What Is Third Wave Behavior Therapy?

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The term "third wave" has been used surprisingly often, such as to describe feminism, music, democracy, and even coffee (https://en.wikipedia.org/wiki/Third_wave). It has also been used to name a group of approaches within the cognitive and behavioral therapies. Like any named difference, however, it can both help and hurt to call something a "third wave." Without going too deeply into the metaphor, it appears undeniable that that "third" comes after first and second. To "come after," or follow, can mean newer or better or a replacement. Although, these are not intrinsic to the meaning of "third wave"– this is supplemental meaning that one can attach to the term. What is the "third wave" of behavior therapy? Is it after, newer, better, a replacement, or even different than the first or second wave, and how? The focus of this chapter is to discuss whether it is any of these things.

Third Wave Behavior Therapies

The term "third *generation* behavior therapy" clearly appeared sometime around or before 1998. One of the things it connoted at that time was an appeal for therapy to maintain a link with basic science, particularly a kind of science focused on learning, use of single subject methodology, and on practically important outcomes (O'Donohue, 1998). It appears that the specific term "third *wave*" was first applied to the behavioral and cognitive therapies, in published form and in English, in an article by Steve Hayes (2004a) based on a presidential address to the Association for Advancement of Behavior Therapy (AABT). In this article he named a number of therapy approaches that "do not fit easily into traditional

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categories within the field" (p. 639). These included Acceptance and Commitment Therapy (ACT; Hayes et al., 1999), Behavioral Activation (BA; Martell et al., 2001), Cognitive Behavioral Analysis System of Psychotherapy (CBASP; McCullough, 2000), Dialectical Behavior Therapy (DBT; Linehan, 1993), Functional Analytic Psychotherapy, (FAP; Kohlenberg & Tsai, 1991), Integrative Behavioral Couples Therapy (IBCT; Jacobson & Christensen, 1996), Mindfulness-Based Cognitive Therapy (MBCT; Segal et al., 2002), and other similar approaches specially applied to addictive behavior (Marlatt, 2002) and generalized anxiety disorder (Borkovec & Roemer, 1994; Roemer & Orsillo, 2002). When these therapies were first categorized this way it was said that "no one factor unites these new methods," (p. 640, Hayes, 2004a) except that each of these has reached into psychological territory not ordinarily addressed within the cognitive behavioral therapies. This includes such matters as acceptance, compassion, mindfulness, relationship, self, spirituality, validation, values, and others. The point being that it is both, a failure to fit into the traditional confines of the more established cognitive and behavior therapies and a kind of similar bold embrace of psychological processes regarded as deep in human experience, and challenging to reach, that distinguish the third wave (Hayes, 2004a, b).

In the years since 2004 some confusion has surrounded the "third wave" including questions regarding which therapies are a part of this wave and which are not. Twelve years after the term was introduced a review was published that examined how the term was being used (Dimidjian et al., 2016). At that time a search of PsychINFO and PubMed using the terms "third wave AND therapy" yielded 239 published articles. After selecting only those articles addressing cognitive and behavioral therapies and excluding those clearly addressing something else, 140 unique articles were identified published between 2003 and 2015. For about a third of the articles reviewed (n = 47), there was no specific therapy approach directly identified as third wave but only a more general discussion of the term. For the remainder of the articles (n = 93), a therapy approach was clearly identified as third wave, and a total of 17 approaches were defined as such. ACT was most frequently identified third wave therapy (66 times), followed by DBT (22 times), MBCT (20 times), FAP (15 times), and BA (11 times). A total of eight other approaches were named as third wave between two and nine times, including mindfulness, metacognitive therapy (Wells, 2009), schema therapy (Young et al., 2003), mode deactivation therapy (Apsche & Ward, 2002), IBCT, compassionate mind training (Gilbert & Procter, 2006), mindfulness-based stress reduction, and CBASP (McCullough, 2000). And four approaches were mentioned just once as third wave, including "mindfulness-based training group," positive psychotherapy (Seligman et al., 2006), unified protocol (Barlow et al., 2011), and compassion focused therapy (Gilbert, 2010). It was concluded that there is both consensus on inclusion of some therapy types within the third wave and inconsistent views on others (Dimidjian et al., 2016).

History

If there is a third wave of behavior therapy, it is only reasonable to assume that it must sit in relation to a first and second wave. In previous chapters of this volume these other waves will have been defined and described. The first two waves will be discussed briefly here to provide a context for understanding the third.

Before there was a wave metaphor, perhaps the most appropriate metaphor for the behavioral therapies would have been to refer to them as a network of many roots and branches. Some of the oldest or deepest roots were the conditioning principles of Pavlov, Skinner, Hull, and others, but mainly these. Over time these differing roots gave rise to differing therapy approaches, or the different branches, within behavior therapy. Essentially these had several important characteristics in common, characteristics that distinguished them from approaches that came before them. These first wave behavior therapies were each (a) based on conditioning principles derived from laboratory research, (b) devoted to scientific methods as a source of knowledge, (c) committed to links between basic and applied science, (d) defined behavior change as outcome, and (e) looked generally to the manipulation of environmental contingencies as the means to produce this change. The "branches," as we say, may have emphasized different processes of change and favored differing specific techniques. At the same time, they were essentially grounded in the same overarching principles.

Behavior therapy in its earliest forms as described here was born in the 1950s and developed in the 1960s. In 1963 the first journal for behavior therapy appeared. It was the journal *Behaviour Research and Therapy* founded by Hans Eysenck. AABT was founded shortly after that, in 1966. Already at that time the seeds were sown for new growth, and new branches were appearing, or, if you will, ripples of the second wave were forming. Cognitive therapy soon appeared and began what would become a dramatic reshaping of behavior therapy into something else (e.g., Beck, 1970).

