

DETACHED MINDFULNESS IN COGNITIVE THERAPY: A METACOGNITIVE ANALYSIS AND TEN TECHNIQUES

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ABSTRACT: This paper describes the nature and information processing requirements of detached mindfulness. The construct emerged from the self-regulatory information processing theory of emotional disorder (Wells & Matthews, 1994), and is viewed as a metacognitive state that facilitates change in core underlying pathological processes. Detached mindfulness has multiple components, requiring the activation of metacognitive knowledge, metacognitive monitoring and control, suspension of conceptual processing, attentional flexibility, and a de-centered relationship with thoughts. A model of the cognitive structures and processes supporting the state is presented. Implications of the model for the scientific development and effective use of mindfulness techniques are discussed. Ten techniques for rapidly achieving detached mindfulness in the course of metacognitive therapy are described.

KEY WORDS: Metacognition; Cognitive therapy; mindfulness; information processing; techniques.

Mindfulness is a concept that has a variety of meanings and contexts in psychology. It can be equated with effortful attentional processing and is seen as the opposite of mindlessness, a state of automatic processing (Shiffrin & Schneider, 1977). It is identified with metacognitive monitoring of thinking and the application of different learning styles (Salomon & Globerson, 1987). In psychotherapy research mindfulness has been conceptualised as an enhanced state of self-awareness thought to promote well-being (Brown & Ryan, 2003). It has been proposed that it is a common factor found in all

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modes of psychotherapy, as a state of psychological freedom occurring when attention remains quiet and limber, without attachment to any point of view (Martin, 2002).

There have been different pathways leading to clinical implementations of mindfulness. One has emerged primarily from adopting Buddhist meditation practices, and is exemplified by mindfulness based relapse prevention in cognitive therapy (Teasdale et al., 2000). Another has emerged from an information processing theory of psychological disorder in which a specific type of mindfulness is viewed as a useful state in developing adaptive metacognitive monitoring and control over pathogenic internal processes (Wells & Matthews, 1994, 1996; Wells, 2000). Techniques similar to mindfulness have also been advocated in Acceptance and Commitment therapy (Hayes, Strosahl, & Wilson, 1999), based on a theory of language and cognition.

Whilst mindfulness techniques appear set to proliferate, this is not necessarily a good state of affairs. Unless we understand what mindfulness is and what it requires its development and uses will be limited and potentially counterproductive. To better understand mindfulness it would be sensible to formulate something of its information processing underpinnings. With this in mind I will discuss the nature, underpinnings and uses of a particular form of mindfulness, a state that we have termed “detached mindfulness,” in the context of our metacognitive theory of psychological disorder. My goal is to use this theory to present a model of what it is that detached mindfulness requires from an information processing perspective. I then go on to describe a range of strategies that have been used for achieving it in metacognitive therapy.

THE WELLS & MATTHEWS (S-REF) THEORY

The Self-Regulatory Executive Function (S-REF) theory of psychological disorder emphasizes the similarities in maladaptive cognitive processing across psychological disorders. It proposes that all disorders are linked to the activation of a dysfunctional pattern of cognition called the Cognitive Attentional Syndrome (CAS). This consists of inflexible self-focused attention, perseverative thinking styles in the form of worry/rumination, attentional strategies of threat monitoring, and coping behaviours that fail to modify erroneous beliefs.

The CAS is a pattern of strategic processing activity driven by metacognitive knowledge stored in long term memory. Although it is

often initiated by involuntary intrusions from lower level automatic processing, its implementation requires the accessing of metacognitive plans or tactical knowledge, which exist as programs for guiding cognition and action. These are not directly verbally accessible but are marked by metacognitive beliefs about thinking styles. Examples of such beliefs include: "I must worry in response to negative thoughts in order to be prepared. If I pay attention to every danger I can avoid harm. Thinking of the worst that can happen will stop me being disappointed. I mustn't think positively or I'll tempt fate. Dwelling on the past will stop me forgetting."

Aside from tactical metacognitions of this kind, other metacognitive beliefs about the meaning and threat associated with thoughts and feelings are also important in shaping the person's interpretation of experience. Negative beliefs about the harmful consequences of thoughts and emotions are of particular importance. For example, obsessive disorder is linked to beliefs about the negative consequences of having intrusive thoughts, generalised anxiety is linked to erroneous beliefs about the dangerousness of worry, and depression is linked to erroneous beliefs about the abnormality of mood variation.

