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A clinicians' guide to integrating mindfulness into evidence-based practice: a common elements approach

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A CLINICIANS' GUIDE TO INTEGRATING MINDFULNESS INTO EVIDENCE-BASED PRACTICE: A COMMON ELEMENTS APPROACH

A clinical dissertation submitted in partial satisfaction

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by

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DEDICATION

For Grant, who remained a constant source of support, patience, and loving kindness throughout many, less than mindful, months in completing this work; for helping to keep me centered and grateful for the present moment throughout the years. I dedicate this dissertation to him for being like the breath….my anchor, and always there to turn to.

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ABSTRACT

Stemming from Eastern practices, mindfulness entails intentionally bringing one's attention to all aspects of experience in the present moment, and holding these experiences with non-judgmental acceptance. In recent years mindfulness-based interventions have been gaining empirical support together with clinician interest in their use. The APA now mandates the use of evidence-based practices in psychology (EBPP), which incorporate the best empirical evidence, clinical expertise, and individual population characteristics and culture. However, at present, because there have been relatively few dismantling studies, clinicians are forced to either adopt an entire treatment protocol or pick and choose individual interventions in a relatively ad hoc fashion. This effectively creates greater variability in the quality of treatment that is disseminated in the community. A system is needed, which bridges the gap between rigid adherence to EST manuals and the inconsistency of over reliance on clinical decision-making. The common elements approach has been proposed as one means of bridging this gap.

This dissertation contributes to EBPP utilizing mindfulness approaches by (a) identifying the commonly shared elements of effective mindfulness based interventions; (b) offering treatment considerations for the integration of mindfulness into clinical practice based on EBPP requirements. This is the first attempt to provide such clinical considerations for the integration of mindfulness approaches that are consistent with the APA policy on evidence-based practice in psychology (APA, 2005).

Chapter 1

Integrating Mindfulness in Psychotherapy

Introduction

Stemming from Buddhist philosophy, mindfulness has been practiced with an aim towards the alleviation of human suffering for over 2,500 years (Fulton & Siegel, 2005). Mindfulness practice entails bringing non-judgmental awareness to all aspects of one's experience in the present moment and holding these experiences with acceptance. While mindfulness and clinical psychology can be seen to share similar goals, the two practices have, until recently, remained segregated (Kutz, Borysenko, & Benson, 1985). Walsh and Shapiro (2006) suggest that there was, "a prolonged period of mutual ignorance in which each tradition remained blissfully or willfully ignorant of the other" (p. 227) and suggest that we are only just reaching a stage of "assimilative integration" in the evolving relationship between meditative and Western psychological practices.

The popularity of mindfulness-based interventions has been growing (Baer, 2003; Brown, Ryan, & Creswell, 2007) in concert with the emerging empirical evidence for their effectiveness and acceptability in work with clinical populations seeking mental health services (Finucane & Mercer, 2006). This increased interest has most predominantly been linked to cognitive behavioral oriented treatments and has been called the "third wave" in the evolution of behaviorally informed psychotherapies (Hayes, 2004). In this developing phase, elements of Eastern spiritual practice are combined with the fundamentals of the first two waves, learning theory and cognitive theory. However, parallels between the Buddhist philosophies and psychoanalytic thought have been noted for decades (Epstein, 1995). Authors have compared the direct

attention to present focused awareness, inherent in mindful awareness, to Freud's conceptualization of the therapist's requisite "evenly hovering attention" (Freud, 1912). Humanistic and Gestalt psychologists have also emphasized the importance for immediacy of experiencing in full, authentic functioning, (e.g., Rogers, 1961, and Perls, 1973). Regardless of theoretical orientation, mindfulness approaches to clinical practice have been proposed as potentially providing an adjunct to any therapeutic orientation, which may "help facilitate an optimal circumstance for psychotherapeutic change" (Martin, 1997, p. 292). Thus, research that facilitates the integration of mindfulness practices across orientations is needed.

The lack of dismantling studies is among the barriers to integrating evidence-supported treatments (EST's) into clinical practice (Hunsley, 2007). Qualitative research that identifies the common elements of evidence-based mindfulness treatments may contribute to future research, practice, and training efforts. Such research can generate novel hypotheses related to mechanisms of effectiveness (Kazdin, 2008), facilitate integration, and minimizing redundancy in retraining (Chorpita, Becker, & Daleiden, 2007). Efforts to bridge the gap between EST's and EBP's can be assisted by; (a) identifying the commonly shared conceptual and practical elements of empirically-supported mindfulness interventions; (b) investigating the current empirical evidence for these constituents; (c) offering suggestions for the integration of mindfulness into clinical practice. This dissertation shall be the first effort to provide clinical considerations in the integration of mindfulness into clinical practice that are consistent with the latest APA policy on evidence-base practice in psychology.

Background of the Problem

Clinicians currently face three primary difficulties in attempting to integrate mindfulness into clinical practice. First, proposed operational definitions of mindfulness have varied. As a result of the lack of consensus, a number of misconceptions about mindfulness have emerged and created confusion for researchers and clinicians alike (Dimidjian & Linehan, 2005; Hayes & Shenk, 2004). For clinicians wishing to integrate mindfulness into psychotherapy practice there is much uncertainty as to what exactly are the mindfulness constituents necessary for effective integration. Second, the American Psychological Association's "Policy Statement on Evidence-Based practice in Psychology" EBPP (2005) now mandates the integration of best available research with clinical expertise and patient characteristics. This mandate relies heavily on clinician knowledge and understanding of the existing research base and clinical decision-making. Subsequently, clinicians wishing to integrate mindfulness practices as part of evidence-based practice are faced with a third problem. Dismantling studies, which elucidate the essential constituents of the empirically supported mindfulness treatments, have yet to be conducted. As such, at present, clinicians must either adopt an entire manualized treatment protocol and orientation or make educated guesses regarding which elements to integrate (Daleiden & Chorpita, 2006). Research is needed that identifies the common elements of effective mindfulness-based treatment and thus provides benchmarks, which facilitate clinical decision making for integration into a psychotherapy practice, regardless of orientation.

Defining Mindfulness

Operational definitions of mindfulness. Numerous attempts have been made to define and operationalize mindfulness as well as the processes and mechanisms that underlie it. Jon Kabat-Zinn (1990) has given the most often cited conceptual definition of mindfulness, which is "the awareness that emerges through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment" (p. 145). Bishop (2004) describes mindfulness as a cognitive strategy with which to increase awareness of mental processes (e.g., negative automatic thought, rumination, harsh judgments, etc.). With this strategy, one may increase the likelihood of conscious chosen responses, instead of engaging in otherwise automatic maladaptive reacting. According to Baer and colleagues (2006), the recently developed mindfulness questionnaires represent "an attempt to operationalize mindfulness by writing self report items that capture its essence" (p. 28). This group has identified five distinct "facets" of mindfulness amongst the most commonly used mindfulness measures. Exploratory factor analysis suggested the five facets to be: (a) Non-reactivity to inner experience; (b) Non-judging of experience; (c) Acting with awareness/concentration/non-distraction; (d) Describing/ labeling with words; and (e) Observing/noticing/attending to sensations /perceptions/ thoughts/feelings.

Mechanisms of mindfulness. Together with these five conceptualizations of mindfulness, other mechanisms of mindfulness have also been proposed, which may mediate the transformative effects of mindfulness techniques on mental health outcomes. Metacognition or decentering is one such mechanism. Bishop (2004) proposes that this "state of dispassionate self-observation introduces a space between ones perception and

subsequent response" (p. 232). Shapiro, S. L., Carlson, L. E., Astin, J. A., & Freedman, B. (2006) have named this quality of disidentification from the content of one's thoughts and resulting objective clarity, "reperceiving" (p. 377).

Interoceptive exposure is another proposed mechanism. Stemming from theories of exposure and avoidance with anxiety disorders, researchers have hypothesized that mindfulness meditation may create a kind of exposure to affect, much like traditional treatments use exposure to external feared stimuli (Roemer & Orsillo, 2003). Mindfulness techniques encourage the participant to stay with, rather than flee, or avoid the discomfort of thoughts, emotions, or bodily sensations. It has been well established in the trauma and anxiety literature that successful emotional processing requires a functional exposure to feared stimuli, and that because avoidance will reduce discomfort in the short term, those behaviors will be reinforced. Hayes and Feldman (2004) posit that "experiential avoidance" is one strategy that can be used to regulate difficult emotions, thoughts, images, memories, or physical sensations.

Finally, the balance of acceptance strategies with traditional CBT change strategies has also been proposed as instrumental in the effectiveness of these treatments. This specific integration defines this group of interventions. Where CBT typically targets "cognitive distortions" and other unhelpful modes of thinking for change, mindfulness-based therapy encourages clients to simply be aware of and accept these kinds of thoughts. According to Baer (2003), the current shift in clinical psychology is centered around an awareness that empirically oriented clinicians may have overemphasized the importance of changing all unpleasant symptoms, potentially negating the importance of acceptance.