Those studying clinical psychology during the 1970s and later may have learned slightly different accounts of the origin of the C being added to BT. Many, however, would have learned that what is now regarded as the second wave, was an amalgamation of behavior therapy added to mainly of the work of Albert Ellis (1962), Aaron Beck (1976), and Donald Meichenbaum (1977). Their approaches were called Rational Emotive Therapy, Cognitive Therapy, and Stress Inoculation Training, respectively, among other terms. There are similarities and differences between these three and they are not each equally well known today, the cognitive therapy approach from Beck, arguably, having produced the most applications, research, and evidence (e.g., Cuijpers et al., 2020; See also Beck, 2019 and Dryden, 2011 for personal accounts). What unifies these three is a dissatisfaction with the then current behavior therapy, and its neglect of cognitive processes (see Davison, chapter "Personal Perspectives on the Development of Behavior Therapy and Cognitive Behavior Therapy", this volume). Their response to this was, to say it

simply, to emphasize the role of individual distorted or maladaptive thoughts, beliefs, and attitudes in relation to emotional and behavior problems.

The essence of the cognitive approach was clear in its defined mechanism of change, "… a crucial mechanism in the psychotherapeutic chain is a modification or shift in the patient's ideational system. As his irrational concept that he is paralyzed (hysteria), helpless and hopeless (depression), in danger (anxiety or phobia), persecuted (paranoid sate), or superhuman (mania) becomes deactivated, the abnormal clinical picture recedes" (p. 197, Beck, 1970). Looking back over the "60-year evolution of cognitive theory and therapy" the emphasis remained on identifying and modifying negative automatic thoughts and on "…working to rewire maladaptive beliefs and biases into more adaptive ones" (p. 19, Beck, 2019). An interesting feature was the tendency to regard different forms of psychopathology as characterized by unique cognitive distortions or attitudes.

Notably, many of those involved at the start of what is now regarded as the second wave maintained an affinity for first wave behavior therapy and were meaning to simply broaden its focus while staying true to some of its primary tenets. Even Beck called cognitive therapy "congruent with many of the assumptions of behavior therapy" (p. 198, Beck, 1970) while at the same time regarding cognitive therapy as broader, and providing "a greater range of concepts for explaining psychopathology as well as the mode of action of therapy" (p. 198). What was literally proposed was a kind of expansion and integration, an addition of cognitive concepts and techniques to the current behavioral ones. It must be said, however, that cognitive processes and methods were really very much more the headline of the cognitive approaches, and the message of synthesis and expansion appeared at best a secondary concern. In fact, another agenda was hinted at some of the time, such as when it was asked, "Can a fledgling psychotherapy challenge the giants in the field – psychoanalysis and behavior therapy?" (p. 333, Beck, 1976). So, it is possible to detect two different narratives around the rise of cognitive approaches, an integration agenda that was there for some but less so for others, and a fight to win agenda, which was certainly in the experience of many.

Worth mentioning is that around the same time as primary variants of the cognitive approach were showing up on the scene other allied approaches were also emerging. One of these was social learning theory (Bandura, 1977a) later called social cognitive theory (Bandura, 1986). From within this approach comes the extremely well-known self-efficacy theory, proposed at the time as a "unifying theory of behavior change" (Bandura, 1977b). What seemed apparent from the early days of cognitive therapy was that methods and mechanisms of acquisition and change in human behavior could be formulated in terms of cognitive processes, such as cognitive restructuring or reappraisal, OR in terms of environmental manipulations and overt behavioral performance, such as in exposure therapy or skills rehearsal. Bandura therefore proposed a solution to this problem of two sets of methods and mechanisms in the form of a process that unified them, namely self-efficacy. This he defined essentially as the strength of a person's conviction regarding their own effectiveness, their expectation for whether they can successfully execute the behavior required to produce an intended outcome (Bandura, 1977b).

For Bandura this was a key factor in the acquisition, regulation, and motivation of behavior, although he continued to see a role of skills building, competency, as well as incentives. He saw self-efficacy as potentially arising from successful performance, vicarious learning, verbal persuasion, and emotional experiences. In a nutshell, he said, "people process, weigh, and integrate diverse sources of information concerning their capability, and they regulate their choice behavior and effort expenditure accordingly" (p. 212, Bandura, 1977b). It is worth noting that self-efficacy is a rather transdiagnostic concept, not linked to one particular disorder or another. It has been particularly influential in clinical health psychology and behavioral medicine, where it continues to be frequently applied in both clinic settings and research (e.g., Franks et al., 2009; Náfrádi et al., 2017).

So when did the therapies now called third wave first appear? The answer is almost certainly that first small studies appeared in the 1980s and the first full book length descriptions in the 1990s, now about 30 years ago. The first treatment study of what is now called ACT was a study of what was then called "comprehensive distancing" for depression (Zettle & Hayes, 1986). The first published book length description of ACT did not appear until 13 years later (Hayes et al., 1999). To take another possible member of the wave, mindfulness based approaches, sometime called a "fellow traveler" with the third wave, early treatment studies appeared in the 1980s (Kabat-Zinn et al., 1985) but again at least one example of a popularly applied, full length description, in the form of a book, appeared some years later (Kabat-Zinn, 1990). The timeline is more or less the same for other third wave approaches, with books for FAP (Kohlenberg & Tsai, 1991) and DBT (Linehan, 1993) first appearing in the early 1990s, and BA, at least in a more modern form, shortly after that (Martell et al., 2001), and also MBCT (Segal et al., 2002).

"Anomalies" in the Context of the Second Wave

Nothing ought to stay the same in the behavioral therapies – certainly no approach has ever claimed, or should claim, to have solved the problem of human suffering. Research continues, showing us both what we know and what we don't know. Accordingly, the cognitive model was never going to be the last word. What Ellis, Beck, Meichenbaum and others added to behavior therapy was an emphasis on the role of cognition, on irrational beliefs, negative automatic thoughts, and information processing biases in psychological problems. From their cognitive models, therapy adopted a focus on the detection and correction of these through such methods as thought records, self-statement analysis, cognitive restructuring and behavioral experiments (e.g., Beck, 1976; Ellis, 1962; Meichenbaum, 1977; see also Longmore & Worrell, 2007). Simply stated, with the advent of the second wave, a focus on changing particularly the content of pathological thoughts and beliefs became important for achieving improvements in the participant's problems in therapy. At the start of the so-called cognitive revolution in CBT the assumption was that cognitive methods were uniquely suited to creating this type of cognitive change and this

change was necessary for improvement to appear in therapy. This was, as some will remember, fiercely debated from both sides of the arguments (Mahoney, 1977; Wolpe, 1978). Only much later did results emerge that directly address these assumptions, and with evidence came inconsistency and contradiction.