The CAS is considered to be a problem for psychological wellbeing because it focuses appraisal on threat, fails to provide information that can modify erroneous appraisals and beliefs, drains attentional resources for more adaptive responses, biases lower level automatic processing, and has environmental/interpersonal consequences that are problematic.

This theoretical analysis implies that cognitive modification in treatment should focus not only on challenging the validity of worry and negative thoughts, as is the case in standard cognitive therapy, but should focus on modifying the CAS directly by changing the style of cognition. An important strategy for doing such is the development of a state of *detached mindfulness*. Techniques for achieving detached mindfulness modify the style of thinking and the nature of the relationship that the person has with his/her thoughts.

THE NATURE OF DETACHED MINDFULNESS

In earlier work (Wells & Matthews, 1994) we proposed that detached mindfulness (DM) was a desirable state for patients undergoing psychological treatment. In many respects it is the antithesis

of, and is incompatible with, the CAS, and should therefore confer an advantage for therapeutic change.

Detached mindfulness is a type of inner-awareness, but in the absence of effortful processing of the self. It is awareness of the automatic and non-volitional ebb and flow of internal events, primarily thoughts. In this state the person is “cognitively de-centered,” meaning that thoughts are seen as objects in the mind that are separate from reality. Because DM does not involve conceptual processing the inner-awareness is one that relies upon the simultaneous control (i.e. suspension) of more usual analytical and perseverative forms of thinking. Detached mindfulness is objective awareness of thoughts and internal events in the absence of conceptual analysis and in the absence of goal directed responses. The characteristics of DM are depicted in Figure 1. It consists of the following:

1. Meta-awareness (consciousness of thoughts).
2. Cognitive de-centering (comprehension of thoughts as events not facts).
3. Attentional detachment (attention is flexible and not anchored to any one event).
4. Low conceptual processing (low levels of analytical and meaning based appraisals. i.e. inner dialogue).
5. Low goal directed coping (goals to remove or avoid threat are not paramount).

Our thesis (Wells & Matthews, 1994; Wells, 2000) is that procedures inducing DM can facilitate greater flexible control over the selection of different thinking and behavioural strategies. In addition the application of DM strengthens new plans for regulating cognitive activity, and can free-up resources for disconfirmatory processing and modification of beliefs. It provides a means of disengaging or preventing full activation of the CAS in response to triggers.

In summary, DM is a state of awareness of internal events, without responding to them with sustained evaluation, attempts to control or suppress them, or respond to them behaviourally. It is exemplified by strategies such as deciding not to worry in response to an intrusive thought, but instead allowing the thought to occupy its own mental space without further action or interpretation in the knowledge that it is merely an event in the mind.

Having sketched the theoretical and conceptual basis of detached mindfulness and its components, in the next section I show how the

