

Advances in Mindfulness Training Integration: Towards a Non-Dualistic Cognitive-Behaviour Therapy

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New paradigms and reconceptualisations of old technologies constantly add to the range of available psychotherapeutic methods, but they are also potential sources of dilemmas for the prudent clinician. Innovations by clinicians are central to advances in the development of new interventions, and technical eclecticism and theoretical integration represent vivid articulations of the nature and importance of such innovations (Lazarus & Davison, 1971). Over the last two decades, attempts to integrate the 'mindfulness' epistemic value system and techniques into models of cognitive-behaviour therapy (CBT) have captured the interest of researchers and clinicians worldwide. This article briefly discusses theoretical and practical advantages of this integration in overcoming difficulties posed by traditional cognitive-behaviour interventions, using clinical cases treated by the author as an example.

The Mindfulness Approach: A Brief Overview

It has been proposed that mindfulness – a way of attending consciously and non-judgementally to internal and external events in the present moment – is a common factor across various therapeutic orientations (e.g., Martin, 1997). The basis for this view is that the development of mindfulness promotes access to new perspectives and the disengagement from habitual response sets, including automatic thoughts and behaviours (Cayoun, 2004; Langer, 1989, 1992; Roemer, & Orsillo, 2002; Teasdale, Segal, & Williams, 1995; Wells, 2002).

Six years ago, Kabat-Zinn (1998) noted a growing interest in the mindfulness approach since its earliest formal inclusion in western psychotherapy (Kabat-Zinn, 1982), with over 240 programs implemented in North America and Europe. Some researchers and clinicians have already embraced the inclusion of mindfulness in the cognitive-behaviour framework (e.g., Linehan, 1993; Segal, Teasdale, & Williams, 2002; Williams; Witkiewitz, Marlatt, & Walker, in press). Others are now proposing the formal integration of mindfulness-based approaches with existing

cognitive-behavioural models of psychopathology (e.g., Cayoun, 2004; Roemer & Orsillo, 2002).

The mechanisms of action proposed include exposure, cognitive change, self-management, relaxation, and acceptance (Baer, 2003). They have also been described in terms of their neurophenomenological bases via a more comprehensive model of reinforcement, the co-emergence model (Cayoun, 2004).

The Co-Emergence Model of Reinforcement

The model posits that reinforcement is dependent upon learned reactions toward intrinsically coupled cognitions and body sensations. In accordance with eastern conceptualisation of mind and recent connectionist models of information processing, associations stored in memory can manifest spontaneously in the form of co-emerging thought networks and body sensations. In other words, the model offers a non-dualistic explanation of reinforcement where mind and body constantly interact to process information and are systematically experienced at once, whether or not one is aware of it. Conscious and active disengagement from such spontaneous co-emergence through a systematic acceptance-based attentional training (i.e., mindfulness) leads to the development of equanimity¹ and extinction of learned responses. This method is conceptualised as a form of generalised interoceptive exposure and response prevention systematically applied to all experiences as they manifest themselves from moment to moment.

By observing fleeting thoughts and corresponding (co-emerging) body sensations objectively, without reacting to any experience, trainees gain sufficient insight to realise and accept that all experiences (including rumination, anxiety symptoms, even physical pain) are in essence transient and impersonal events. With each experience, the trainee reminds himself or

¹ In this context, equanimity is the ability to remain unperturbed by an event experienced within the framework of one's body and thoughts as a result of objective observation. This implies that unless one is aware of an actual (internal) experience, one cannot be equanimous towards it. Thus defined, equanimity relies on awareness of one's thoughts and body sensations.

herself that “this experience will change provided I don’t react to it (reinforce the response)”. Accordingly, the notion of impermanence/ extinction in individuals with psychopathologies is emphasised to foster the development of equanimity, and used as an empirical means for reality testing. This approach increases the client’s ability to reappraise undesirable situations more objectively and accept change.