Mindfulness Practices. In addition to differences in formulating a universal conceptual definition, there is a lack of consensus regarding the requisite practical applications that lead to mindfulness and positive mental health outcomes. Specifically, the cognitive and behavioral components of effective mindfulness practice remain ambiguous. Some investigators describe mindfulness as attending purely to internal stimuli (e.g., thoughts or physiological sensations) (Bishop, 2004; Wells, 2000), while others emphasize the importance of attending to both internal and external stimuli (Brown & Ryan, 2004). The requisite direction of cognitive deployment remains uncertain. The essential importance of a formal meditative practice has also been greatly debated (Kabat-Zinn, 1990; Teasdale et al., 2000). Is a formal mediation practice necessary to achieve the increased levels of trait mindfulness that have been associated with increased well-being? If so, how much practice is necessary? Many researchers have suggested that informal practices can be taught as a means by which one can achieve mindfulness as a psychological skill **(**Hayes, 2004; Linehan, 1993a). Camps are similarly divided in relation to the issue of the therapist's mindfulness practice; is it essential for the clinician utilizing mindfulness in therapeutic practice to have a mediation practice? Questions regarding which of the conceptual and practical elements of mindfulness practices are essential to therapeutic change have yet to be answered.

Evidence-based Practice in Psychology (EBPP)

The APA's (2005) "Policy Statement on Evidence-Based practice in Psychology" (EBPP) now mandates the flexible integration of best available research with clinical expertise and patient characteristics. This mandate requires clinicians to have knowledge and understanding of the research base related to treatment and informed clinical

decisions about how to integrate such knowledge into treatment. However, this integration is not so easily accomplished. The inherent difficulty in bridging the gap between evidence-supported treatment (EST), evidence-based treatment (EBT) and evidence practice (EBP) has been a subject of concern in clinical psychology generally (Kazdin, 2008), not just with the mindfulness-based interventions.

Part of this difficulty is the great deal of ambiguity that remains surrounding the term "evidence-based" (Chorpita et al., 2007). EST's are those interventions studied with the most scientific rigor. They include as a basic feature that the intervention has been tested using methodologically sound evaluations with consistent findings in patients across studies (Chambless & Hollon, 1998). The APA has outlined two levels of support, which fall under the rubric of EST's. The "well established" treatments require at least two randomized clinical trials with active controls as well as independent replication and manualization. Treatments that have demonstrated positive outcomes in at least two randomized clinical trials, with wait list controls are considered "probably efficacious." EBT refers to the interventions or techniques that have been effective in controlled trials (Kazdin, 2008). EBP requires the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences (APA, 2005). Therefore, EBP is far more flexible than EST or EBT in that it relies heavily on clinical knowledge and understanding of the relevant research base and clinical decision-making in order to synthesize scientific findings with individual client characteristics.

Integrating Manualized Treatments

At present there are four mindfulness-based interventions that can be considered "probably efficacious" (Baer, 2003), and have the best empirical support (Baer & Huss,

2008). These interventions include: Mindfulness Based Stress Reduction (MBSR), Mindfulness Cognitive Behavioral Therapy (MCBT), Dialectical and Behavioral Therapy (DBT), and Acceptance and Commitment Therapy (ACT).

Meditation-Based Interventions

Mindfulness Based Stress Reduction (MBSR). MBSR was designed for the alleviation of physical and psychological symptoms related to stress in non-psychiatric populations. The objective of this program is to provide patients with an effective method for facing, exploring, and relieving their suffering in both mind and body through intensive training and practice of mindfulness meditation (Kabat-Zinn, 2003). Training includes formal sitting, walking, eating, and light yoga meditations. The 8-week program of intensive meditation training meets one time per week for two to three hours of instruction and clients are assigned guided meditation with audio recordings for 45 minutes per day, 6 days per week. There is also one all-day intensive session, usually held around week six.

Mindfulness Based Cognitive Therapy (MBCT). MBCT integrates aspects of Cognitive Behavioral Therapy (CBT) into the MBSR format, (without the day long session) for the treatment of patients in remission from chronic major depression. It adds traditional elements such as psycho-education about depression, differentiating thoughts from facts, and strategies for relapse prevention. Instead of teaching clients to change thoughts, they encourage a "decentered" approach to internal experience.

Mindfulness as a Skill in Daily Living

Dialectical behavior therapy (DBT). DBT is a six month to one year, psychosocial skills training intervention, which was developed for the treatment of

Borderline Personality Disorder (BPD). DBT includes concurrent weekly skills training groups (with two co-leaders) and individual therapy (with a primary therapist). Mindfulness skills are operationalized as "psychological and behavioral versions of meditation practices" (Linehan, 1993a, p.63). "Mindfulness practice is the intentional process of observing, describing, and participating in reality nonjudgmentally, in the moment, and with effectiveness " (Robins, Schmidt, & Linehan, 2004, p. 37). Mindfulness skills are woven throughout three other skills taught (Interpersonal Skills, Emotion Regulation Skills, and Distress Tolerance Skills), which comprise the manualized DBT skills training. Individual sessions are structured around the tenets of behaviorism and used to help generalize skills to everyday life experiences.

Acceptance and Commitment Therapy (ACT). ACT was developed as a general model of psychopathology, and not for one specific diagnosis. The central aim of ACT is to enhance the ability to become more fully aware of present behavior and self-endorsed values, and then to commit to behaviors that are consistent with those values. Unlike the other interventions, there is no single ACT protocol. Instead, its developers propose ACT as a clinical philosophy, rather than a specific technology. ACT aims to teach six core psychological skills, which are systematically, yet flexibly aimed at increasing psychological flexibility, ACT relies heavily on specific metaphors, stories, paradox, exercises, behavioral tasks, and experiential processes (Hayes, 2004).

These mindfulness-based ESTs (MB-ESTs) have been found effective in the treatment of symptoms related to numerous psychological disorders, such as Major Depression (Kenny & Williams, 2006) and relapse in treatment resistant clients, (Ma & Teasdale, 2004; Teasdale et al., 2000), anxiety disorders (Evans et al., 2007; Koszycki,

Benger, Shlik, & Bradwejn, 2007; Miller, Fletcher, & Kabat-Zinn, 1995), Obsessive Compulsive Disorder (OCD), (Twohig, 2008; Twohig, Hayes, & Masuda, 2006), Borderline Personality Disorder (Bohus et al., 2004; Kroger et al., 2006; van den Bosch, Koeter, Stijnen, Verheul, & van den Brink, 2005), and substance related disorders (Bowen et al., 2006). Improvements in subjective wellbeing (Chadwick, Taylor, & Abba, 2005) and reduced hospitalizations (Bach & Hayes, 2002; Gaudiano & Herbert, 2006) have also been found in subjects with psychotic disorders, who have participated in mindfulness-based group treatment.

However, clinicians seeking to practice in an evidence-based manner are confronted by some substantial challenges (Hunsley, 2007). The question remains of how to move from adopting an entire treatment, to integrating the essential elements. According to Chorpita and colleagues (2007), there are several potential barriers to the integration of the manualized EST's into clinical practice in the community. These barriers include: (a) negative attitudes of clinicians towards the one size fits all manual approach; (b) incompatibility of new practices into organizational infrastructures; (c) complexity of integrating training for each individual treatment; (d) and evidence supported treatments are not yet available for universal application to all populations. The MB-ESTs face these same problems. The MB-EST's are multifaceted psychosocial interventions in which mindfulness is but one component. Dismantling studies have yet to elucidate which elements are essential to effective outcomes. Thus the evidence base from which clinicians might make important decisions about which elements to integrate remains severely limited.

In order to circumvent these problems, a "common elements" approach has been proposed as a complementary approach to integrating EST's into clinical practice (Chorpita, Daleiden, & Weisz, 2005; Daleiden, Chopita, Donkervoet, Arendorf, & Brogan, 2006; Garland, Hawley, Brookman-Frazee, & Hurlburt, 2008). Such an approach proposes that through the extrapolation of the most common elements of ESTs, clinical decision-making is facilitated and sound treatment more flexibly delivered. A systematic qualitative content analysis of the MB-ESTs would allow for the extrapolation of common elements of these treatments. This would thus effectively assist clinicians to circumvent the noted difficulties in application by providing clinical considerations for more flexible integration of such treatment in an idiopathic fashion. From the analysis, the common elements may be used as benchmarks for clinical practice considerations.

Research Objective

This dissertation contributes to the mindfulness scholarship in its attempt to provide a preliminary bridge between evidence-supported treatment and evidence-based practice. The common overlapping constituents of the MB-ESTs were sought, which might contribute to future research, practice, and training efforts. The ultimate objective was to provide clinicians with information to consider, as well as preliminary suggestions, when integrating mindfulness into EBP. The considerations and suggestions given are consistent with the APA's mandate for evidence-based practice in psychology.