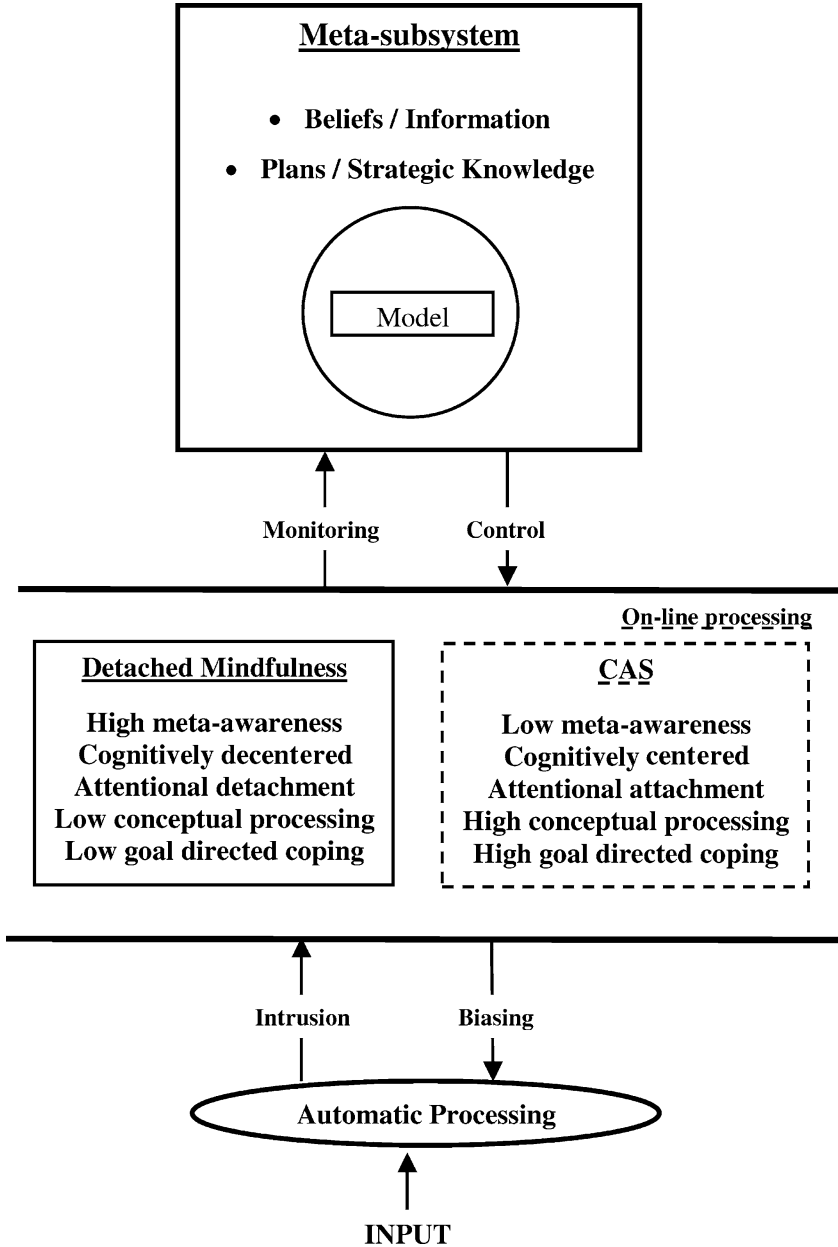


Figure 1. A Metacognitive Model of Detached Mindfulness.

S-REF theory accounts for the metacognitive and cognitive mechanisms and processes underlying the state.

THE ARCHITECTURE AND DYNAMICS OF DETACHED MINDFULNESS

Detached Mindfulness requires a range of interrelated metacognitive and cognitive structures and processes. Figure 1 depicts the structures and processes involved.

The cognitive structure is split into three levels. A level of automatic processing, on-line (controlled) processing, and a level of stored knowledge/beliefs. Conscious awareness is equated principally with on-line processing. A meta-subsystem is identified, comprised of information about cognition and plans (programmes) that can be called to control it, stored in long term memory. It also consists of a model of the activities of the on-line level. There is limited evidence to specify where the model of on-line processing operates in relation to the cognitive levels but it is possible that it is some kind of controlled process involving on-line processing that is not directly amenable to consciousness. Such "veiled" controlled processes have been described by Schneider and Shiffrin (1977) and Schneider, Dumais, and Shiffrin (1984) as simpler elements of controlled processing that occur outside of consciousness. For example, constructing a template to guide selective attention may be unconscious but the person may be aware of the general aim (goal) of the attention plan.

The relationship between the meta-subsystem and conscious on-line processing is represented by a flow of information involving *monitoring* and *control*, retaining the relation posited by Nelson and Narens (1990) in their dual conceptualisation of metacognition.

The meta-subsystem holds a model of the activity of conscious on-line processing. The model is defined here as perception of events in on-line processing, and projection of their status in the future in relation to a reference standard. It constitutes a current representation of its status in relation to a set of goals. The model requires not only real-time feedback from the on-line level, but the accessing of knowledge stored in long-term memory in order to function.

In Figure 1, the configuration of on-line processing constituting detached mindfulness is contrasted with the maladaptive CAS of psychological morbidity. This contrast is solely for reference purposes, as both configurations cannot run simultaneously because of resource

limitations and incompatibility in their respective plans for processing. Detached mindfulness is the antithesis of the CAS.

Activating and maintaining a state of detached mindfulness, which is not a typical configuration of processing, is dependent on flexible executive control. Any threats to attentional resources such as those produced by emotional or informational overload, or choice of inappropriate plans for control will impair the ability to achieve detached mindfulness.

In this framework detached mindfulness requires four information processing parameters to be met:

- (1) Activation of appropriate plans for controlling thinking
- (2) A mental model of the mindfulness state
- (3) Ongoing monitoring and control of on-line mindfulness
- (4) Sufficient attentional resources *and* flexibility of executive control to facilitate activation and implementation of the plan.

Implications of the Model for DM

The model presents important ramifications for understanding and designing DM procedures.

