modes of ruminative self-focus: Impact of abstract versus concrete rumination on problem solving in depression. *Emotion, 5,* 319-328.

Watkins, E. & Moulds, M. (2005b). Positive beliefs about rumination in depression - a replication and extension. *Personality and Individual Differences, 39,* 73-82.

Watkins, E. & Teasdale, J. D. (2001). Rumination and overgeneral memory in depression: Effects of self-focus and analytic thinking. *Journal of Abnormal Psychology, 110,* 353-357.

Watkins, E. & Teasdale, J. D. (2004). Adaptive and maladaptive self-focus in depression. *Journal of Affective Disorders, 82,* 1-8.

Watkins, E. R., Scott, J., Wingrove, J., Rimes, K., Bathurst, N., Steiner, H. et al. (2006). Rumination-focused cognitive-behaviour therapy for residual depression: a case series. *Behaviour Research and Therapy*.

Watkins, E. (2004). Adaptive and maladaptive ruminative self-focus during emotional processing. *Behaviour Research and Therapy, 42,* 1037-1052.