Method

A qualitative content analysis was conducted to investigate the core elements of mindfulness-based empirically supported treatment (MB-EST) and mindfulness practices specific to the MB-ESTs. This "common elements" approach is consistent with research

methods proposed by Chorpita et al. (2005) and adapted by Garland et al. (2008). Common constituents were extrapolated from the primary treatment descriptions and manuals (as defined below) of the EST's utilizing mindfulness. Content analysis is a method that may be used with either qualitative or quantitative data (Elo & Kyngas, 2007). Qualitatively, content analysis can involve any kind of analysis where communication content (speech, written text, interviews, images, etc.) is categorized and classified. This method allows for the categorizing of data and determining the frequencies of these categories. This approach is relevant for the present research as a means by which to categorize the common constituents of mindfulness-based interventions, as denoted by written treatment descriptions. Content analysis offers a means of synthesizing sources of data by allowing a systematic way of categorizing and counting themes and is widely used in the social sciences (Dixon-Woods, Agarwal, Jones, Young, & Sutton, 2005).

Content analysis can be used in an inductive or deductive approach. When a priori knowledge is available and the structure of content to be analyzed is operationalized on the basis of this knowledge, the analysis should be deductive and thus the purpose of the study is theory testing. Deductive content analysis is based on an earlier theory or model and therefore moves from the general to the specific (Burns & Grove, 2005). However, if there is not enough former knowledge about the phenomenon of interest, or if the knowledge is fragmented, the inductive approach is recommended. Inductive data analysis moves from the specific to the general, so that particular instances are observed and then combined into a larger whole or general statement (Chinn & Kramer, 1999).

While evidence is emerging in support of common constituents of mindfulness (e.g. Baer et al., 2006), the field remains fragmented. Thus, the current study shall utilize both deductive and inductive content analysis.

Plan of Action

The first step in the investigative process was the selection of the treatment materials to be reviewed. Treatments were identified a priori as those mindfulness-based interventions demonstrating at least probable efficacy (as defined by the American Psychological Association criteria). The four selected treatments include, Mindfulness Based Stress Reduction (MBSR), Mindfulness-Based Cognitive Therapy (MBCT), Dialectical and Behavior Therapy (DBT), and Acceptance and Commitment Therapy (ACT). Materials were selected according to the following criteria: (a) seminal books describing the treatment and written by the developer(s) of the intervention; (b) treatment manuals co-authored by the developer(s) of the treatment; and (c) those manuals directly cited as used in at least one published empirical study in a peer reviewed journal. "Manuals" were defined as clinician targeted descriptions of treatment protocols. Thus, client targeted works, such as "work books," or "verbatim transcripts" to facilitate clinician learning were excluded. However, materials for ACT did include one "work book" as per the recommendation of the developer (Hayes, personal communication, 08/13/08). The development of clinical treatment is a generative and continuously adapting process. In this work treatment "developers" were identified as those researchers who consolidated particular concepts and practices, conducted the initial studies and published the original treatment protocols and who are most often cited as such in the literature.

Procedures: Reviewing Treatment Materials

The next step was to begin the content analysis procedures. The procedures of a content analysis do not proceed in a linear fashion and are more complex and difficult than quantitative analysis because it is less standardized (Polit & Beck, 2004). As such, in depth analysis entailed procedural steps, not a step-by-step procedure, but in a circular fashion as data is culled from each source. The process of the content analysis was drawn and adapted from Elo & Kyngas' (2007), *The Qualitative Content Analysis Process.* According to these authors, both inductive and deductive content analysis processes occur within three main phases: preparation, organization, and reporting.

Preparation phase. Preparation for the research includes the selection of units of analysis, which can include individual words or themes. Treatment elements may be defined with various levels of specificity (Chorpita et al., 2005) and according to content (what is conveyed) or techniques used (how it is conveyed), (Garland et al., 2008). For the current study, conceptual and functional elements included information, knowledge, or understanding that is explicitly conveyed as part of a treatment. Specific practice elements shall be defined as "discrete clinical techniques or strategies used as part of the larger intervention" (Chorpita et al., 2005). To be identified as such the materials must have explicitly emphasized the use of a particular treatment strategy or practice in the protocol to be considered a core element. This emphasis may be reflected by the duration or frequency of use or explicit details about how to use a strategy and may pertain to either the client or therapist. The next step in the preparation phase was to make sense of

the data as a whole. This included reading through the literature several times and becoming immersed in the data in order to gain insights and begin developing theories about it.

Organization phase. During the organizational phase, a deductive approach was used initially to identify common elements of the treatments. Conceptual, functional, and practice elements were sought. Conceptual elements are those that are integrated based on a given treatment conceptualization. Functional elements are those that are proposed to have cause and effect relationships. The difference between these types of elements is that conceptual elements are functional elements minus cause and effect propositions. However, because this distinction is an empirical question, which is beyond the scope of this analysis, the two were categorized together. Practical elements were those that entailed particular clinician or client behaviors, cognitions or clinical practices.

Based on Baer and colleagues (2006) "five facets of mindfulness" the treatments were analyzed for the presence of the following conceptual/functional elements: 1. Non-reactivity to inner experience. 2. Non-judging of experience. 3. Acting with awareness/automatic pilot/ concentration/non-distraction. 4. Describing/labeling with words, and 5. Observing/noticing/ attending to sensations /perceptions/ thoughts/feelings. Other conceptual/functional elements, based on previous knowledge of the literature, included, "meta-cognition-decentering," "interoceptive exposure," and "acceptance." Predicted practice elements based on previous knowledge of the literature included, meditation practice of client, meditation practice of therapist, and clinician mindfulness expertise/understanding. These elements formed the foundation of the structured categorization matrix. At this juncture, only aspects that fit the predetermined

descriptions were initially chosen from the data. Next, aspects that do not fit the categorization frame were used to create unique concepts.

Elements that did not fit within the predetermined headings were identified using the inductive approach. This step in the process included open coding, creating categories and abstraction. Open coding entailed writing notes and headings in the text while reading, reading through the written material, and creating as many headings as necessary in the margins to describe all aspects of the content. During the first readings of the materials, this entailed using brief summarizing statements or words related to the content in a particular paragraph or page. After the first readings, these notes were perused for common themes, which were collapsed under a common heading name. The headings were then converted onto coding sheets (see Appendix A). Headings and related quotes (and page numbers for later reference) were first entered into individual coding sheets for each treatment source and categorized under six broad categories. Because this analysis was interested in particular aspects of treatment, data was first identified and organized as an element of any of the following broad categories: (a) treatment as a whole; (b) mindfulness specifically; (c) conceptual or (d) practice element related to (e) therapist or (f) client. Next, a second coding sheet was developed (coding sheet B) in order to merge data from the different sources to a single sheet for each treatment. On this coding sheet both deductive and potential inductive elements were listed as subheadings to these categories. Inductive element sub-categories were identified as themes or practices, which consistently occurred, yet were distinct from deductively sought elements. These categories were created based on concepts and practices described as functionally or theoretically similar across treatments, despite differences in verbal labels. Data

describing the use of a particular element in the treatment was transferred from the first coding sheets. After this process was completed for each treatment, elements or themes were compared across treatments and categories in order to identify similarities and dissimilarities. The similar elements formed the basis of a final main coding sheet (coding sheet C) on which the data from each of the treatments was transferred. On this sheet, data representing each grouping was organized according to how the concept or practice was represented in each of the treatments. Finally, abstraction of the data entailed generating higher order categories and reducing the number of categories by further collapsing those that were similar. Each category was named using content-characteristic words. This process naturally entailed comparison between data categories, and decision-making through interpretation based on prior theoretical knowledge and was continued until theoretical saturation was reached. Theoretical saturation is reached when no new relevant data seem to emerge regarding a category, either to extend or contradict it (Strauss & Corbin, 1990).

Reporting phase. The findings of the analysis are presented in tables and narrative discussion. Because of the inherent subjectivity involved in conducting this type of research, it is essential to demonstrate a link between the results and the data in order to increase the reliability of the study (Polit and Beck, 2004). As such samples of the data (e.g., citations and treatment content), which comprise the sub-headings contributing to each category, are presented in the appendixes in the form of tables. Element categories derived from the data were given qualitative labels to suggest relative importance of each element to each treatment. The occurrence of each element was qualitatively analyzed for its relevance within each treatment and consistency across treatments. Decisions

regarding relevance within a treatment were determined based on descriptive language and repetition regarding conceptual elements and duration and frequency of practice elements. For example, descriptors such as “essential,” “inherent,” “core,” “vital,” etc., influenced subjective judgments of the importance of each element. As in other studies using the common elements approach (e.g. Garland et al., 2008), a treatment element was defined as “common” if it was found to be a core element in a majority (3 of 4) of the selected sources of the evidence-based interventions reviewed. Elements determined to have at least a fair degree of relevance in the treatment descriptions were considered as core and contributed to the frequency count across treatments**.**

Strategies for Deriving Clinical Considerations

The common elements derived from the content analysis were used as benchmarks for clinical considerations. The elements were collapsed into seven overarching treatment suggestions, which encapsulated all of the common elements. The majority of the considerations were derived directly from the treatment elements, with the elements of mindfulness specifically incorporated into the broader considerations. Categories in qualitative research should be conceptually and empirically grounded (Dey, 1993) and authentic citations can be used to increase the trustworthiness of the research (Elo & Kyngas, 2007). As such, , the theoretical and empirical literature was extensively reviewed in order to authenticate clinical suggestions Because the empirical validity of the MB-ESTs is based on adult populations, adolescent populations were not specifically considered. Elements with the greatest consistency across treatments, together with theoretical and empirical support were included in the suggestions. Empirical evidence

supporting, contradicting, or lacking is discussed in terms of clinical considerations, which are presented in the form of discussion and tables.