Therapeutic effects of DM can occur at different locations and impact upon a range of mechanisms and processes. Furthermore, impairments in mindfulness can arise at different locations.

The advantage of an information processing model is that it allows for the development of predictions concerning the effects of mindfulness treatment techniques. Specific techniques may be developed to impact on particular components and processes in the model. In addition, the model helps us to see how existing treatment strategies used in cognitive therapy might act on different components of DM. For example, identifying negative automatic thoughts using dysfunctional thought records will increase metacognitive monitoring. This will rely on activating a metacognitive monitoring plan. However, we can also see how the traditional procedure of interrogating thoughts in on-line processing will depend on plans that support high levels of conceptual analysis, which is incompatible with the state of detached mindfulness.

Problems establishing detached mindfulness occur when there are problems in establishing meta-awareness. This can result from the absence of appropriate plans for objective meta-awareness, failure to retrieve them due to insufficient executive control, and failures of implementation due to resource limitations. Failure to implement

plans for detached mindfulness can result from conflicting goals or resources channelled elsewhere. Failure might result from inaccuracies in the model of what the on-line level is doing, for example judgments of cognitive competency and performance are not entirely accurate. Similarly the individual's goal in using DM may lead to use of plans for processing that conflict with plans supporting DM. For example, a person attempting to use the state as means of controlling unwanted thoughts will activate a processing configuration that is incompatible with DM. Identification of information processing parameters required for DM, as in the present model, implies that techniques may be developed that are more specific in their underlying effects.

Strategies that are successful in producing detached mindfulness will increase discriminative control and flexibility of mental responding at the on-line level. However, much of the activity of on-line processing exerts an effect by biasing the lower level.

Detached mindfulness is likely to change (adverse) biasing of the lower level produced by more dysfunctional processing. For example, if the on-line strategy has been characterised by attentional fixation on threat, freeing of attention during mindfulness will de-bias lower level threat detectors. Experimentally such effects may be assessed by changes in performance on attentional filtering tasks such as the emotional Stroop.

WHY DM IS NOT SELF-AWARENESS

The present analysis of mindfulness demonstrates that it is not merely a state of self-awareness or self-focused attention. It requires more specific cognitive operations, which are capable of affecting the style of on-line processing. Self-awareness does not specify the simultaneous control of conceptual processing, and may depend on plans for any number of variants of self-processing. These plans will not normally have the goal of assuming an objective or de-centered perspective with thoughts. Indeed there is a large body of evidence showing that self-awareness and self-consciousness are reliably and positively correlated with psychological pathology (Ingram, 1990; Wells & Matthews, 1994).

Examination of the characteristics of detached mindfulness as summarised in Figure 1, reveals multiple indices of self-awareness that can dissociate. For instance, mindfulness can be construed as

consisting of low self-focus and high meta-awareness. The model provides a more sophisticated view of attention than that typically offered by clinical approaches to disorder. It does not assume that self-awareness or self-focused attention is a positive attribute. Self-focused attention is not viewed as synonymous with the selective internal attention required for meta-awareness. For example, an individual can be internally focused and meta-aware of spontaneous thoughts about another person, but this is not self-focused attention. In contrast a person can be internally focused on thoughts about the self but not be meta-aware or not have a de-centered relationship with such thoughts.

WHY DM IS NOT A COPING STRATEGY

The goal of an individual may be to avoid or prevent non-existent threat (e.g. mental breakdown resulting from anxiety), or the goal may be unrealistic (e.g. control all abhorrent thoughts). There is a danger that an individual's motivation in learning mindfulness techniques is to use them as a means of achieving such goals. This situation runs the risk of strengthening maladaptation by increasing the CAS. Moreover, successful use of mindful techniques as emotion control strategies may prevent the individual acquiring new information and developing new beliefs about the benign nature of emotional and cognitive events. For example, one of our patients had previously learned mindfulness meditation as a means of reducing anxiety. She feared that her anxiety might become permanent if she did not try to manage it. Her attempts to manage it backfired in the long term as she did not discover that anxiety could not persist even if she tried to make it do so.

In summary, the goal of mindfulness practise and the rationale in which it is embedded are important determinants of whether the state leads to changes in maladaptive beliefs or maintains them. Use of DM as a coping strategy compromises that state and may be counterproductive.

TEN TECHNIQUES FOR ACHIEVING DETACHED MINDFULNESS

In the remainder of this paper I will describe a range of techniques that we use to facilitate DM in the context of metacognitive therapy.