One of the earlier studies that addressed the theory of cognitive change in CBT was a treatment component analysis of CBT for depression (Jacobson et al., 1996). In this study 150 participants with major depression were randomly assigned to behavioral activation (BA), BA plus methods addressing negative automatic thoughts, or a full package of CBT. The full package here included BA, plus both methods to address automatic thoughts and to modify core depressogenic schema. These researchers found high adherence to treatment protocols, high allegiance of therapists to the full package approach, and high competence in the delivery of this. At the same time they found no evidence that the full package was more effective than the smaller component treatments, including the single component of BA, both immediately after treatment and at a 6-month follow-up. It was also found that BA alone appeared equally effective to the full CBT package at altering negative thinking and dysfunctional attributional styles. These findings were regarded as calling into question both the theory of therapeutic change proposed by Beck and others, and the necessity of methods that explicitly aim to produce cognitive change (Jacobson et al., 1996). In fact, it was proposed that perhaps "exposure to naturally reinforcing contingencies produces change in thinking more effectively than the explicitly cognitive interventions do" (p. 303, Jacobson et al., 1996).

Subsequent to the treatment component study by Jacobsen and colleagues further studies in a similar vein appeared. Results from these studies could be seen to further undermine the assumption that methods for cognitive change are necessary to produce improvements. One of these studies showed that BA was as effective as antidepressant medications, and better than cognitive therapy, for the treatment of moderate to severe depression (Dimidjian et al., 2006). Yet another study, based in the same trial, showed that there was a group of patient who showed "a pattern of extreme nonresponse" to cognitive therapy (Coffman et al., 2007). These people had severe depression, were highly functionally impaired, and had low social support. People with the same problems did not show the same pattern of nonresponse in BA, suggesting that a less complex treatment focused only on behavioral engagement might be a better, more effective, choice for these people.

With the new millennium, after 30 or 40 years of relative domination of the cognitive model and methods in the behavioral therapies, research findings that appeared to contradict the cognitive model continued to accumulate, again, seemingly calling into question the fundamental role of cognitive change and methods. One of these was led by David Burns (Burns & Spangler, 2001), a psychiatrist and earlier student of Beck, who greatly popularized cognitive therapy with his books for non-professional non-specialist audiences, including the bestselling *Feeling Good: The New Mood Therapy* published in 1980. In his research he posed the question of whether change in dysfunctional attitudes act as mediators of change in CBT for depression and anxiety (Burns & Spangler, 2001). In a study of 521 people participating in CBT for 12-weeks, conducted in an actual practice setting, data included

multiple measures of depression, anxiety, and dysfunctional attitudes related to perfectionism and dependency. Using structural equation modelling, he and his coauthor found that changes in dysfunctional attitudes indeed were correlated with changes in depression and anxiety across time. They did not find, however, that these changes in dysfunctional attitudes were likely to have causal effects on the changes in outcomes. The authors commented that the failure may have been because they did not assess the right dysfunctional attitudes or that perhaps it was not the level of dysfunctional attitudes but their impact on mood, as aspect not assessed, that was responsible for improvement (Burns & Spangler, 2001).

In 2004 a new book appeared. It was called *Mindfulness and Acceptance: Expanding the Cognitive Behavioral Tradition* (Hayes et al., 2004a). This is essentially a book about the third wave, arguably the first book, including chapters on ACT, DBT, MBCT, FAP, BA, and specific mindfulness and acceptance approaches to trauma, generalized anxiety disorder, eating disorder, alcohol and drug use problems, and couples problems. In chapter "The Three Waves of Cognitive Behavior Therapy: Scientific Aspirations and Scientific Status" of this volume it was proposed that a particularly fertile context for the new generation of behavior therapy was present. Part of this was a failure to reconcile several empirical anomalies in the field. Two of these we have just addressed: that explicitly cognitive treatment methods do not appear to provide an added benefit to behavior methods, and that changes in presumed cognitive mediators do not appear to explain the impact of CBT, and one more not yet mentioned, that improvement in CBT seems to happen before the presumed core cognitive methods have been implemented (Hayes, 2004a).

Shortly after the book on "expanding the cognitive behavior tradition" appeared it was followed by a critical review of the evidence with regard to the three points it raised. The title included the question, "Do we need to challenge thoughts in cognitive behavior therapy?" (Longmore & Worrell, 2007). One approach taken in this review was to examine component analysis studies for depression and anxiety disorders. For depression there were 13 of these, including the study by Jacobson et al. (1996) already discussed. For anxiety disorders there were similarly at least twelve of these, including generalized anxiety disorder, PTSD, social phobia, and OCD. Based on a review of these studies the authors concluded that in the depression studies behavioral activation alone appeared as effective as behavioral activation plus cognitive methods. From the anxiety disorders studies they concluded that exposure-based methods appeared as effective as methods aimed at thoughts (Longmore & Worrell, 2007).

The phenomenon of rapid early change in therapy has been interpreted supportively by both those claiming the importance of cognitive change and those denying it. Those claiming it proves cognitive change in unimportant argued that this type of change, apparently occurring before the main cognitive methods were introduced, essentially shows those methods are not necessary. Those who support the model of cognitive change, on the other hand, attribute the observed therapy impact to cognitive change from the initial elements of therapy rationale and other early skills training. In the end it was concluded that findings in the area are equivocal, neither supporting nor refuting the cognitive model (Longmore & Worrell, 2007).