Limitations and Areas of Potential Bias

Some particular areas of limitation and bias of this study warrant discussion. Of primary importance is the issue of researcher bias. Researcher bias can result from the selective observation and selective recording of information, and from inadvertent allowance of one's personal views to affect how data are interpreted. As the sole investigator conducting this analysis, it is possible that subjective investigator bias influenced the selection (or exclusion) of categories. Therefore, it is possible that future researchers using the same procedures would find disparate elements. Another equally important limitation is the issue of effectiveness towards clinical change. The common elements approach works by aggregating information across EST's, and thus in essence represents a frequency count of the occurrence of practice elements across treatments. However, the presence of practice elements does not prove that these elements are necessary or sufficient for clinical change (Chorpita et al., 2005). Finally, the preferred method of validity check for this type of research has traditionally been in the form of an expert review or panel (e.g. Garland et al., 2008). The lack of such a review board for the current findings may further reduce any assumptions of effectiveness of the derived common elements.

Summary

Mindfulness-based interventions have been growing in popularity together with emerging evidence for their effectiveness in a wide variety of clinical populations. This chapter reviewed some of the difficulties faced by clinicians in integrating mindfulness into

clinical practice. These difficulties included: (a) variations on the proposed operational definitions of mindfulness; (b) the APA's recent mandate for the integration of best available research with clinical expertise and patient characteristics; and (c) the current lack of dismantling studies of the manualized treatments, which elucidate the essential constituents to be integrated. A common elements approach was presented as one means of obviating the difficulties faced by clinicians wishing to integrate mindfulness into an evidence-based practice. A qualitative content analysis method was proposed in order to determine the common elements of the MB-ESTs, which would serve as benchmarks for clinical considerations for mindfulness-based practice. A comprehensive review of the literature was proposed in order to authenticate clinical suggestions as evidence-based.

Chapter 2

Findings

The primary goal of the content analysis was to derive the common elements of the four existing mindfulness-based ESTs (MB-ESTs). The resources from which the analysis was drawn can be found in Appendix B. In this chapter the findings of this analysis are presented. In the first section the common elements of the treatments as a whole are presented. To underscore how MB-ESTs are more or less unique from traditional CBT, the first section will briefly present the similarities between the two. Next, the common elements of mindfulness specifically as it is utilized within the MB-ESTs will be presented. These include common conceptual and functional elements and cognitive and behavioral practice elements of mindfulness. Categorical distinctions were made inductively for the broad treatment elements. Categories were derived both deductively and inductively for the mindfulness specific elements. Elements are presented in tables and descriptive labels used to suggest the relevance of an element to a particular treatment. In the following chapter these elements will serve as benchmarks for clinical considerations when integrating mindfulness into psychotherapy practice.

Elements Common to CBT

One aspect of the difficulty in integrating mindfulness into clinical practice has been related to the strong association between CBT and the MB-ESTs. The MB-ESTs rely heavily on many of the interventions commonly associated with traditional CBT. A detailed table is provided of the traditional CBT elements found in the MB-ESTs (See appendix C). As can be seen, these treatments are primarily protocol driven and include such elements as behavioral activation, self-monitoring, and relapse prevention.

However, two CBT elements are of particular note due to their emphasis in the MB-ESTs; skills training and eliciting client commitment.

Skills-Training

In the MB-ESTs mindfulness is taught as a cognitive and behavioral skill. According to Baer (2006), mindfulness has become more available to Western populations by conceptualizing meditation practices as sets of skills that can be taught independently of any religious belief system. In MBSR mindful awareness is the only skill taught in a psycho-educational format in the treatment of primarily non-psychiatric, heterogeneous, healthy and medical patient populations. In MBCT mindfulness skills are integrated with traditional CBT skills and relapse prevention in the treatment of recurrent major depression. In ACT the therapeutic processes proposed to underlie mindfulness and acceptance are taught and overlap with committed action processes, and these processes are conceptualized as positive psychological skills. The mindfulness and acceptance strategies are *acceptance/willingness, cognitive defusion, being present,* and *self as context*. The overlapping committed action processes are, *being present, self as context, defining valued directions*, and *committed action*. ACT teaches these skills to target pathological processes as a general model of overall psychopathology (Luoma, Hayes, & Walser, 2007). The skills taught in DBT target the dysregulation of mood, behavior, and cognition proposed to underlie Borderline Personality Disorder (BPD). Mindfulness skills are the core skills taught and are woven throughout the Distress Tolerance, Emotion Regulation, and Interpersonal Effectiveness skills (See Appendix D for a detailed table).

Client Commitment, Personal Responsibility, and Self-Care

As behaviorally oriented treatments the MB-ESTs explicitly incorporate the elicitation of client commitment to treatment and personal responsibility for behavioral practice. MBSR and MBCT both hold an individual preprogram orientation and commitment meeting with each of the participants. Commitment level is assessed and discussed verbally in the form of an informal learning contract. In DBT there is a "pre-treatment" phase, where clients are prepared for the hard work required by the program. During this phase the therapist "sells" commitment using a variety of persuasion techniques drawn from social psychology research. Continuous and repeated commitment is considered both a prerequisite and a goal of the effective therapy. ACT utilizes indirect and direct methods to elicit commitment. At the beginning of ACT treatment, the therapist elicits a process called *creative hopelessness*, a state in which the client discovers that control and avoidance strategies are hopeless, and thus the creative space of committing to an alternative is opened up. ACT directly targets building patterns of committed action and works toward behavior change in the service of client chosen values.

Continued maintenance of client commitment is considered the client's personal responsibility. MBSR participants are encouraged to take responsibility for learning more about their own bodies by listening to them carefully. Increased self-awareness is proposed as a means by which to develop an increased sensitivity to one's own internal messages of health and illness and the need for self care. According to Kabat-Zinn (1990), "Taking responsibility for learning more about your own body by listening to it carefully…is the best way to hold up your end of the collaboration with your doctors" (p.

27). In MBCT cognitive and motivational issues are targeted more specifically in the service of depressive relapse prevention. According to Segal, Williams, & Teasdale, (2002) “Looking after yourself is not an optional extra. Taking action starts with simply noticing what is going on around you” (p. 277).

In ACT response-ability is explicitly differentiated from responsibility and self blame, in the sense that there is always an ability to respond. “Response-ability is acknowledging that you are able to respond and that were you to do so, the outcome would be different” (Hayes, Strosahl., & Kelly, 1999, p. 103). In DBT the bio-psycho-social conceptualization of BPD highlights the transaction between the individual’s biological and psychological predisposition and the social environment as resulting in the disorder. Similar to the ACT conceptualization, “The patient is not responsible for being the way she is, but she is responsible for what she becomes” (Linehan, 1993a, p. 209).

Mindfulness-Based Treatment Elements

While overall, these treatments are considered cognitive behavioral, there are numerous common elements of these treatments that distinguish them from traditional CBT. The next section details common features found to be somewhat distinctive to the treatments as a whole. Later sections will describe the common elements of mindfulness within these treatments. An understanding of these broader elements of treatment provides a context, which may facilitate integration of the mindfulness elements into more eclectic psychotherapy practices. Table 1 lists the six common elements treatment elements inductively derived from the content analysis and their relevance to the treatment. These treatment elements are described below.

Table 1

Common Elements of MB-ESTs

Elements	MBSR	MBCT	ACT	DBT
1. Balances acceptance with change strategies	H	H	V	V
2. Optimization of universal processes	H	H	H	R
3. Equality between therapist and client	H	H	H	R
4. Paradoxical conceptualization: Solution is the problem	H	H	H	H
5. Experiential learning	H	H	H	V
6. Holistic-Contextual	H	R	H	H

H = Highly relevant; V = Very relevant; R = Relevant; F = Fairly irrelevant; I = Irrelevant

Treatment Element 1: Balances Acceptance with Change Strategies

The most fundamental difference between the mindfulness-based interventions and traditional CBT is the integration of mindfulness and acceptance perspectives and strategies into CBT's direct change framework. While acceptance is a fundamental element of all MB-ESTs, some of these treatments emphasize change more than others. The treatments can be considered as falling along a continuum of the degree to which each emphasizes acceptance over change approaches. Figure 2.1 demonstrates visually where each treatment falls on the continuum of acceptance and change strategies. MBSR and MBCT emphasize more acceptance-based strategies, where as ACT and DBT include more behavioral change strategies.