It should be noted that DM is utilised as a state to promote metacognitive and cognitive change in beliefs and normally forms part of a range of treatment strategies in metacognitive therapy. We do not use DM as a means of regulating or controlling emotions, or as a means of controlling or avoiding threat. It is not used as a coping skill.

1. Metacognitive Guidance

Description. Use of a series of questions during exposure to situations. It is intended to promote meta-awareness, de-centering, and freeing of attention. Can be used in neutral situations and applied in anxiety provoking situations. An example is given below.

Implementation. “Do you ever assume your thoughts are just facts indistinct from what you see in the outside world? Have you ever paused for a moment to become aware of the inner stream of thoughts that are constantly with you. I would like us to walk together and as we do so for you to use your attention in a new way.”

During the walk: “Can you become aware of your thoughts and images. Can you see your thoughts and the outside world at the same time? Try to hold onto a thought whilst focusing on what is happening in the street around you. Ask yourself: do I live by my thoughts or by what my eyes reveal in the moment?”

2. Free Association Task

Description. To facilitate passive observation of the ebb and flow of internal events that are cued by verbal stimuli. Facilitation of meta-awareness, de-centering, attentional detachment, and low conceptual processing.

Implementation. The task is introduced in the following way:

“In order to become familiar with using detached mindfulness it is useful to practise it in response to spontaneous events in your mind and body. By doing this you can learn how to relate to these events in a new way. In a moment I will say a series of words to you. I would like you to allow your mind to roam freely in response to the words. Do not control or analyse what you think, merely watch how your mind responds. You may find nothing much happens, but you may find that pictures or sensations come into your mind. It doesn't matter what happens, your task is just to passively watch what happens without trying to influence anything. Try this with your eyes

open to begin with. I'm going to say some words now: apple, birthday, seaside, tree, bicycle, summertime, and roses.

What did you notice when you watched your mind?

The idea is that you should apply this strategy to your negative thoughts and feelings, just watch what your mind does without getting actively caught-up in any thinking process."

This task is practised with neutral/positive stimuli initially and then with the gradual introduction of words related to the patient's concerns when relevant.

3. Prescriptive Mind-Wandering

Description. Intended to facilitate DM particularly in cases marked by excessive efforts at mental control. Excessive efforts are seen in forms of cognitive-emotional avoidance, and in disorders related to fear of intrusive thoughts. Such control efforts are problematic because they can interfere with automatic cognitive control processes that are more appropriate for certain situations. Furthermore, control efforts are prone to backfire leading to a sense of breakdown of mental control. Even when they are successful they may prevent the individual from discovering that intrusions are harmless.

Implementation. The exercise is introduced in the following way:

"Sometimes people try too hard to control their thoughts or try too hard to solve problems. This can have the effect of taking someone further away from the solution. You may have noticed this yourself when you have been unable to remember a name and it is on the Tip of your Tongue. If you try hard to make your mind remember it usually doesn't work. But when you let your mind go it will take care of the job of remembering for you. Your mind can look after itself. You can practise letting go by letting your mind wander freely and simply watching what it does. This exercise enables you to acquire the ability of detached mindfulness. I'd like you to sit quietly with your eyes closed for the next 3 minutes and allow your thoughts to roam freely, do not control them in any way. I will then ask you to describe what happened in your mind."

4. Suppression Counter-Suppression Experiment

Description. Some patients are motivated to rid themselves of particular thoughts, and erroneously equate detached mindfulness with having a blank or empty mind or try to use the strategy to achieve

this goal. In cases like this it is important to distinguish between *suppression* and *detached mindfulness* so that individuals do not misunderstand or misuse the strategy. A suppression counter-suppression experiment is used for this purpose, and consists of a brief period of suppression contrasted with a subsequent counter-suppression period.

Implementation. The therapist introduces the technique in the following way:

“It is important to know the difference between detached mindfulness and trying not to think thoughts. Trying not to have thoughts is a form of active engagement with them as you are trying to push them away. This can be very unhelpful. You can see this yourself if you try not to think a thought. Let’s try that now. For the next 3 minutes I don’t want you to think about a blue rabbit. Don’t allow yourself to have any thought connected with blue rabbits. Off you go.

What did you notice?

Let’s now try detached mindfulness and see what happens. For the next three minutes let your mind roam freely and if you have thoughts of blue rabbits I want you to watch them in a passive way as part of an overall landscape of thoughts. Try that now.”

