

Module: Psychological Foundations of Mental Health

Week 5

Cognitive therapy: experimental and clinical evidence

Topic in Action 2

Third wave psychotherapies: from content to process – Part 1 of 2

Professor Richard Brown

Department of Psychology, King's College London

Lecture transcript

Slide 3

While the evidence that we have been reviewing offers support for the efficacy of cognitive therapy and CBT for the treatment of depression. It has also highlighted a number of important limitations. Although treatment benefit is reliably observed in group studies, this masks the fact that there is considerable variability in how clients respond to therapy. Rates of non-response or partial response are significant, and in those who do respond relapse or recurrence is very likely. It is also evident that cognitive therapy may not be suitable or the best choice for all clients, particularly those with significant co-morbidity such as anxiety disorder or personality disorder. Equally, some may not accept the basis of the therapy or the way it is delivered and prefer an alternative.

These limitations are not specific to CBT, but are shared by all evidence based treatments of depression, both psychological and pharmacological. To address these remaining unmet clinical needs, a range of alternative potential therapeutic approaches are emerging that may provide more effective treatment for more patients with more lasting benefits. These are known collectively as the third wave of psychotherapies.

Slide 4

This third wave describes a heterogeneous group of approaches, each with its own underlying evidence base and theoretical model. However, what links them is a greatly decreased emphasis on two of the basic components of the cognitive model-- the presence of systematic thinking deficits and depression, the cognitive distortions, and the precise nature of the negative and maladaptive thought content. The techniques of cognitive therapy are based on helping the patient to understand, recognise, challenge, and thereby change their maladaptive thinking through the techniques of cognitive restructuring, some of which we looked at in week 5. These emphasise conscious top down cognitive processing to effect changes in mood.

In contrast, third wave psychotherapies are more concerned with addressing maladaptive cognitive processes and thinking styles, rather than the specific cognitions themselves and their content. Addressing these processes and styles is seen as a more effective way to achieve lasting clinical benefit. Recent experimental developments in cognitive bias modification techniques, such as those that you looked at in week 3, also offer novel ways to come at this problem using more the automatic bottom up processing of emotional threat related stimuli. These have not yet fed through

into full scale clinical trials, and may in turn come to be part of an eventual fourth wave approach.

Slide 5

Here are some of the growing number of therapies that fall under the general banner of the third wave. These include rumination focused therapy, metacognitive therapy, and schema therapy, mindfulness-based cognitive therapy, and acceptance and commitment therapy. They each draw on a range of psychological frameworks, from the role of the tension in metacognitive therapy to that of attachment in schema therapy. However, it is worth noting that the third wave is also re-examining and broadening the application of the behavioural, or first wave approaches. With examples including behavioural activation and dialectical behaviour therapy.

A brief overview of these therapies can be found in the paper by Carl and colleagues published in 2012, although this rapidly moving field has developed even in the past few years. In this final section we're going to look at just two examples that seek to build on and extend traditional CBT approaches to improve their effectiveness-- rumination focus cognitive behavioural therapy and mindfulness-based cognitive therapy. Both were developed specifically to treat patients with persistent residual symptoms at high risk of relapse.

Slide 6

Rumination describes a particular style of repetitive thinking. Broadly, repetitive thinking has been defined as the process of thinking attentively, repetitively, and frequently about oneself and one's world. Attentive here means that rumination demands and captures the majority of our attention to the exclusion of other things. Thinking about problems and issues that concern us is not in itself a bad thing. Dwelling on such matters may help us to resolve issues, to understand, and come to terms with them or to help us take steps to prevent them happening in the future. So helpful repetitive thinking is the sort that leads us to a resolution or a solution. This serves as a stop signal that brings the thinking to a conclusion.

Slide 7

The term rumination is more typically used to define repetitive thinking that does not stop. It is unproductive, going round and round without leading the person to improved understanding and acceptance or suggesting a solution. It is this type of unproductive rumination that is most closely linked to depression and other mental health problems. In this context, we will call it depressive rumination.

Ed Watkins provides a thorough review of productive and unproductive repetitive thinking in his 2008 paper. He compares various types of repetitive thinking and ways in which they differ. He identified that depressive rumination tended to have the following characteristics-- First, the content of ruminative thinking is negative. It relates to problems and distressing things in the person's life, past or present. Second, ruminative thinking has negative valence. It is emotionally disturbing and unpleasant to engage in. During rumination a person may feel angry or sad, ashamed, guilty or overwhelmed, helpless and hopeless.

Third, the anticipated implications or outcomes are negative. Thinking things that are going to happen or not happen for the worst, such as ending a relationship or losing a job. Finally, the nature of the thinking tends to be abstract and general, such as why me? Why did it happen? What does it mean? Rather than concrete and specific to the situation-- questions such as what can I do to make things better? Or what can I do things differently in the future to look for solutions?

Slide 8

Rumination is common in people who are depressed and can be seen as an important maintaining factor for low mood. Some depressed people can spend over half of their waking day engaged in rumination, which can have multiple negative effects. When ruminating, they are not doing other more productive and positive things, nor are they engaged in more constructive problem solving. Constant rumination can also reduce the amount of support that friends and family want to offer,

leading to isolation.

When a negative thought is triggered by an event, rumination can serve to maintain the thought, and so the low mood and unpleasant feelings that accompany it, possibly for hours. The nature of rumination is also such that the person will tend to return to the event at later times. We can see how overall general memory and a tendency to ruminate can repetitively reactivate negative thoughts and feelings from a single event that may have happened days, months, or even years previously, lowering mood and reinforcing unhelpful beliefs in the process.