The important question raised in "expanding the tradition" and examined in the review is the question of cognitive mediation in CBT. Briefly, in reviewing the results of at least seven empirical studies, one of these the study by Burns & Spangler (2001), Longmore and Worrell (2007) found that cognitive change is no more a feature of CBT than alternative treatments, and there was limited and inconsistent evidence for the causal role of cognitive change in relation to improvements observed in CBT. They referred to their findings as revealing "a worrying lack of empirical support for some of the fundamental tenets of CBT" (p. 185, Longmore & Worrell, 2007).

It is perhaps no surprise that the dramatic conclusions reached regarding the necessity of cognitive change in CBT would provoke a response, which they did (Hofmann, 2008), and this in turn provoked a rebuttal (Worrell & Longmore, 2008). Authors of both of these pieces essentially claimed errors, misconceptions, and incorrect interpretations on the part of their opponent and that the other has essentially missed the point. There is also some careless misspelling of names, accusations of wanting to be trendy, and advice to be open minded. Yet in their own way, they agree that the fundamental question of cognitive mediation is not answered and needs more research done with appropriate methods.

Change in Content Versus Change in Context

One point being made is that the first and second waves overlapped in some respects as to assumptions, principles, and even methods. One point on which they appear to hold clearly opposing views on the centrality and necessity of change in the content of thoughts and beliefs in relation to relief from psychopathological conditions. The respective positions on whether feelings need to change is more equivocal. Probably both of these early waves include methods aimed to reduce unwanted emotions or feelings, such as fear or sadness, as a way to improve behavioral performance or as a key outcome of therapy, although their processes and methods for doing this differed. It is clear in any case that the early waves differed in the realm of content change in psychological events. This then gives rise to a defining feature of the third wave. The stance of the third wave is explicit in embracing both, a focus on content change or not, and is thus a point of integration and "expansion," as the book title says. In fact, the stance of the third wave therapies on this point, generally speaking does not oppose the stance held by either the first or second wave – it includes them both (Hayes, 2004a).

The Role of Differing Assumptions

It might be worth a short discussion of the context around content changes and the arguments waged for and against these as causes of the problems people experience. For years the clearest division in all of behavior therapy rested on this one issue,

essentially, whether thoughts cause behavior. The two sides basically named the other as the "cognitivists" and the "behaviorists," the former proposing a key role of cognition as underlying cause in human behavior problems (e.g., Bandura, 1986) and the latter claiming with no uncertainty that they are not (e.g., Lee, 1992). Thankfully, many people completing their training very recently may not remember these battles, essentially between participants in the first wave of behavior therapy, mostly behavior analytically oriented researchers and clinicians, on the one hand, and participants in the second wave, mostly cognitive theory and therapy proponents, on the other. As often happens both sides were correct. Perhaps a better way to say this is that both sides represent entirely legitimate approaches to understanding behavior. And at the same time neither side was destined to win the argument, at least not on empirical nor theoretical grounds.

Often missed by those who fought over the causal status of cognition was that their disagreement actually rested on fundamental differences in the nature of their dependent variables, the nature of causation, and what constitutes knowledge, and the goals of science. Hidden behind their disagreements the rivals were, often unknowingly, holding differing world views and applying different scientific frameworks (Dougher, 1995; Hayes & Hayes, 1992). Following Pepper's (1942) notion of root metaphors, these world views are sometimes referred to as mechanistic, or more recently and kindly, elemental realist, on the cognitivist side, and contextual, on the behaviorist side. Quite simply, those working within a mechanistic approach have as their assumptions to (a) define the action alone as the subject matter, to (b) analyze the parts, including present psychological events and action, as a way to understand the whole, to (c) treat the parts as potential true causes of the other parts, and to (d) allow prediction or correspondence as a basis for an adequate explanation. Here a scientific statement is true to the extent that it matches or predicts observed events. For the contextual approach each of these assumptions is a different matter. They (a) define their subject matter as the act in context, (b) see the act in context as an essential whole where a change in any of the elements changes the subject under study, (c) regard only contextual elements outside of the act in context as potential "causes," and regard the term "cause" here to be a way of speaking that may help reach a goal, and not true in an ontological sense, and (d) seek the joint objectives of prediction and influence, as requirements for an adequate explanation. Here, an explanation must include manipulable elements and, ideally, demonstrate goal achievement as the mark of what is "true."

For proponents of the cognitive model and cognitive therapy methods, an irrational thought is a perfectly acceptable explanation for a failed performance, if the two are consistently correlated, and this matches a cognitive formulation of the problem. For their rivals in the behavioral wing this is not adequate because they regard irrational thoughts as inaccessible to direct manipulation, being that another person intending to help create change can only ever operate on elements in the context around the thought and performance (see O'Donohue). This distinction is not helped by the fact that cognitive therapists will probably regard cognitive restructuring as a method to directly manipulate thoughts. The behaviorist, for their part, will call this manipulating the verbal and social context around the thought, or the context around

the link between the thought and performance. Such is the difficulty in getting the two sides to see eye to eye.

While for some, all of this has been heard before, and for others it all seems a little complicated or beside the point, the main point is the same. Early divisions in the behavioral therapies were not in fact battles to rightfully claim the souls of behavior therapists. They were based in a misunderstanding, on differing background assumptions regarding subject matter, causality, and knowledge, both equally respectable and legitimate, both choices. And, these choices that cannot themselves be proven in evidence or theory, cannot be justified, and need no justification (Dougher, 1995).

There is just one more point to understand in the debate over cognition as cause, because, although this debate has shifted it has not gone away. Do remember that those participating in the first wave of behavior therapy were diverse to a degree in their theory, key variables, and methods, although they all shared a kind of pre-cognitive view of behavior. At least some of them however were behavior analysts, and for them, not only were thoughts and other private psychological experiences out of scope for being non-manipulable, but they were also regarded as unnecessary to the goals of their analyses. It is regarded by some as a mistake Skinner made that while he admitted thoughts and feelings as a subject of study for psychology, he rejected them as necessary for understanding patterns of behavior (Hayes & Hayes, 1992). For Skinnerians, all that one needed to predict and influence behavior, including the behavior of thinking and feeling and following what one thinks and feels, was to be found in prevailing environmental contingencies.