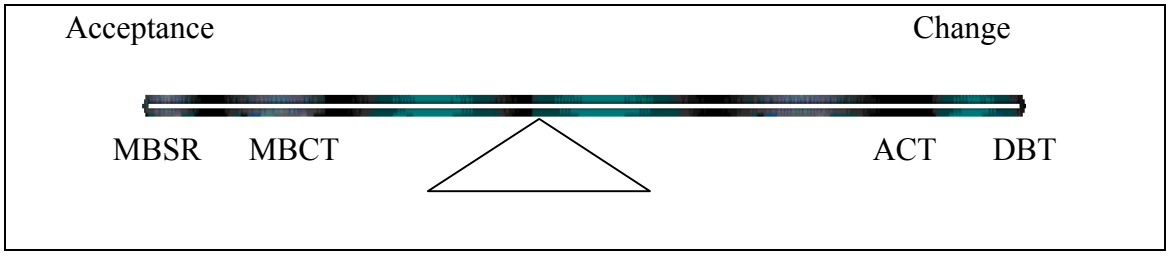

Figure 1. Spectrum of acceptance versus change.

This distribution may represent the non-psychiatric and in remission populations for which MBSR and MBCT were respectively developed. MBSR most heavily contrasts the common goal of traditional psychological treatments of achieving a specific desirable result (Kabat-Zinn, Massion, Hebert, & Rosenbaum, 2002). MBCT, developed as a depressive relapse prevention intervention, integrates change elements of traditional CBT into the MBSR structure. ACT and DBT were developed as therapeutic interventions, rather than the educational models used in the other two treatments. ACT is based on a general model of psychopathology, and is commonly used to treat a variety of anxiety, depressive, and psychotic disorders. The acceptance of all of one's internal experiences is emphasized in the service of committing to behavior change in line with one's stated values. In the treatment of the severe pathology associated with Borderline Personality Disorder (BPD), DBT includes more change strategies. The acceptance strategies include: (a) validation of the client; (b) reciprocal communication style of the therapist; and (c) direct environmental intervention. Change strategies include: (a) problem solving; (b) irreverent communication style of the therapist; and (c) consultation to the patient about how to change her environment. Skills training modules teach clients acceptance skills (Mindfulness and Distress Tolerance [radical acceptance] modules), but include more change skills (Emotion Regulation, Interpersonal Effectiveness, and Distress Tolerance [crisis survival]).

Treatment Element 2: Optimization of Universal Processes

Mindfulness-based interventions are primarily concerned with the cultivation and optimization of the processes proposed to underlie mindfulness, rather than the remediation of psychological symptoms. Universal processes are proposed to underlie

both mindfulness and maladaptive coping processes. When optimized, mindfulness is posited to disengage less effective processes, which often lead to increases in affective, cognitive, and behavioral difficulties. Examples of maladaptive processes include rumination and cognitive problem solving (MBCT), attachment and aversion (MBSR), experiential avoidance and control strategies (ACT), and dysregulation of mood, cognition, and affect (DBT). This focus on optimization is in contrast to traditional CBT approaches, in which certain kinds of thought processes (e.g., catastrophization, all or none thinking, mind reading, minimizing the positive, etc.) are confronted and targeted for change in the service of improving outcomes in mood and behavior.

According to Kabat-Zinn (2003), mindfulness is an inherent human capacity subject to the universal processes of attention deployment. He emphasizes seven "attitudinal qualities of mindful awareness," which are optimized through formal practice. These qualities include, non-judgment, patience, beginner's mind, trust, non-striving, acceptance, and letting go. In MBCT, optimizing mindfulness is proposed as shifting from "doing mode" to "being mode." The authors of MBCT note the following:

> Participants have to learn how to disengage from one mode of mind and enter another, incompatible, mode of mind that will allow them to process depression related information in ways that are less likely to provoke relapse. This involves moving from a focus on content to a focus on process, away from cognitive therapy's emphasis on changing the content of negative thinking, toward attending to the way all experience is processed. (Segal et al., 2002, p. 75)

ACT cites six therapeutic processes to be optimized, which target six corresponding pathological processes. As noted, the processes to be optimized are divided, yet overlapping, as mindfulness and acceptance processes and committed action processes. In DBT mindfulness skills are taught in the service of increasing dialectical

thinking. Treatment emphasizes skills acquisition, rather than the reduction of psychopathology and aims to reduce vulnerability and increase "hardiness" (Linehan, 1993a).

Treatment Element 3: Equality Between Therapist and Client

Stemming from the notion that universal processes are at work in all humans is the natural conclusion that there is an equality shared between the experiences of therapist and client. Thus, the therapeutic relationship is inherently less hierarchical in the MB-ESTs. The mindfulness-based therapist works from this perspective to reduce the power differential. Equality between therapist and client is particularly emphasized in MBSR, MBCT, and ACT, while the DBT therapist notes the inherent power differential and works to minimize it. Self-disclosure is specified as one means by which to convey equality in ACT and DBT.

Treatment Element 4: Paradoxical Conceptualization: Solution is the Problem

The MB-ESTs all propose that efforts to solve the problems of negative mood, thinking, or physical sensations in the short-term paradoxically either make the problem worse (MBSR, MBCT, ACT), or become problematic in their own right in the long run (DBT). Mindfulness and acceptance are proposed as the alternative to ineffective, short-term problem solving. Mindfulness and acceptance are the solution to the problems (rumination, avoidance, control, suppression, etc.), which are proposed to be the client's maladaptive solutions to the problem of unwanted thoughts and feelings. Each of the treatments emphasizes the acceptance of thoughts, emotions, and bodily sensations in the service of increasing circumstances that may more readily provide psychological and

behavioral change. Therefore, the ultimate goal of these treatments is to foster long-term adaptive responding over short-term reactivity.

Treatment Element 5: Experiential Learning

All of the interventions were found to be highly interactive and emphasize experiential learning above verbal forms of knowledge acquisition. There is a consensus across all four treatments, the felt sense of mindfulness can only be conveyed by providing clients with opportunities to experience mindfulness directly. In MBSR and MBCT sessions always begin first with the experience of formal practice, from which didactic discussion follows based on the participant's experience. Kabat-Zinn (1990) emphasizes "discussions are secondary to the actual practice of meditations. Doing it is most fundamental" (p. 140-141). In MBCT also, the aim is to be "as experiential as possible…participants learn from them by first having the experience and only afterwards trying to make sense of what it means" (Segal et al., 2002, p. 102). In ACT the experience of the client is always the absolute arbiter of truth (Luoma et al., 2007). A core competency of the therapeutic stance is that "the therapist always brings the issue back to what the client's experience is showing, and does not substitute his or her opinions for that genuine experience" (Luoma et, al, p. 285). In DBT "Dialectical reasoning, both on the part of the therapist and as a style of thinking taught to patients…requires the individual to assume an active role, to let go of logical reasoning and intellectual analysis as the only route to truth, and to embrace experiential knowledge" (Linehan, 1993a, p. 204). DBT also links skills learned with experiential exercises. However, there is far more reliance on didactic instruction and concrete verbal explanations and rationales are provided first.

Treatment Element 6: Holistic-Contextual

The principle of holism proposes that all the properties of a given system (physical, biological, chemical, social, economic, mental, linguistic, etc.) cannot be determined or explained by the component parts alone. Instead, the system as a whole determines in an important way how the parts behave (Wikipedia, 2009). All of the treatments emphasize a holistic conceptualization of mental health and the interrelatedness of mind and body. Furthermore, MBSR, ACT, and DBT maintain a philosophy of fundamental interconnectedness and wholeness of the individual within a particular environment. MBSR considers these factors as a construct of behavioral medicine, mind body inter-relatedness, and the whole self as connected to the greater whole. ACT and DBT consider contextual and cultural variables as instrumental in the development and maintenance of psychopathology as well as their curative function. Interestingly, MBCT does not use terms such as "holistic," "interconnectedness," or "connectedness" to the whole, nor address contextual variables. However, awareness and integration of mind-body interactions is a fundamental aspect of all of the treatments.

Conceptual and Functional Elements of Mindfulness

A primary goal of the content analysis was to determine (deductively and inductively) the explicit presence of specific conceptual/functional elements of mindfulness within the empirically based treatments. Inductive elements were derived from the Five Facets of Mindfulness Questionnaire (FFMQ) developed by Baer and colleagues (2006) and other elements proposed in the theoretical literature. The FFMQ elements included; a) Acting with Awareness/Non Distraction; b) Observing/noticing/attending to sensations; c) Describing/ Labeling experience with

words; d) Non-judging of experience; e) Non reactivity to internal experience. Other theoretically derived elements included: a) Meta-cognition/ Decentering; b) Interoceptive exposure; and c) Acceptance.