Slide 9

Experimental studies have used induction procedures to encourage a brief period of ruminative thinking. This involves asking a person to reflect on a relevant personal event or concern with questions such as think about what your feelings might mean, or think about what this means for you in the future. A controlled condition asked a person to think about some non-self relevant neutral topic, such as visualising the layout of her kitchen. Following induction, tasks are then used to assess its impact, such as recalling a past life event or interrupting a hypothetical scenario. Such studies reliably show that people who are currently depressed and induced to ruminate, even for a few minutes, tend to then record more frequent negative and over general life events or interpret hypothetical negative events in a more negatively biased way. Both the clinical observational and experimental evidence suggests that rumination may be a valuable therapeutic target within the context of a more traditional CBT approach.

Slide 10

Although rumination is common in people who are depressed, it is also a trait factor. Some people will tend to ruminate throughout their life in response to distressing or upsetting life events. An important question is whether having a general response style that favours rumination over other ways of dealing with such events increases the risk of becoming depressed? The answer seems to be that it does.

A large study by Helen Nolen-Hoeksema, published in 2000, assessed over 1,300 adults randomly selected from communities living in the San Francisco area of America at Time 1 and followed up 86% of them a year later. At each time point, they assessed to determine whether or not they were depressed or anxious, as well their tendency to ruminate using a measure called the rumination response scale.

As expected, rumination scores were higher in those with major depressive disorder at both time points. However this simply shows that rumination is associated with depressive state. More importantly, rumination at Time 1 predicted depression status 12 months later, even when the level of depression at Time 1 was factored in.

Slide 11

This figure shows some other results from the study that tries to understand the relationship between rumination and the course of depression, both new onsets of depression, remission of depression during the period, and those who remained chronically depressed. What we see is that the lowest levels of rumination were shown by the participants who were not depressed at either Time 1 or Time 2. However, those who showed a new onset of depression at Time 2 showed higher levels of rumination even at Time 1 when they were not yet depressed. This is supportive of the hypothesis that rumination may be a vulnerability factor for depression.

What about the other groups? In those who were depressed at Time 1 but who had remitted by Time 2 there was some evidence of a drop in rumination. However, even after remission their levels of rumination remained high compared to the never depressed group. Finally, those with chronic depression have the highest levels of rumination of all, especially at Time 1, and higher than the group whose depression had remitted. This suggests that rumination is high in those who are depressed, who become depressed, and who have been depressed, compared to those who have

never been depressed.

The persistently high levels of rumination, even in the remitted group, suggested rumination remains a persistent problem and is likely to predict future recurrence.

Slide 12

Given the possible significance of rumination in depression, it suggests that a rumination focused treatment might have a number of benefits. First, it may enhance the general response to CBT by counteracting the repeated reactivation of negative thinking following an earlier trigger event. Second, it may reduce the extent to which rumination remains as a residual symptom, even after remission.

Third, it may promote recovery in those with chronic depression who have not achieved remission through standard methods. Finally, and linked to this, reducing rumination may maintain the benefits of CBT and reduce the risk of future recurrence.

Rumination focused cognitive behavioural therapy was developed by Ed Watkins, trained and previously based here at the IOPPN. The therapy focuses on the process and purpose of ruminative thinking, rather than the content of the ruminative thoughts themselves. Ruminative thinking is typified by abstract why and what questions, such as why me? Or what does it mean? The therapy seeks to switch this form of self-questioning to more specific and constructive thoughts-- how questions such as how did it happen? How can I change?

It also addresses rumination as a form of avoidance behaviour and uses functional analysis and self monitoring and record keeping to help the client understand when and why they tend to ruminate. This can help reveal factors that are maintaining their unhelpful thinking behaviour. This may involve changing the contingencies that seem to be leading to rumination, such as being alone or listening to sad music or lying in bed in the morning before getting up and starting the day. Behavioural experiments may be used to test out the effect of changing such contingencies.

Finally, the therapy they need to address beliefs that the person has about rumination, such as that it is inevitable and uncontrollable, or that it has positive value, that it is helpful and necessary as a way to deal with problems.

Slide 13

In 2007, Ed Watkins and colleagues from the IOPPN reported an uncontrolled series of 14 patients who had previously failed to respond to antidepressant medication. Following rumination focused therapy, 71% showed a significant treatment in response and 50% achieved full remission. Encouraged by these findings, the same group conducted a full randomised controlled trial that was published in 2011, including 42 patients with significant residual depressive symptoms after treatment with antidepressant medication. Continued treatment as usual was the controlled condition and treatment as usual plus the rumination focus therapy the active treatment.

We see here a summary of the results and see a significant effect of the active treatment for the severity of depression as measured by the Hamilton Depression Ratings Scale and by self-report using the Beck Depression Inventory. As expected we also see an effect on rumination itself. The effect sizes of the active treatment relative to control, the Cohen's d statistic, were medium to large. Equally impressive were the other treatment outcome come data assessed in terms of response and remission rates at the end of the 12 weeks and the rate of relapse over the subsequent six months.

However encouraging search results may seem, this is a single trial and more evidence is needed, particularly comparing rumination focus CBT against other active treatments. Just such a trial is currently underway comparing rumination focused CBT with conventional CBT to see which is more effective in treating depression and maintaining treatment gains.