Enter the third wave in the battle over thoughts as cause and something different becomes possible. In a true sense it is an expansion or synthesis of the cognitive behavioral tradition (Hayes et al., 2004a). It is acceptance, mindfulness, and spirituality meet exposure, behavioral activation, contingency management, and cognitive restructuring. To the repertoire of ignore the thoughts or change the thoughts is added observe the thought, experience the thought as just a thought, open up and allow the thought, act in ways that are literally inconsistent with the thought, and so on. With the third wave thoughts are important and can be addressed at the level of change in content, their form or what they say, and can be addressed at a level of change in context and function, how they interact with relevant behavior patterns of influence. Perhaps particularly from the mindfulness side it becomes common to say that in order to change behavior one can change what they think or how they experience what they think. Even more than that, while the first and second waves both took a more or less predominant focus on control over psychological events, the third wave included as a distinct possibility the notion that "control is the problem." This means that for some human behavior problem the root of it is not simply the presence of sadness, fear, pain, or distressing or misleading thoughts, but it is the application of attempts to change these that creates the difficulties that creates interference and failures. Here thoughts and feelings become a space for acceptance or change, and "change" becomes an attitude perhaps better directly applied to behavior rather than to thoughts and feelings (Hayes et al., 2011).

Treatment Methods

As to what methods characterize the third wave behavior therapies, it is quite unambiguously a theme of expansion once again. Nothing is taken off the table, although some methods may be used less than they were, or used in a more discriminated fashion. An interesting development, however, is that the third wave appears to embolden therapists, to empower the use of some traditional behavior therapy methods that perhaps were not implemented as widely as they could have been.

A rather ironic, and at the same time entirely understandable, phenomenon is the occurrence of what is called "therapist drift" (Waller, 2009). Evidence clearly demonstrates that behavior change in CBT comes from application of such methods as behavioral activation, skills training, and exposure, among other methods. The observation is made, however, that therapists often make mistakes in therapy, and do not implement these when they could and should. They delay doing so, conclude that is it not the right moment, or the right participant. They regard these methods as too stressful or distressing, they "protect" the participant, and turn away from delivering them, and instead they shift from doing to talking (Waller, 2009). Therapists fail to deliver treatment as needed, and may make problems worse, the argument says, as a result of therapist fear, influence of unhelpful thinking, and avoidance, on the part of the therapist. Discovery of this phenomenon cannot be attributed to the third wave particularly, however, the third wave therapies appear well placed to embrace it, particularly with their explicit focus on therapist stance, in ACT (Vilardaga & Hayes, 2009), relationship and validation, in DBT (Carson-Wong et al., 2018), and even courage and love, in FAP (Maitland et al., 2017). For example, in ACT the therapeutic stance can be "whatever works," based on a common set of values and goals defined by the treatment provider and recipient, and will necessarily include building the treatment recipients psychological flexibility from a context of provider psychological flexibility (Vilardaga & Hayes, 2009). These aspects in particular ought to function to lessen the impact of experiences that can lead to drift, such as in the impact of misleading thoughts or feeling that coordinate therapist avoidance.

One way to understand the methods of the third wave and to see if they have indeed expanded the tradition or to see if they might address therapist drift, is to ask what self-identified third wave therapist use. An internet survey published in 2011 included 55 second wave and 33 third wave therapists, all self-identified as such and as licensed and practicing (Brown et al., 2011). The survey examined treatment techniques and approaches used as well as a number of attitudinal issues relevant to clinical practice. The results were just as one might expect after having followed the discussion of this chapter so far. The two groups were remarkably the same in background and attitude, both reported the same attitudes toward evidence-based practice, for example. The two groups did differ significantly, however, in treatment techniques used. No surprise, the third wave therapists reported greater use of acceptance and mindfulness techniques. Similarly, second wave therapist reported greater use of cognitive restructuring and relaxation. On the other hand, third wave

therapist reported greater use of exposure, and a greater number of total techniques. All of the difference here reflected effect sizes that were medium to large (Brown et al., 2011). In a similar survey that we completed in 2015, except focusing only on therapists working in the area of chronic pain we essentially replicated all of the findings (N = 68; Scott et al., 2017). There were no background or attitudinal differences between self-identified second and third wave therapists, but the second wave therapists reported greater use of cognitive restructuring and relaxation, and the third wave therapists reported greater use of mindfulness, cognitive defusion, values clarification, metaphor, experiential methods, and a wider range of methods overall.

Acceptance as Key Process

One of the terms that seems to clearly mark a difference carried in the third wave is the focus on acceptance. It is certainly a fundamental idea at the heart of the third wave. And, at the same time, it is remarkably prone to misunderstanding. It might begin to sound commonplace these days to speak about acceptance, but a small number of people in the UK will recall a conference paper session on the topic around 2001 and the chair of the session, a prominent, international, senior clinical psychologist and researcher in CBT and behavioral medicine referred to the topic as "where angels fear to tread." Such was the fluffiness and perceived inaccessibility to research the concept reflected at that time, 50 years into the development of behavior therapy and 20 years ago. So what does acceptance mean, how is it validly measured, and how is it implemented as a method in treatment?

Possibly the first publication of a measure and data addressing acceptance as it has come to be understood within the third wave was based in a study of chronic pain (McCracken, 1998). It was remarkably difficult at that time for researchers and therapists from the predominant second wave to see acceptance as something other than a belief, most particularly a belief that the experiences one wrestles with will not change and that one should stop wrestling with them. On the surface that almost sounds technically correct, but it is certainly not, at least is it not true to the spirit of the third wave understanding of this term, coming mainly from ACT.