Rationale for Mindfulness/CBT Integration

Despite its origins in eastern traditions, mindfulness training contains several features that overlap with cognitive-behavioural models for treating mood and anxiety disorders (Beck, Rush, Shaw, & Emery, 1979; Barlow, 2002; Meichenbaum, 1977). The mindfulness and CBT perspectives seem to differ mainly in depth and scope, but they share a common aim by encouraging reappraisal of a maladaptive view to promote a more objective reality about oneself and the world. However, since the mechanisms of action contained in the mindfulness approach capable of enhancing long-term behaviour change are not present in CBT (Miller, Fletcher, & Kabat-Zinn, 1999; Teasdale et al., 1995), integration of these two approaches seems a fruitful endeavour.

There are a number of clinically relevant difficulties in CBT that can be prevented when such integration is accomplished (Cayoun, 2004). Some of these will be discussed here using real cases as illustrations (to preserve anonymity, each client’s name is fictitious and age is approximated).

The Therapeutic Role of Interoception

A considerable weakness of conventional CBT is its insufficient consideration for the ‘lower’, co-emergent sensorimotor processing, which operates without the necessity for volitional effort. Of course, this is less obvious with cognitive treatments of anxiety disorders, where the necessity of considering body sensations is made obvious by their salience (e.g., Clark, 1986). In the mindfulness approach, body sensations play a key role in the reinforcement system.

The focus on contents and structures of ‘distorted’ thinking can easily become a distraction from a more fundamental reality that needs to be acknowledged: a negatively charged cognition is painful, it generates unpleasant body sensations, and reactivity is subconsciously directed towards this unpleasant experience while one remains with the impression that reactivity is directed towards target events. The client’s lack of insight in this matter leads him or her to reinforce the behaviour by reacting to the sensation, which increases the probability of therapeutic failure.

Moreover, clinicians can often be misled by the traditional CBT working model. In a number of cases, such as severe depressive episodes, some clients appear insufficiently reactive and clinicians often encourage emotional reactivity. Nevertheless, there is no evidence to date that someone who *appears* numb is not actually in a reactive state. Someone whose reactivity levels are usually normal but decrease significantly during mood disturbance may simply internalise reactions – which may also be suppressed by medication. The act of suppressing emotion *is* in itself a reaction.

Attempting to change a covert reaction to an overt one may be useful in reinforcing the clinician’s sense of efficacy, but does not necessarily lead the client nearer self-acceptance. The belief that clients who are encouraged to freely react emotionally have a greater ability to ‘let go’ and maintain recovery in the long-term is not evidenced. This author’s observation is that when such ‘non-reactive’ individuals undertake a mindfulness-based CBT (MCBT) program, paradoxically, they appear to become *more* reactive for some time before they are able to accept the experience. It is possible that their reactions become more conscious and externalised because they are able to let go of the ‘first-order reaction’ (emotional suppression) and are faced with the ‘second-order reaction’ (the behaviour they attempted to avoid, such as a fear response). In accordance with the body of research in anxiety disorders (see Barlow, 2002, for a review), long-term change is made possible only when avoidance mechanisms are neutralised and avoided experiences are faced.

“Jenny” is a 30-year-old client diagnosed with borderline personality disorder. She had partly recovered from a dissociative identity disorder but still experienced severe dissociative symptoms, along with severe self-mutilating behaviour (including body parts amputations) and severe depression. The pervasiveness of her long-term condition has led to a separation in her relationship, following which she was denied custody of her children. Jenny’s social network is limited to very few individuals, upon whom she feels emotionally dependent. She described a long list of psychotherapies (including CBT) that failed to help deal with her condition. Following six weeks of MCBT, Jenny was discharged from our inpatient program and admitted as an outpatient. As I mentioned at this stage (six weeks into treatment) that her rapid change would be a good example to cite for educational purposes, Jenny kindly decided to write the following letter reflecting her experience.

I came here two months ago with three aims: to try to find out who I was, to be able to feel emotions, and to become more 'real' rather than switching constantly from role to role. I was unable to feel strong emotions and was often unaware of the less intense emotions as well. To control the sensations that emotions produced in me I was using controlled dissociation, suppression and various distraction behaviours.

Over the next six weeks, I changed my perspective from being event-focused to focussing on my reactions to events. This meant that instead of trying to deal with the event itself, which wasn't the problem, I could start to deal with my reactions and responses at the basic level. This will enable me to deal with any stressful event as it happens, rather than having to cope with each new event as a separate problem or just suppressing any reaction to it.