Table 2

Conceptual/Functional Elements of Mindfulness

Element	MBSR	MBCT	ACT	DBT
1. Acting with Awareness.	H	H	V	V
2. Observing/Noticing/Attending	H	H	H	H
3. Describing/Labeling with Words	R	R	V	H
4. Non Judging of Internal Experience	H	H	H	H
5. Non Reactivity to Internal Experience	H	H	R	R
6. Interoceptive Exposure	F	R	H	H
7. Meta-cognition-Cognitive Defusion-Decentering	H	H	H	H
8. Acceptance-Willingness -Letting go	H	H	H	H
9. Observer self / Wise self (inductive)	H	R	H	V
10. Direct Experience (inductive)	H	H	H	V

H = Highly relevant; V = Very relevant; R = Relevant; F = Fairly irrelevant; I = Irrelevant

The goal of this section of the analysis was to determine whether the empirically supported treatments incorporated these elements into their conceptualizations of mindfulness. The results of the content analysis suggest that all elements were represented in the most of the treatments with at least a fair degree of relevance. In addition to these deductively sought conceptual elements, two conceptual elements (Observer self and Direct experience) were derived inductively. Table 2 describes the

relevance of each of these elements in each treatment (See Appendix F for sample qualitative data.).

Element 1: Acting with Awareness

Items on the "acting with awareness" scale appear to target aspects of inattention and distraction primarily (e.g. "I rush though activities without being really attentive to them" or "I do jobs or tasks automatically, without being aware of what I'm doing") with fewer than 20% of the items directly targeting concentration (e.g. "It is easy for me to concentrate on what I'm doing."). All of the treatments emphasize the non-distraction quality of mindfulness. Each emphasizes the universal tendency of the human mind to wander into an "automatic pilot" mode and explicitly teaches clients how to bring their minds back to the present moment. Only MBSR, MBCT, and DBT emphasize the importance of concentrating the mind as an important first step in developing the ability to maintain present moment awareness.

Element 2: Observing/Noticing/Attending To

The "observing/noticing" facet of the FFMQ describes a more deliberate and intentional noticing of all aspects of experience in the here and now (e.g. "I pay attention to sensations, such as the wind in my hair or the sun on my face" or "I intentionally stay aware of my feelings."). It should also be recalled that Baer and colleagues (2006) found that the correlation between this element and measures of well-being was either negative or positive, depending on one's experience with meditation (Baer & Huss, 2008). The more meditation experience, the more positive the correlation. It is also of note that included in the five measures that were integrated to comprise the FFMQ was the Kentucky Inventory of Mindfulness Skills (KIMS), which was "based largely on the

DBT conceptualization" of mindfulness (Baer et al., 2006, p. 29). The "observe" scale on the FFMQ is largely based on the KIMS (11 of 15 items) and thus essentially encapsulates the skill of "observe" found in DBT mindfulness training. However, active observation of the ongoing flow of experience in the present moment is proposed as a key element of mindfulness in all of the treatments evaluated. Kabat-Zinn (1990) describes the formal meditation practice in MBSR as the "process of observing body and mind intentionally" (p. 23). In MBCT the intentional use of attention and awareness to choose what one attends to and how one to attends to it is described as a "basic tool" of mindfulness practice (Segal et al., 2002). In ACT mindfulness is proposed as "a way of observing your experience" (Luoma et al., 2007, p. 83).

Element 3: Describing/Labeling with Words

The "describe" facet on the FFMQ measures one's ability to express aspects of experience in words (e.g. "I'm good at thinking of words to express my perceptions, such as how tings taste, smell, or sound." or "I can usually describe how I feel at the moment in considerable detail."). As with the observe element discussed above, this scale on the FFMQ was primarily formulated from the KIMS, which is based on the DBT conceptualization of mindfulness. Of the ten items contributing to the "describe" facet, eight are from the KIMS. As such, DBT most heavily and directly emphasizes the "describe" element as inherent in mindfulness. In MBSR, MBCT, and ACT a specific verbal conventions is used, which functionally accesses one's ability to use language to accurately describe experience. In this verbal convention the client is encouraged to preface aspects of internal experience with "I am noticing," or "I am having." For

example, the client would be encouraged to say, “I am noticing feelings of anxiety,” rather than “I am anxious,” which identifies one with the experience.

Element 4: Non-Judging of Experience

The items measuring this element on the FFMQ assess an individual’s tendency to negatively evaluate internal experience (e.g. “I tend to evaluate whether my perceptions are right or wrong” or “I criticize myself for having irrational or inappropriate emotions”). All of the treatment descriptions emphasize the non-judgmental quality of mindfulness. In MBSR non-judgment is one of seven essential attitudinal qualities necessary to cultivate mindfulness. “Mindfulness is cultivated by assuming the stance of an impartial witness to your own experience” (Kabat-Zinn, 1990, p. 33). In the treatment of clients who suffer from chronic depression, MBCT highlights that rumination involves judgments about experience, where the thoughts about experience become confused with the “raw experience.” (Segal et al., 2002, p. 190). In ACT it is noted “part of the elusiveness of mindfulness is that it is purposive, and thus evokes evaluations, but the whole purpose of being mindful is to learn how to defuse from your evaluations”(Hayes & Smith, 2005, p. 110). In DBT “non-judgmentally” is one of the three concrete “how” skills of the mindfulness skill (Linehan, 1993b).

Element 5: Non-Reactivity to Internal Experience

Non-reactivity to internal experience is the fifth and final of the five facets of mindfulness measured on the FFMQ. The items contributing to this facet assess one’s ability to “just notice,” not get “taken over by” and/or not react to distressing feelings (e.g. “I perceive my feelings and emotions without having to react to them.”). It is of note that the items on the FFMQ do not include avoidance, control, or suppression of

experience as a form of reactivity to internal experience. As these types of reactions are often outside of awareness (Hayes et al., 1999), the measure may not tap into this form of reactivity. As noted above, all of the treatments emphasize the notion that problematic secondary reactions result from a lack of awareness and acceptance, avoidance, or suppression of primary experience. However, while non-reactivity is implied in all of the treatments, only MBSR and MBCT explicitly note non-reactivity as an element of mindfulness specifically, rather than as an outcome. Non-reactivity is implied in ACT as experiential avoidance and control are proposed to be antithetical to the therapeutic processes proposed to underlie mindfulness. In DBT unawareness is proposed to be a characteristic of impulsive behavior (Linehan, 1993b), and thus the need for mindfulness skills.

Element 6: Interoceptive Exposure

Stemming from theories of exposure and avoidance with anxiety disorders, mindfulness of one's internal experience has been proposed as a form of interoceptive exposure (Roemer & Orsillo, 2003). While all of the treatments explicitly suggest that experiential avoidance is problematic (and thus the need for mindful awareness), there is a far greater emphasis on mindfulness as a form of exposure in some treatments than others. In the MBSR materials there was only one remote reference to mindfulness as being similar to non-reinforced exposure in DBT. MBCT functionally applies exposure to affect, but does not note the process as being one of interoceptive exposure. Participants in MBCT are asked to bring difficult memories to mind and systematically explore and accept bodily reactions to these difficult experiences until such reactions abate.

ACT and DBT explicitly describe mindfulness interventions used as functioning as exposure techniques. According to Luoma et al. (2007), "ACT is an exposure based method" (p. 163). Engaging in the process of committed action in accord with one's values, it is expected that this process will evoke thoughts and feelings that were previously avoided by the client. "When clients engage in committed action, they are engaging in exposure to feared and avoided stimuli" (Luoma et al., 2007, p. 163). However, there is a functional difference between ACT and traditional exposure methods. In ACT exposure to previously feared and avoided stimuli is intended to increase willingness to experience discomfort and response flexibility, rather than to necessarily reduce emotions or eliminate responses respectively. In DBT mindfulness in psychotherapy is considered a form of exposure to painful emotions without association to negative consequences. According to Linehan (1993a), "Mindfulness is an instance of exposure to naturally arising thoughts, feelings and sensations" (p. 354). Mindfulness is used as an intervention to extinguish the ability of primary emotions to stimulate secondary negative emotions. The focus on "experiencing the moment" in mindfulness skills training is explicitly noted to be "based on both eastern psychological approaches and Western notions of nonreinforced exposure as a method of extinguishing automatic avoidance and fear responses" (Linehan, 1993b, p. 145).

Element 7: Meta-Cognition- Decentering

Metacognition and decentering has also been proposed as the mechanism underlying the effectiveness in both CBT and mindfulness-based interventions. This element was found to be highly relevant to all of the treatments. The mindfulness-based interventions teach clients to bring metacognitive awareness to, not only thoughts, but

also as a means of decentering from all experience, including feelings, emotions and bodily sensations. The MBSR and MBCT programs "teach people to explore how they might have a different relationship not only to thoughts, but also to feelings and bodily sensations" (Segal et al., 2002, p. 58). In MBCT the initial goal of the treatment was to make explicit the underlying process in CBT of the changing relationship to thoughts, rather than their content[1]. "Decentering," is proposed in MBCT as "seeing thoughts in a wider perspective, sufficient to be able to see them as simply "thoughts" rather than necessarily reflecting reality (Segal et al., 2002, p. 39). In ACT Cognitive defusion, the stepping back from the thinking process and learning to look at thought rather than from thought is one of six core therapeutic processes. In DBT, the ability to "step back" from experience is proposed as inherent in the "observe" skill of mindfulness. "The ability to attend to events requires a corresponding ability to step back from the event; observing an event is separate or different from the event itself" (Linehan, 1993a, p. 145).