5. *Tiger Task*

Description. In this task participants are guided in observing non-volitional aspects of imagery as a vehicle for the experience of DM. First the technique is practised with a neutral image, but later it can be applied to spontaneous intrusive images. The neutral image we use is that of a tiger.

Implementation. “To enable you to practise detached mindfulness, I’d like you to conjure up in your mind an image of a tiger. Do not make any attempt to influence or change the tiger’s behaviour. Just watch the tiger. It may move but do not make it move, it may blink but do not make it blink, it may change but do not make it change, watch how the image develops over time but do nothing to influence it, just watch the tiger in a passive way.”

The therapist then explores with the patient the movements the tiger made, and asks the patient if s/he made it move.

6. *Clouds Image*

Description. In this task participants are instructed to use imagery as a means of responding to thoughts. Although, strictly speaking

this technique requires some kind of active engagement with thoughts, it assists as an alternative to maladaptive ruminative styles of response to intrusions when patients request a concrete strategy. Alternatively, it can be used simply as a metaphor to illustrate the concept of letting thoughts go.

Implementation. “One way to help you achieve detached mindfulness is to think of your thoughts as clouds floating in the sky. It would be unnecessary and impossible to push clouds away and control their movements. Treat your thoughts and feelings as clouds. Imagine your thoughts printed on them and allow them to occupy their own space as they pass you by.”

7. *Passenger Train Analogy*

Description. An alternative to the clouds strategy above.

Implementation. “Imagine that each of your intrusive thoughts is a non-stop passenger train passing through a station. There is no point in trying to stop it or trying to climb aboard. Just be a bystander and watch your thoughts pass through.”

8. *Recalcitrant Child Analogy*

Description. A metaphor to assist patients in understanding the difference between and consequences of active engagement with distressing events versus detached awareness.

Implementation. “Detached mindfulness is similar to the way you might deal with a child. How would you manage a child misbehaving in a shop? You could pay a great deal of attention to the child and try to control the child’s behaviour. But if the child craves attention this could make things worse. It is better not to actively engage with the child but to keep a passive watch over the child without doing anything. You can put your negative thoughts and feelings in the place of that child. Do not try to control or actively engage with them, just keep a watching brief over everything.”

9. *Verbal Loop*

Description. Repeated presentation of thoughts in a verbal loop, either by using a loop tape or digital sampling device offers a means of applying detached mindfulness to negative intrusive thoughts. This task is configured specifically to induce detached mindfulness by

presenting it in the context of a metacognitive rationale. The metacognitive rationale is as follows:

Implementation. “I would like you to listen to the recording of your intrusive thoughts, and apply detached mindfulness as you listen. Treat each thought as merely a set of sounds not facts. Do not engage with the thoughts in any way, after all they are nothing more than sounds in the outside world. Keep in mind as you listen the knowledge that thoughts are not facts.”

10. Attention Training Technique

Description. The Attention Training Technique (ATT; Wells, 1990) is a formal attentional procedure designed to increase metacognitive monitoring and control processes and reduce perseverative conceptual activity. It therefore acts on several components of processing depicted in Figure 1 that contribute to detached mindfulness. Space precludes a detailed description of the technique here but the protocol can be found in Wells (2000).

ATT is an auditory external attentional exercise comprised of three components: selective attention, attention switching, and divided attention. Practise of the technique lasts approximately 15 min. Eight minutes are devoted to selective attention, 5 min to rapid attention switching, and 2 min to divided attention. An important aspect of the procedure is that the therapist aims to maintain attentional demands at a high level throughout use of the procedure, both within and across sessions.

Several sounds are introduced in the immediate consulting room, with additional sounds identified outside the room in the near and far distance. In total 6–8 sounds are recommended for use as attentional targets. The technique has also been used with a range of sounds introduced in the consulting room at different spatial locations (left, right, front, rear) in relation to the participant.

The instruction for ATT emphasizes that the aim of the procedure is not to suppress thoughts, but to practice focusing attention as instructed. If internal events such as thoughts or sensations do intrude then the patient is asked not to react to them but to re-focus attention as instructed.

Homework practise is a central component of the procedure. Typically patients are asked to practise the technique at least once per day, but not to use it as a distraction or coping strategy.