As my awareness of myself increased, I realised that my sense of identity was caught up in doing rather than being, so as I became more aware of my bodily and emotional reactions, and more able to just be, my sense of self increased naturally (underlining not mine).

Then I realised that there were a number of things about the 'real' me that I didn't like and couldn't accept in myself, and this led me to some dissociative episodes and some self-injurious behaviour. It took me some time to be able to accept that it was 'normal' to be ambivalent about oneself – that there are parts of everyone that they find harder or easier to accept (Some cognitive work had just taken place at this stage). I was then able not only to be aware of myself but also to come to some acceptance of myself.

After discharge I continued to become more and more aware of my reactions, feelings and thoughts. A few days ago I experienced a very negative reaction to a trigger and felt so much emotional pain that I reacted out of habit rather than my new training and self-harmed again. Afterwards I felt very negative and depressed, but instead of burying these emotions I was able to stay with them and struggled to accept them until they passed. When they did, I looked back and realised that I had become the 'emotional wreck' I had always wanted to be. I knew that to experience life fully meant experiencing the 'negative' emotions and reactions as well as the 'positive' ones, but I hadn't realised how painful they could be.

Looking back however, I can appreciate the experience, because I really did experience it, and that was my goal, after all. I finally was able to be 'emotional' and even though I felt awful and hated every minute of the negative feelings, being emotionally unstable was a great experience!

Jenny's discovery of a clearer, more authentic and more consistent sense of self, and a shift from external to internal locus of control were not due to cognitive restructuring, which had been offered to her for many years without lasting benefit. In fact, she reported to be "very good at using the mind to rationalise and thus avoid the pain". Jenny has rapidly regained custody of her children and has

enrolled in a science degree five months following the end of treatment. She is now a successful undergraduate university student.

Experiential Ownership

Another advantage of incorporating mindfulness is not only the client's conceptual but also actual recognition of his or her responsibility for the evaluation of experiences and corresponding maladaptive behaviour. For example, "Craig" was admitted for severe anger management problems following a work accident which caused permanent damage to some body parts. At first, classic CBT (including anger management training) was used with some success, but compulsive anger towards his employer and other staff members, as well as the mental health system, kept overpowering him.

Adding the mindfulness training to the therapy led him to discover progressively and directly that nobody planted the sensations of heat moving throughout his face and upper back, the sensation of pressure on the temples, and the unpleasant need for harder breathing. By developing his capacity for interoception and equanimity, Craig realised that whatever was the reason for producing anger, it was *he* who suffered its psychophysiological manifestations, and it was only he who could transform the reactive habits. The ecological validity of this approach made it easier for Craig to take responsibility for his unpleasant experiences. Incorporating mindfulness training in the CBT model for anger management was beneficial, as he was discharged from the inpatient group and admitted as an outpatient in his third week of treatment.

Online Detection versus Retrospective Retrieval

A central tenet of traditional CBT is that each maladaptive response is preceded by distorted automatic thoughts. Nonetheless, empirical research in cognitive psychology has shown the existence of multiple levels of cognition and the need to distinguish between the effects of thoughts and emotions at various levels of the system (Teasdale & Barnard, 1993). Therapies that operate at the conceptual level cannot necessarily be assumed to have effects at the sensorimotor level, and therapeutic work at one level does not affect other levels (Williams et al., 1997). In particular, a limitation of traditional CBT is its tendency to deal mainly with higher-level cognitive processing and to disregard dynamic, self-organised mental events co-emerging with somatic sensations below awareness level.

The mere fact that the thought pattern has become automatic (i.e., subconscious) suggests that online (immediate) detection is hardly possible. Since old habits of responding do not require semantic processing, it seems unlikely that fully formed ideas, as exemplified so often in typical 'dysfunctional thoughts records' given to clients, are detectable online. It is far more likely that the 'automatic thought' is either partially retrieved or reconstructed by reasoning it out following the event. For online detection, one has to be mindful of the simultaneity of external and internal events, and such a state of mind is diametrically opposite to an agitated state. In effect, mindfulness and emotional reactions are mutually exclusive states.