Element 8: *Acceptance*

Perhaps the most essential element of mindfulness in the MB-ESTs is increasing clients' ability to relate to experience with acceptance. This element is proposed to functionally differentiate the "third wave of cognitive and behavioral therapies" (Hayes, 2004) from traditional CBT. A cognitive stance of acceptance of experience is proposed to alter the influence of negative internal events on mood and behavior. Acceptance directly targets maladaptive cognitive and behavioral strategies, which represent the struggle with negative experience. Within the construct of acceptance, subtle conceptual

[1] It is an interesting historical note that it was Marsha Linehan, the developer of DBT that proposed mindfulness as a means of achieving a shift in relationship to thoughts and mentioned the name Jon Kabat-Zinn to the researchers.

variations were found in the use of terminology[2]. The terms acceptance, letting go, non-striving, and willingness are used in conceptual and applied descriptions of the treatments, often interchangeably. All of the treatments emphasize the active quality of acceptance as a skill to be learned. Acceptance is explicitly differentiated for clients from "resignation" (Segal et al., 2002), "toleration" (Hayes et al., 1999) "approval" (Linehan, 1993a), or "taking a passive attitude" (Kabat-Zinn, 1990, p. 39).

Element 9: Observer Self /Wise Self

The presence of the deductively derived conceptual elements suggests that there is a place from which attention, awareness, and non-judgmental, non-reactive observation is occurring. Suggested is a place from which invariant and more objective awareness yields wise decisions about one's well-being, an observer self that is imperturbable, that can make effective decisions in the face of turmoil. What is suggested is that there is a larger source of knowing, that holds inherent wisdom and is the container of experience, rather than the sum of experience.

This stable place is described slightly differently in each of the treatments with greater or lesser emphasis. However, it appears that the observer must be present to do the observing. In MBSR it is noted, "During mindfulness practice, there may be moments in which the practitioner realizes that the observer, commonly associated with the pronoun, "I" is different from what is being observed" (Kabat-Zinn, Massion, Herbert, & Rosenbaum, 1998). Participants are instructed to bring "wise attention" to the experience of symptoms and other difficult experiences (Kabat-Zinn, 1990). In ACT "self as

[2] These constructs might be considered as elements of the mechanism of acceptance, and not mindfulness itself. Thus they are not considered here as conceptual elements of mindfulness.

context" is proposed as one of the four therapeutic processes underlying mindfulness. It is described as a "continuous and secure I from which events are experienced" (Luoma et al., 2007, p. 19), the "spiritual aspect of normal human experience" (p. 20), "a transcendent sense of self as perspective," which is "continuous and stable, and yet hard to define" (p. 111). In DBT "Wise mind" is at the heart of the conceptualization of mindfulness. The very first thing clients learn in the mindfulness module is that there is a space between and beyond logical analysis ("Reasonable mind") and emotional over determination ("Emotion mind"). MBCT gives relatively less emphasis to this element. However, it is suggested throughout the program that there is a "larger space" within which experience can be held in awareness. Practicing mindfulness of the present moment "allows the process to unfold, lets the inherent "wisdom" of the mind deal with the difficulty and allows more effective solutions to suggest themselves" (Segal et al., p. 190).

Element 10: Direct Experience

Buddhist conceptualizations of mindfulness have included 'pure awareness' and 'bare attention' (Gunaratana, 2002). In the Western clinical conceptualizations, the elements described above seem to naturally lead to this type of direct experience. Attention and awareness, together with the desistance of judgment, over conceptualizing and interpretation, comes a more direct experience and increased clarity. In MBSR mindfulness is "an invitation to allow oneself to be where one already is and to know the inner and outer landscape off the direct experience in each moment" (Kabat-Zinn, 2003, p. 148). Kabat-Zinn (1996b) proposes, "meditation practice is at the core of [an] orientation toward reality and its direct experience" (p. 272). In MBCT, "Being mode is

characterized by direct, immediate, intimate experience of the present" (Segal et al., 2002, p. 73). "The required *skills/knowledge* can only be acquired through direct experience" (p. 91). In ACT it is proposed that "because humans tend to become fused with literal language, we often do not distinguish between the world as it is verbally conceptualized and the world that is directly experienced" (Luoma et al., 2007, p. 26). Without the qualities of mindful awareness the "direct contingencies of experience are lost" (p. 26). In DBT "direct experience" is proposed as a quality of "Wise Mind." The skills taught in mindfulness are taught in the service of stripping away judgment, distraction, and the imposition of mood on direct experience in the here and now and achieving "Wise Mind" (Linehan, 1993a).

Practice Elements of Mindfulness

This section turns to the practical question of how mindfulness is effectively practiced and taught in session. Elements specifically related to the practical utilization of mindfulness, rather than the treatment as a whole, are related to behavioral and cognitive activity during formal or informal practice and specific therapist activities and characteristics (See Appendix H practice elements table in its entirety).

Formal Practice

From the outset of the analysis it was understood that the treatments differ in the importance they place on formal meditation practice as a means of achieving mindfulness. MBSR and MCBT explicitly emphasize a consistent, daily formal meditation practice as essential for both participants and instructors. ACT and DBT make no such dictates. However, ACT and DBT do incorporate meditative exercises. In ACT mindfulness meditations are recommended as but one useful means by which to activate

the processes proposed to underlie mindfulness[3]. DBT also makes use of very brief guided meditative awareness exercises as a session wind down exercise or as homework for practicing awareness. However, regardless of the duration or emphasis of formal practice in the four treatments, when formal meditation is used, there are many common behavioral and cognitive constituents across treatments.

Behavioral Elements

The common behavioral practices of mindfulness are listed with descriptions of their degree of relevance in Table 3. MBSR and MBCT rely most heavily on formal meditative practices. However, although ACT does not consider meditation practice an absolute necessity, Hayes and Smith (2005) emphasize and recommend that, "To sit still for extended periods of time and simply watch what your mind and body produce for you is an excellent way to practice acceptance, defusion, and being present" (p. 115).

MBSR, MBCT, and ACT all make use of body scan mediation, where the individual lies on their back and moves attention through the different regions of the body. Sitting meditation is also used in these three treatments as a means of developing ones ability to develop mindful awareness. During sitting meditation, assuming a particular posture is highly emphasized. Participants are similarly instructed in MBSR, MBCT, and ACT to adopt an erect and dignified posture, with the head, neck, and back aligned, either with crossed legs on a cushion on the floor or in a straight chair.

[3] In the original ACT text (Hayes et al., 1999), the use of formal meditation in other treatments is briefly cited as evidence for the importance of acceptance and the problems inherent in experiential avoidance. However, recommendations are not made for its use, such recommendations were integrated later into ACT and are often used to begin each session in more recent protocols not evaluated for this analysis.

Table 3

Behavioral Practices of Formal Meditation

Formal Practice Behaviors	Description	MBSR	MBCT	ACT	DBT
Sitting meditation	Engaging in processes of mindful awareness while seated either with crossed legs on a cushion on the floor or in a straight chair.	H	H	R	F
Body Scan	The practice involves lying on one's back and moving attention through the different regions of the body.	H	H	R	I
Proper positioning	During sitting meditation; adopting an erect and dignified posture, with the head, neck, and back aligned.	H	H	H	I
Designated place and time	Deciding in advance a consistent place and time exclusively reserved for formal practice.	H	H	V	I
Consistent Practice	Emphasizes the importance of practice over conceptual understanding of mindfulness	H	H	H	I

H = Highly relevant; V = Very relevant; R = Relevant; F = Fairly irrelevant; I = Irrelevant

In order to develop the skill of mindfulness there is a correspondingly explicit emphasis on the importance of practice. In MBSR, MBCT, and ACT it is recommended that formal practice be used consistently, at a particular time and place, for a predetermined amount of time. However, while MBSR and MBCT ask clients to practice for about forty five minutes per day, ACT recommends beginning with a more obtainable goal of approximately fifteen minutes, 3 times per week (Hayes & Smith, 2005). When meditation is chosen as means of fostering mindfulness, it is recommended that clients choose a consistent time and place for practice, where distractions are minimized (Kabat-Zinn, 1990; Hayes & Smith, 2005).

Cognitive elements. Common elements of cognitive or attention deployment instructions were also found across treatments, with some interesting variations. The cognitive practices of mindfulness are presented in Table 4.