Implementation. A basic rationale for the procedure is given in accordance with the outline below:

“An important factor that keeps emotional problems going is that attention becomes *locked* onto negative thoughts and events, and this can be difficult to control. One technique that can reduce this tendency is called Attention Training. In this technique you practise focusing attention outwardly onto sounds in a special way as instructed. The aim of the procedure is not to distract you from thoughts or feelings, but to allow you to practise using your attention in a different way. You may well have negative thoughts or feelings during the exercise, that is perfectly normal, and if you do you should merely treat them as additional noise and return to focusing your attention as instructed. The aim is not to blank-out your mind but to practise flexibly using your attention and awareness in a particular way.”

The therapist then goes on to give instruction in the procedure. An extract of the beginning selective attention phase follows:

“Fix your gaze on the spot I have made on the wall. Keep your eyes open throughout the procedure. To begin with focus on the sound of my voice. Pay close attention to that sound, for no other sound matters. Try to give all of your attention to the sound of my voice. Ignore all of the other sounds around you. Focus only on the sound of my voice. No other sound matters, focus only on the sound of my voice.

“Now focus on the tapping sound, the sound that I make as I tap on the table. Focus only on that sound, no other sound matters. Closely monitor the tapping sound. If your attention begins to stray or is captured by any other sounds, re-focus all of your attention on this one sound....”

EVIDENCE OF THE EFFECTIVENESS OF DM

Evidence is emerging that techniques directly or indirectly producing detached mindfulness may be useful adjuncts to existing procedures, or effective in their own right.

Fisher and Wells (2005) examined the experimental modification of beliefs in patients with obsessive-compulsive disorder using detached mindfulness as an adjunct to exposure and response prevention. Patients were exposed to a closed-loop tape of obsessional thoughts following a habituation rationale versus a DM rationale. The latter condition produced significantly greater reduction in anxiety,

negative beliefs and urge to neutralise in a subsequent behavioural assessment test. Similarly, metacognitive therapy for OCD involving the development of a detached attitude towards intrusions not necessitating control or avoidance appears to be an effective treatment (Fisher & Wells, in preparation). However, the multi-component nature of metacognitive therapy used precludes assessment of the unique effects of DM strategies.

Metacognitive therapy for PTSD which involves a range of techniques described here for achieving DM appears promising in provisional studies. Instructing patients to respond to intrusions of trauma related material with DM, worry reduction strategies, and abandonment of threat monitoring appears effective without the need for cognitive restructuring or imaginal exposure (Wells & Sembi, 2004a, b).

Instructions to redirect attention away from the self and onto aspects of the external social environment during exposure appear to be more effective than exposure alone in the modification of anxiety and erroneous beliefs in social phobia patients (Wells & Papageorgiou, 1998). These results are consistent with the idea that inflexible attentional attachment on processing the self contribute to disorder maintenance, and strategies that override this may be beneficial.

Several studies have investigated the therapeutic effects of Attention Training used as a stand-alone treatment strategy. Whilst many of these studies have involved small numbers of participants they have used formal single-case experimental methodology. Attention training has been shown to be effective in the treatment of panic disorder (Wells, 1990; Wells, White, & Carter, 1997), hypochondriasis (Papageorgiou & Wells, 1998), recurrent major depression (Papageorgiou & Wells, 2000), and social phobia (Wells et al., 1997). Cavanagh and Franklin (2000) conducted a randomised controlled trial of ATT for hypochondriasis and showed that it was an effective treatment.

CONCLUDING REMARKS

In this paper, I have suggested a theoretical model for representing the information-processing requirements of detached mindfulness. The construct is multifaceted differing from constructs such as self-awareness, and having an unknown level of overlap with states achieved through meditation practices and with concepts such as acceptance. These latter constructs are not based on psychological

theories of information processing in disorder or models of mechanisms required for mindfulness. Future research is required to elucidate the differences and similarities between detached mindfulness and the states accompanying different types of meditation and acceptance based techniques.

Detached mindfulness is a theory derived psychological construct. It is defined as a state consisting of de-centered metacognitive awareness of internal events, particularly thoughts, coupled with a suspension of conceptual meaning-based processing and a suspension of effortful coping (e.g. suppression, goal directed avoidance). It is experienced as a state of watchful quiescence involving objective awareness of events in which attention remains flexible and not bound to any one thing.

Detached mindfulness has a pathogenic antithesis in the current model. This is the cognitive attentional syndrome (CAS) equated with high levels of mindlessness (limited de-centred meta-awareness), ruminative processing, attentional fixation on threat, and goal-directed coping behaviours.