One may ask whether this difference of a few minutes (or sometimes seconds) between the automatic thought and the reaction to the event is of any relevance to the client's understanding and progress. It is very relevant indeed, because between the actual evaluation stage (automatic thought) and the retrieval (or reconstruction) analysis, the reaction has already taken place. If the reaction is destructive, as it was for Craig's anger responses and Jenny's self-injurious behaviours, this delay of a few seconds or minutes becomes even more relevant.

One may also ask what difference does this make in terms of treatment. It is common to observe friends, colleagues, or clients, repeating the same undesired behaviour and apologising for it, but it is too often too late. A person may be very aware of some of his or her schematic models while being incapable of preventing reactive reflexes, whether cognitive, emotional or behavioural.

This difference is of significance for treatment efficacy and duration, as it was for the case aforementioned. First, as the client attempting to record dysfunctional thoughts keeps reacting negatively and keeps rationalising about the reaction (i.e., when it is too late), a recurring outcome in the early stages of therapy is the client's growing sense that this procedure is either ineffective or too complex, or that he or she is "once more" unable to achieve even such a simple task. In depressed clients, the typical sense of failure and worthlessness may be reinforced by the inability to prevent their reactions and the possible negative feedback from significant others. Since therapeutic progress is enhanced by small successes (Beck, 1976), preventing reactions by detecting the preceding automatic thoughts *online* is of significant benefit.

A means by which online detection is facilitated is the act of attending to co-emerging body sensations and thoughts from moment to moment, as proposed by the mindfulness approach. This online awareness enables earlier detection of psychophysiological changes following stimulation,

a short period when the unpleasant experience is sufficiently manageable to enable some inhibitory control over reactive habits.

"John" is a 42-year old inmate diagnosed with Posttraumatic Stress Disorder (PTSD) incarcerated about three years ago. His account of mindfulness training after six weeks of treatment illustrates both the beneficial effect of online detection and clients' renewal of trust in therapy when rapid results are acquired despite the chronicity of their condition.

I was just an average sort of bloke. I lived in an average house in an average suburb in an average city. I owned and managed an average business. A few years ago my world disintegrated. I was involved in an incident which ultimately resulted in the tragic death of another man. So here I sit in prison.

Have you ever closed your eyes and found yourself engulfed in a swirling darkness that threatens to smother your breath, a darkness so intense you can feel it swelling in your throat and tightening around your chest? I liken it to an immense whirlpool. I would find myself standing on the edge of an unimaginable vortex, trying in vain to maintain my balance. Pieces of my life flash past, disjointed horrible memories that I am unable to make sense of. Memories of accidents from years ago, children, cold and silent, the smell of fuel, blood and the cold night air; flotsam in a raging sea. And then it happens again, and again, and again...

The reason I'm telling you all this is to try and explain how I felt, before I reached out for help. I started speaking with a psychologist and the simple act of sharing my thoughts and fears was like a weight being lifted from my shoulders. In this grey and lonely place I had a friend whom I could talk to. The nightmares didn't stop but I was no longer alone.

Some months ago I was introduced to another psychologist who in turn introduced me to Equanimity Training. Meeting him was an extremely positive point in my life.

He set about explaining that all emotions were linked to physical sensations within our body. Memories are attached to emotions which are in turn attached to physical sensations. This explains why the thought of something unpleasant can sometimes result in a very real feeling of nausea. In short he described how it was therefore possible to control emotions by controlling our physical sensations. He called this technique 'Mindfulness'. By accepting a sensation at its base level rather than tagging it as either good or bad, by accepting it simply for what it is, the physical sensation can be separated from emotion. Well that's my very basic interpretation of it anyway. To do this one has to listen to one's body and this takes lots of training and practice. But it's worth it!

Suddenly I was in control. Sure, the whirlpool of despair made regular appearances but now I had the power to step back from the edge. I have been able to re-visit a lot of the horrors from my past and examine them as exactly what they are, memories from the past. I have been able to accept the physical sensations associated with these memories. The memories have now lost their terrible power; they no longer fill me with dread. I have accepted them. I made the choice.