As a typical example of a kind of contextually conceived process, acceptance is a quality of behavior in context. In a context of experiences that are undesirable or unwanted and that can in some situations coordinate avoidance or struggling, or attempts to limit contact, acceptance is an act of engagement, without resistance, without attempts to eliminate or limit contact. It is simply engaging with potentially avoidance promoting experiences and doing so openly or willingly. For example we have come to refer to acceptance of pain as engaging with pain and refraining from attempts to reduce the pain. Importantly, acceptance is not a cause of engagement or a reducer of avoidance. It cannot be separated out as an event that can play that kind of role, at least not from the typical perspective within the third wave. It is also a process that is explicitly to support action toward goals and values – it is not in

explicit purpose a way to reduce distress or discomfort. Outside of a context of goals and values, acceptance is not a thing to do, so to speak.

Acceptance is clearly one of the most studied processes within the third wave and its establishment within the cognitive and behavioral therapies as an evidence-based process is surely one of the significant achievements of this wave. Its contribution sits clearly as an extension of a predominant focus on the control, reframing, or reduction, of unwanted or misleading thoughts and feelings within behavior therapy. In experimental studies of responses to experiences of emotional distress, acceptance versus cognitive reappraisal appear mainly similar in their usefulness (e.g., Wolgast et al., 2011). In meta-analyses of 30 experimental studies of acceptance versus other emotional regulation strategies small to medium effect sizes favored acceptance for "pain tolerance," which typically means voluntary exposure time, while there were no differences with respect to pain intensity or negative affect (Kohl et al., 2012).

What ought to be clear to any therapist, or anyone considering the matter pragmatically, and is clear in research evidence (Ford et al., 2018), is that acceptance is not meant to be an exclusive strategy. It is not meant to be a response applied to all unwanted events in all situations, as a replacement for ever intending to control anything. Acceptance is meant to be a companion for control. Acceptance is for responding to thoughts and feelings when these cannot be controlled, cannot be usefully controlled, or cannot be controlled in a way that succeeds with respect to what a person wants to achieve. After all, sometimes attempts to control our thoughts and feelings does harm or subverts our goals. On the other hand, there is nothing healthy in accepting unwanted situations that can be readily changed, when there is no purpose or goal to achieve, and no use facing pain and distress when these can be stopped effectively and efficiently without creating any further difficulty, and in a way that keeps a person on track with their goals.

Finally, it is worth mentioning that measuring acceptance has been a significant challenge. Of course the same could be said for other variables that fit within the third wave, including the wider facets of psychological flexibility. In the wider acceptance literature the best known measure is the seven-item Acceptance and Action Questionnaire-II (AAQ-II, Bond et al., 2011). The AAQ-II itself was a response to criticisms of earlier versions of the same measure on the basis of low reliability, unstable factor structure, and difficulties with item complexity and comprehension (Bond et al., 2011). The AAQ-II is also clearly an imperfect instrument. Certainly it does not measure acceptance as its name might suggest. At best it measures the opposite of acceptance, experiential avoidance, or psychological inflexibility. As such, studies have found a lack of discriminant validity, that the items of the AAQ-II appear more strongly related to items intended to measure psychological distress than to measures of acceptance or avoidance per se (Ong et al., 2020; Rochefort et al., 2018; Wolgast, 2014). The end result is that the AAQ-II seems too strongly correlated with measures of distress and insufficiently differentiated from these. The other problem with the AAQ-II in the context of ACT is that the item content is insufficient to capture the full set of therapeutic processes included in the model. Recent efforts to produce multidimensional models of psychological

flexibility have remedied this and seem to have partly addressed the earlier problem of inadequate discriminant validity (e.g., Rogge et al., 2019; Rolffs et al., 2018).

Evidence

Since even before the term third wave appeared in a published paper, the evidence for the "new behavior therapy technologies," particularly DBT, ACT, and FAP were being questioned, and debated (Hayes et al., 2004b). In a review, 42 studies, including nearly 550 participants, were included that "evaluated the impact of ACT, FAP, or DBT interventions" (Hayes et al., 2004b). Studies that addressed only such questions as assessment, acceptability, cost-effectiveness, or processes of change were excluded to keep the focus on clinical outcomes only. The studies included seven RCTs of DBT and eight RCTs of ACT, and the others were quasi-experimental or case studies. It was concluded at this early stage, essentially concurrent with the launch of the term third wave itself, that data supported the efficacy of DBT and ACT. It was also concluded that these data were remarkable for showing benefit in conditions, such as in people diagnosed with psychosis, borderline personality disorder, or long term chronic conditions, seen as difficult and typically unresponsive to treatment. Even if the data were preliminary or incomplete, based on the number and range of studies found, these approaches were regarded as undeniably empirical in orientation, particularly given their recent appearance (Hayes et al., 2004b).

The first systematic review and meta-analysis specifically focused on the efficacy of third wave behavioral therapies was done by Öst (2008). In it he found 29 RCTs, including 13 for ACT and 13 for DBT, one is CBASP, and two in IBCT. Briefly, his conclusion was that the research methods used in the third wave trials were less stringent than those typically used in CBT, mean effect sizes were moderate for ACT and DBT, and that none of the third wave therapies were regarded as empirically supported as conventionally defined (Öst, 2008).

One of the methods used in the Öst (2008) review was to "match" each of the third wave therapy trials with a trial of traditional CBT selected from the same or a similar journal at around the same publication date. This was done to see if the level or methodological rigor applied was similar or different between the two approaches. This comparison was the basis for the conclusion that the studies of third wave therapies were weaker in the rigor of their methods. In a subsequent response to the Öst review it was pointed out that a questionable assumption had been made, that third wave and CBT studies published around the same time and in the same journals ought to have the same level or rigor. Several confounds were noted with regard to the comparison, confounds likely to boost the apparent performance of the traditional CBT trials relative to the third wave (Gaudiano, 2009). The main points were that the third wave studies (a) represented an earlier stage of development compared to traditional CBT, (b) had less grant funding, (c) included more difficult to treat diagnoses, such as psychosis, chronic medical conditions, and addiction, than the CBT trials, which all included mainly anxiety or stress disorders, and (d) were

mainly pilot studies of newly designed and never tried treatments (Gaudiano, 2009). In this response to the review, constructive criticism for the developing third wave therapies was repeatedly welcomed, and readers were reminded that these criticisms themselves need to be held to a high standard of evidence.