In conclusion, the metacognitive model (Wells & Matthews, 1994) equates psychological disorder with a particular fixed and perseverative pattern of thinking, the CAS. This is the foundation for proposing that an opposing state of detached mindfulness requiring incompatible underlying processes could be usefully developed. The analysis points to the multi-component nature of detached mindfulness requiring three structural levels, interactions and information transfer between them, and different types of information. It offers a potential grounding for the scientific development and evaluation of mindfulness based treatment techniques.

REFERENCES

- Brown, K. W., & Ryan, R. M. (2003). The benefits of being present: Mindfulness and its role in psychological wellbeing. *Journal of Personality and Social Psychology*, *84*, 822–848.
- Cavanagh M. J., & Franklin, J. (2000). Attention Training and Hypochondrias: Preliminary Results of a Controlled Treatment Trial. *Paper presented at the World Congress of Cognitive Therapy*, Vancouver, Canada.
- Fisher, P. L., & Wells, A. (2005). Experimental modification of beliefs in obsessive-compulsive disorder: A test of the metacognitive model. *Behaviour research and Therapy*, *43*, 821–829.
- Hayes, S. C., Strosahl, K. D., & Wilson, K. G. (1999). *Acceptance and Commitment Therapy: An Experiential Approach to Behavior Change*. New York: Guilford Press.

- Ingram, R. E. (1990). Self-focused attention in clinical disorders: Review and conceptual model. *Psychological Bulletin*, *107*, 156–176.
- Martin, J. R. (2002). The common factor of mindfulness – An expanding discourse: Comment on Horowitz (2002). *Journal of Psychotherapy Integration*, *12*, 139–142.
- Nelson, T. O., & Narens, L. (1990). Metamemory: A theoretical framework and some new findings. In G. H. Bower (Ed.), *The Psychology of Learning and Motivation* (pp. 125–173). New York: Academic Press.
- Papageorgiou, C., & Wells, A. (1998). Effects of attention training in hypochondriasis: An experimental case series. *Psychological Medicine*, *28*, 193–200.
- Papageorgiou, C., & Wells, A. (2000). Treatment of recurrent major depression with Attention Training. *Cognitive and Behavioural Practise*, *7*, 407–413.
- Salomon, G., & Globerson, T. (1987). Skill may not be enough: The role of mindfulness in learning and transfer. *International Journal of Education Research*, *11*, 623–637.
- Schneider, W., & Shiffrin, R. M. (1977). Controlled and automatic human information processing: I. Detection, search and attention. *Psychological Review*, *84*, 1–66.
- Schneider, W., Dumais, S. T., & Shiffrin, R. M. (1984). Automatic and control processing and attention. In R. Parasuraman & D. R. Davies (Eds.), *Varieties of Attention*, New York: Academic Press.
- Shiffrin, R. M., & Schneider, W. (1977). Controlled and automatic human information processing: II. Perceptual learning, automatic attending, and a general theory. *Psychological Review*, *84*, 127–190.
- 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.
- Wells, A. (1990). Panic disorder in association with relaxation-induced-anxiety: An attentional training approach to treatment. *Behavior Therapy*, *21*, 273–280.
- Wells, A. (2000). *Emotional disorders and metacognition: Innovative cognitive therapy*. Chichester, UK: Wiley.
- Wells, A., & Matthews, G. (1994). *Attention and Emotion: A Clinical Perspective Hove*. UK: Erlbaum.
- Wells, A., & Matthews, G. (1996). Modelling cognition in emotional disorder: The S-REF model. *Behaviour Research and Therapy*, *34*, 881–888.
- Wells, A., & Papageorgiou, C. (1998). Social phobia: Effects of external attention focus on anxiety, negative beliefs and perspective taking. *Behavior Therapy*, *29*, 357–370.
- Wells, A., & Sembi, S. (2004a). Metacognitive therapy for PTSD: A core treatment manual. *Cognitive and Behavioral Practice*, *11*, 365–377.
- Wells, A., & Sembi, S. (2004b). Metacognitive therapy for PTSD: A preliminary investigation of a new brief treatment. *Journal of Behavior Therapy and Experimental Psychiatry*, *35*, 307–318.

Wells, A., White, J., & Carter, K. (1997). Attention training: Effects on anxiety and beliefs in panic and social phobia. *Clinical Psychology and Psychotherapy*, 4, 226–232.