But even more than this I have been able to use this technique in dealing with the present. The biggest difference I can attest to now, after practising the mindfulness technique, is that I no longer react. I respond. There is a huge difference. In responding I have made a considered decision as to the course of action rather than an emotive reaction.

I feel calmer and more in control of my everyday experiences. As corny as it sounds, I feel like I'm in touch with the real me. I haven't had a nightmare in ages, and the negative thoughts that used to plague me through each day have just faded away.

Please don't misunderstand what I am saying here. I still have some issues in my life, and I still have some problems but I believe that I am now far better equipped to deal with life thanks to this training.

I sit here in prison, deprived of my family, my friends, my liberty, but still I can find something to smile about every day. I have been given the opportunity to make a choice every morning when I wake.

The first option is to run around in ever decreasing circles crying out "why me, why me" and searching for non-existent answers, wishing I could turn back time. The second choice is to accept the current situation for what it is, and then move on.

What good can possibly come from the former option? I therefore choose to accept and look forward instead of behind. I'm not advocating that acceptance of a given situation means giving up hope. I am simply saying that the mindfulness technique has proved to be a very powerful tool that helps me accept the reality of life.

Have you noticed that the recurring theme of my little account is 'acceptance'? To me, acceptance is the key.

I'm still just an average bloke but now I have a degree of skill and knowledge that helps me cope when real life is anything but average.

Despite his disappointment following two unsuccessful appeals in court in the last year, follow-up measures 12 months following the end of treatment show that John's depression and anxiety levels have not increased, PTSD symptoms have not re-emerged, and high coping skills have been maintained (Cayoun & Fullarton, 2004). John is now thinking of enrolling in tertiary studies.

The Four Stages of MCBT: Brief Overview

In the first stage of the program (mindfulness training) increased levels of equanimity are achieved via "generalised interoceptive exposure", and then systematically applied to all encountered experiences so that the skill is not limited to dealing with specific events or contexts.

The second stage of the program is also an exposure procedure, but it includes challenging unhelpful behaviours and unsubstantiated assumptions about external triggers. When equanimity is sufficiently developed, a typical behavioural test is the investigation of whether the experience of the present difficulty is truly impermanent when equanimity is applied. For example, exposure for a person with agoraphobia can be to step out of the house, first within a 'safe' distance, and remain equanimous towards whatever body sensations and thoughts which may be experienced.

The third stage of MCBT consists of interpersonal investigation and interaction, including social skills training and equanimity-based assertiveness. A typical task is to test whether a person with whom a client enters in conflict reacts in the same way when the client is equanimous. Another requires the client to hypothesise about the type of body sensations a significant other may be experiencing during a confrontation with the client. This type of homework can easily be added to role-playing in social skills training and other techniques commonly used by professionals to increase a sense of control in social interactions. This stage helps the client to perceive others' difficulties more objectively.

The fourth stage of MCBT is designed to foster "grounded empathy", and plays an important role in relapse prevention. When equanimity is sufficiently developed and unpleasant body sensations during training have mostly given place to a pleasant flow of subtle sensations, clients are taught to first think of people they love and wish them well while at the same time feeling their pleasant body sensations. Then they focus on those with whom they may be (or may have been) in conflict and proceed in the same way. Thus, this repeated daily exercise involves the pairing of initially aversive targets with pleasant interoceptive experience, acting as a powerful counter-conditioning device.

Conclusion

Therapeutic innovations by clinicians are central to advances in the development of new interventions. Technical eclecticism and theoretical

integration are useful means by which empirical researchers are often guided to carry out more systematic research. How, and how much mental health practitioners should integrate the development and proliferation of such techniques is of practical, ethical, and economical concerns. For Jenny, Craig and John (and others not discussed here), mindfulness-based CBT was more practical, understandable, and result-oriented than CBT alone. Since discharge was consequently possible at an earlier date, integrating these therapeutic systems had both ethical and economical values.

There are now sufficient empirical data in the literature to establish the effectiveness of mindfulness training and the benefits of its integration into CBT models. Whether clinicians promote mindfulness skills in an eclectic manner or allow a transformation of their preferred theoretical framework is not critical to therapeutic gains. If the client understands where and how reinforcement takes place, increases self-acceptance, self-efficacy and capacity to change, the purpose is served.

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