Some 6 years later Öst (2014) again produced a systematic review and meta-analysis, this time focused just on ACT. This time 60 RCTs were found, including 4234 participants, with psychiatric or somatic disorders, and work-related stress. In this review it was concluded that ACT was not a well-established evidence based treatment for any disorder, that it was probably efficacious for chronic pain and tinnitus, possibly efficacious for depression, psychosis, OCD, anxiety, drug abuse, and stress at work.

A systematic review of meta-analyses of third wave therapies was conducted for the time frame between January 2004 and September 2015 (Dimidjian et al., 2016). Results from eight meta-analyses for ACT, five for DBT, six for MBCT, and seven for BA were narratively synthesized. ACT was deemed to have addressed a remarkably diverse range of problems and populations. Results were evenly split on whether effect sizes for ACT demonstrate superiority to traditional CBT, other behavior therapies, or established treatments more generally. While it was noted that DBT too has found application to an increasing range of problems (see Fitzgerald and Rivza this volume), some not yet included in meta-analyses, the research literature includes a relatively small number of RCTs. In general the conclusion offered was that DBT has not yet demonstrated "incremental benefit over first or second wave cognitive behavioral therapies" (p. 895, Dimidjian et al., 2016). On the positive side, evidence for MBCT was regarded as showing reduced risk of relapse in formerly depressed people of between 35% and 50%. Less clear was the evidence for the application of MBCT in acutely depressed people. It seems to perform better than psychoeducation and similarly to CBT, but predominantly in trials underpowered to detect a difference. Finally, for BA, consistent conclusions from repeated meta-analyses of RCTs described large effects of BA for depressive symptom severity in comparison to control conditions in general, and small effects in comparison to cognitive therapy or CBT, sometimes significant and sometimes not, depending on the particular trials reviewed. Overall these four approaches to treatment, based on this review of meta-analyses, are said to have "amassed a substantial and compelling evidence base" (p. 901, Dimidjian et al., 2016).

Shortly after the review of meta-analyses of third wave therapies a response to Öst (2014) was published. It came in the form of an extensive examination of the methods and data used and essentially asked that the Öst review be ignored from that point forward with respect to evidence for ACT (Atkins et al., 2017). There are many interesting lessons to learn in the results of this reexamination. Without going into too great a detail, 91 factual or interpretive errors were found by Atkins and colleagues. These included 80 of the studies reviewed. Öst's quality ratings of the ACT studies were found by independent checking to be unreliable, and where mistakes were made they were consistently against ACT. The authors recommended that in future reviews and meta-analyses probably should be done by teams of academics and not by individuals, to avoid biased result such as those produced by Öst.

Further recommendations included placing greater value on studies that apply a transdiagnostic approach, and that demonstrate evidence for theoretically consistent mediating processes. Finally, based on an updated review of evidence, including nine meta-analyses, since the time of the Öst review, an accumulation of at least 171 RCTs of ACT, and nearly 50 mediational studies, ACT achieved better outcomes than waitlists or treatment as usual, and at least as good as CBT or other evidence-based treatments, for chronic pain, substance abuse, and anxiety disorders (Atkins et al., 2017).

In passing it seems worth mentioning that third wave behavior therapies have also been the subject of a systematic review of health economic outcomes (Feliu-Soler et al., 2018). Eleven RCTs were included in this review, including MBCT, MBSR, ACT, DBT, and BA. In summary, ACT appeared more cost effective than applied relaxation or recommended pharmacotherapy, MBCT for depressive relapse was not more cost effective than maintenance antidepressant medication but other findings relating to it were inconsistent. DBT was more cost effective than usual care in the management of self-harm, and BA was more cost effective than CBT for adults with depression. The straightforward conclusion was that "there is economic data supporting some of the interventions usually labelled as 'third wave' CBT" (p. 144, Feliu-Soler et al., 2018).

Finally, it would be potentially misleading to not acknowledge that some of the therapies in the third wave have generated great enthusiasm, and that belief in their benefits can exceed the evidence. People will see and say what they want to believe. For example, mental health care providers greatly overestimate the proportion of their service users who benefit from their treatment and greatly underestimate the number who worsen. In one study nearly two out of three therapists surveyed reported believing that 80% or more of their cases improve in their care, when the actual rate is probably something more like 40% or less (Walfish et al., 2012). Something very much like this can happen in the narrative around third wave therapies – this is human nature. Presentations of evidence for ACT have met criticism for potentially "overselling," claiming effectiveness when more modest statements were appropriate (e.g., O'Donohue et al., 2016; Rosen & Lilienfeld, 2016). Without picking sides, this criticism is right, and should be welcomed, and lessons should be taken from it.

Contextual CBT

Third wave therapies have always appeared to have something in common and this something has been difficult to characterize – few particular features characterize them all. What has been suggested however is that the behavioral therapies have changed during the time of the third wave, adopting a greater focus on processes of therapeutic change, and, it is argued, it is here that some of these therapies share considerable common ground (Hayes et al., 2011). In a review of evidence for outcomes, moderators, processes of change, and components, what was found is as

follows: "acceptance, mindfulness, and decentering or defusion mediate or at least correlate with outcomes in mindfulness-based methods, DBT, ACT, and IBCT. Values and commitment … are known to be important in ACT, BA, and MI [motivational interviewing]. Component analyses have shown that flexible attention to the present is important in mindfulness-based methods, MCT, and ACT. These are all contextual variables that can have an impact even without and change in cognitive or emotional content," (pp. 158–159, Hayes et al. 2011) and can be summarized as "open, aware, and engaged." It was proposed in this review that the integration of forms of behavior therapy around these processes constitute the heart of what could be called "Contextual CBT." This class of approaches is presented as a distinguishable, coherent, entity with the behavioral therapies, synonymous with, and perhaps a preferred term to, "third wave," labelled in a way that might invite less resistance (Hayes et al., 2011).

Third Wave and the Rise of Process Based Treatment

With some hindsight one thing that seems to have come with the third wave of behavior therapy is a focus on processes of change. This is reflected in a focus not just on treatment packages but on component analyses, moderators, and mediators of treatment impact (Hayes et al., 2011). And, it is not just a focus on processes of change in general. It appears that there has also been some integration of approaches around a particular set of processes of interest, as just considered, in the form of behavior that is open, aware, and engaged. It is also argued in this context that these processes represent a focus, not on symptom reduction, but on broadly-applicable, flexible, positive behavioral repertoires.

Possibly the appearance of the third wave will reshape the entire field of behavioral and cognitive therapies, and psychotherapy in general, essentially as happened with the second wave. Except that this time separate camps, schools of thought, or particular brands of therapy may no longer make very much sense (Hayes & Hofmann, 2017). In their place a couple of changes may happen. One is a focus on human psychological prosperity and thriving rather than the elimination of psychopathology, and the other is a turn toward process-based therapy (PBT). PBT includes a focus on discovering and refining our understanding of evidence-based processes of change, linked to evidence based treatment procedures, based on testable theories, all focused around the alleviation of human problems and the promotion of human flourishing (Hayes & Hofmann, 2017). Perhaps the easiest way to understand PBT is to see it as the repeated asking and answering in therapy what is referred to as the "fundamental PBT question"… "What core biopsychosocial processes should be targeted with this client give this goal in this situation, and how can they most efficiently and effectively be changed?" (p. 47, Hofmann & Hayes, 2019).

If the third wave of behavior therapy led to the emergence of PBT as a next phase in the development of behavior therapy, this has not been the end of it. With PBT has come new conversations, renewed interests in such important topics as the "role

of the individual" and ideographic methods in the science of treatment development (Hayes et al., 2019), the need to adopt new approaches to mediation analyses (Hofmann et al., 2020), and the emergence of the notion of a "multidimensional, multi-level extended evolutionary meta-model" to reconcile and integrate the processes needed as the foundation to PBT (Hayes et al., 2020). What is being imagined is a return to functional analysis, the use of ideographic methods for identifying change processes, the use of intensive longitudinal data gathering, employing measures of socially valid outcomes, analyzed with the latest methods for examining within-person change, and including methods for dynamically tracking change over time. The expectation is that individual analyses of process of change based on this dynamic network approach will feed a kind of periodic table of general empirically validated processes of change that can in turn guide treatment for individuals (Hayes et al., 2019).

It is worth mentioning that a recent focus on mediation and processes of change has already informed the field and built on existing knowledge. For example evidence shows that cognitive defusion, a process conceived within the psychological flexibility model, the model underlying ACT, changes significantly in both traditional CBT and ACT for anxiety disorders, and significantly mediates post treatment worry, quality of life, behavioral avoidance, and depression in both CBT and ACT (Arch et al., 2012). In this way a third wave process of change is informing our understanding of a second wave therapy, and pointing to potentially integrating processes of change. Similar but perhaps more limited findings with regard to other processes of change have been shown in other studies of ACT and exposure with response prevention for OCD (Twohig et al., 2018) and in CBT for chronic pain (Åkerblom et al., 2016, 2020).

Summary

Behavior therapy is approaching 60 years old if the birth date is taken as the publication of the first journal devoted to the subject in 1963. The history of what has been called behavior therapy is an extremely varied one in some respects. The few things that have remained constant for more than 60 years include a commitment to research evidence and science, to trying new things, to addressing an increasing range of human behavior problems, and to doing a better job in doing this. In doing these things behavior therapy has evolved and very likely, if we are fortunate, will continue to do so.

This chapter is meant to define the third wave of behavior therapy. This is a difficult task as it can only be done coherently be laying out at the same time what were the first and second waves – no easy task in itself. It is also difficult because there is, in a sense, no such thing as the third wave. There are many constituent therapies, each unique and different from the others in key ways, and to speak of them all as a whole will never be uniformly true of them all. One is left off where we began, more or less, the third wave is the expansion of CBT into historically neglected

psychological processes applied to an increasing diverse and often complex set of human behavior problems, including a focus on acceptance, mindfulness, spirituality, intimacy, values, emotional depth, and the like.

With six decades of perspective on behavior therapy, and if one drops some of the particular therapy types, there is some order to it. One could look at the evolution of behavior therapy as a path through the first behavior therapy, then CBT, Contextual CBT, and now possibly the cusp of what comes next, perhaps PBT. What one sees here up to the current day is truly an "expansion of the cognitive behavioral tradition," and an expansion with an important opportunity built into it, that being the opportunity for integration, particularly around processes of change, and perhaps away from divisive specific therapy types. The start to this seems to be found in how selected approaches within the third wave produce the outcome they do, largely by adopting a focus on establishing greater psychological openness, attention and awareness skills, and motivation, behavior change, and engagement.

The third wave therapies have followed the earlier waves. In evidence they generally do not appear better but their appearance has achieved new things, incorporated new processes, taken a focus on processes of change, on contextual change, and they may be ushering in a return to a greater focus on the individual. Because they seem to have called greater attention to mediation and mechanism they may have spawned PBT.

Someone has said that new waves do not wash away the previous waves but they incorporate them, and waves are generally not done when one has come – there are always more. The inevitable effect of waves is that the shoreline is never the same again. One could say that as the waves do this they make progress – certainly the landscape changes. Even with some positive connotations of waves the problem with waves is that there is typically one prominent one at a time and it passes and a next one comes. If you align yourself with a wave there is a sense of being separate from people aligned to the other waves. For this feature, it might be better to adopt some more unifying kind of metaphor.

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