Table 4

Cognitive Practices of Formal Meditation

Formal Practice Cognitions	Description	MBSR	MBCT	ACT	DBT
Body first	Bringing attention to the body as the first point of entry into experience of difficult emotions.	H	H	R	F
Redirecting attention	Noticing when the mind has wandered from the present moment and redirecting attention to the here and now.	H	H	H	H
Anchoring Attention	Bringing attention to the sensations of breathing to anchor attention in the present moment.	H	H	F	H
Expanding awareness	Systematically moving attention in a step-wise fashion to include observation of the flow of all experience.	H	H	H	F

H = Highly relevant; V = Very relevant; R = Relevant; F = Fairly irrelevant; I = Irrelevant

The first point of entry for bringing difficult experience into awareness during mindfulness practice is often the body. MBSR, MBCT, and ACT all emphasize this cognitive strategy. All of the treatments also emphasize noticing automatic, or unmindful attention such as mind wandering, automatic pilot, or particular patterns of reactivity and then redirecting attention and awareness to the present moment. However, ACT differs from MBSR, MBCT, and DBT in the anchor for grounding attention in the present

moment. The later three emphasize anchoring attention on a particular target (the breath or part of the body), to which attention may be redirected when it wanders. In ACT the formal practices guide the client to multiple areas of attention, with an awareness of a consistent self who is observing as the anchor. MBSR, MBCT, and ACT emphasize increasingly expanding awareness to include all aspects of experience. The short formal meditations in DBT are more similar to closed focus meditation, with attention remaining more closely anchored on the breath.

Informal Practice

All of the treatments emphasize informal practice of mindfulness by bringing the qualities of mindful awareness to one's day-to-day experiences and activities. In MBSR and MBCT informal practice is the intentional cultivation of mindfulness of routine activities and is proposed as an extension and generalization of formal practice. In ACT and DBT, informal practice is prioritized over formal meditation practice. Other experiential mindfulness techniques are included here as informal practice. All of the treatments provide a range of different experiential opportunities other than formal practice, such as experiential exercises, guided visualization, metaphor, stories, and poetry. Table 5 presents the specific cognitive and behavioral constituents of informal practice.

Behavioral Elements

Mindfulness in daily living. In MBSR and MBCT "informal mindfulness practice refers to conscious efforts to bring moment to moment awareness into all aspects of one's daily life (Kabat-Zinn, 1996, p. 2). This involves "choosing one routine activity and making a deliberate effort to bring moment-to-moment awareness to the activity" (Segal

et al., 2002, p. 120). Homework assignments include bringing awareness to pleasant and unpleasant activities during the week and recording this awareness together with awareness of ones corresponding somatic, emotional, and cognitive reactivity. Such informal assignments are proposed to "enable participants to generalize to everyday life what they learn in the formal practice" (Segal et al., 2002, p. 119). In MBCT the "3-Minute Breathing Space" is used to bring formal meditation practice into daily life (Segal et al., 2002).

Table 5

Behavioral and Cognitive Practices of Informal Practice

Practice	Description	MBSR	MBCT	ACT	DBT
Behavioral: Mindfulness in daily living	Deliberate effort to bring moment-to-moment awareness into all aspects of one's daily life or during behavioral tasks.	H	H	H	H
Other/ experiential exercises	Range of interventions and techniques other than formal practice to promote felt sense of mindful awareness	V	V	H	V
Cognitive: Internal and external	Bringing awareness to all aspects of the external situation as well as one's internal responses.	H	H	H	H

H = Highly relevant; V = Very relevant; R = Relevant; F = Fairly irrelevant; I = Irrelevant

ACT incorporates informal practice primarily by asking clients to bring the underlying processes of mindfulness to experience during assigned committed behaviors, which are values consistent. For example, during a committed action assignment, the client would be asked to practice willingness to allow whatever negative thoughts, feelings, or somatic experiences might arise, while maintaining present moment

awareness, from the perspective of the continuous self who is observing. DBT encourages clients to apply the concrete cognitive "how" and "what" skills of mindfulness to daily activities and reviews adherence to such practice on weekly diary cards. More specific awareness exercises are also assigned in the service of practicing radical acceptance during the Distress Tolerance module.

Range of other experiential mindfulness techniques. In order to foster experiential learning and the activation of mindfulness processes, all of the MB-ESTs utilize a variety of techniques and approaches. This variety allows for the consideration of individual differences and increases the likelihood of target process activation. "A range of different formal methods and exercises are offered to cultivate mindfulness, so that people with different dispositions may find at least some aspects of the course compatible with their personal orientation and learning style" (Salmon, Santorelli, & Kabat-Zinn, 1998, p. 245). The treatments differentially rely on the use of various formal meditation practices, informal practices, experiential exercises, metaphor, and story. MBSR and MBCT most heavily rely on formal meditation practices, but also make use of experiential exercises, metaphors, stories, and poetry. ACT and DBT more heavily rely on experiential exercises, metaphor, and/or more brief meditative exercises. (See Appendix H.)

Cognitive elements. Another question of interest is whether mindfulness practice includes attention and awareness of internal or external events or both. In all four treatments formal meditation emphasized awareness of internal experience, while informal practice involved awareness and attention to both internal and external events. This entails awareness of events as they are occurring as well as one's internal reactions of attachment or aversion to them.

Clinician Behaviors and Characteristics

Together with the specific behavioral and cognitive elements of mindfulness practice, particular clinical behaviors and characteristics were identified, which are intended to facilitate mindful awareness in the client. These include the clinician working in the here and now of experience, engaging in formal practices together with clients in session, and clinician practicing the mindfulness interventions used with the client in their own lives and modeling mindfulness and acceptance perspectives in session. Table 6 presents each behavior and its relevance to each treatment.

Clinician practices together with client(s). When meditation is used to practice mindfulness, MBSR, MBCT and ACT recommend that clinicians practice together with clients. Getting down on the floor with clients is an important means of conveying a sense of interconnectedness and equality (MBSR protocol). This means that one is "guiding out of your own moment-to-moment experience during the guided meditations" (Segal et al., 2002, p. 89). The authors of MBCT equate teaching mindfulness to a rock climbing instructor, "In the same way, mindfulness training involves the instructor participating alongside the patient, not giving instructions, as it were, from the bottom of the rock face" (p. 56-7). Practicing together with the client(s) is proposed to result in "more fluid and better timed exercises, helps the therapist be mindful and present, and can help equalize the therapeutic relationship" (Luoma et al., 2007, p. 96-7).

Table 6

Clinician Behaviors and Characteristics

Clinician Behaviors	Description	MBSR	MBCT	ACT	DBT
Therapist practices with client	The therapist practices in session meditations together with client(s).	H	H	H	F
Working in the here and now	Clinician deliberate- in depth-detailed inquiry of clients' moment-to-moment experience.	V	V	H	R[4]
Therapist Mindfulness	The therapist actively practices the methods he/she uses in treatment and embodies mindfulness and acceptance perspectives.	H	H	H	R

H = Highly relevant; V = Very relevant; R = Relevant; F = Fairly irrelevant; I = Irrelevant

Working in the here and now. The MB-ESTs emphasize the clinician helping the client bring moment-to-moment awareness to multiple aspects of their experience as it is occurring in the here and now in session. The specific formal and informal practices and experiential exercises are embedded in an environment in which the therapist actively observes, invites, and explores multiple aspects of the client's experience. This may occur in response to naturally arising difficult experience or such experience may be intentionally elicited as a function of interoceptive exposure to affect. However, in each case difficulties are considered an opportunity to practice awareness and acceptance of internal experience.

Therapist mindfulness. Finally, MBSR and MBCT emphasize the importance of consistent formal meditation practice for the clinician, while ACT and DBT do not

[4] In individual sessions only.

emphasize such practice. However all of the treatments emphasize the importance of the clinician's personal familiarity with mindfulness treatment practices. Whether the clinician relies primarily on formal practice or experiential exercises, metaphor, and other experiential strategies, the therapist should be very familiar with the particular practices from his or her own experience. This personal experience and familiarity with treatment practices will facilitate the therapist's requisite ability to model and embody mindful awareness and acceptance in session. Each treatment highlights the therapist's ability to be aware of and to accept both their own and the client's difficult experience. The therapeutic stance is one of curiosity and willingness to experience the natural arising discomfort with difficult client content and experiences, rather than rushing in to problem solve.

Chapter 3

Discussion

Numerous conceptual, functional, and practical common elements were identified across the majority of the MB-ESTs. Elements were identified common to the treatments as a whole, as well as more specifically to mindfulness practices. This identification of common elements can provide important benchmarks in future research as well as practice. For example, Garland and colleagues (2008) have noted that, "common elements can serve as benchmarks for quality of care research or other types of observational studies attempting to characterize existing services" (p. 511). For clinical practice, these authors note that common elements of ESTs can be used in training efforts to more specifically target the common core techniques and content, which might improve clinician acquisition of basic competencies. As such, it follows that these elements can serve as guidelines for the clinicians to consider when integrating mindfulness into evidence-based practice.

Table 7 outlines the clinical considerations derived from the results of the content analysis. In this chapter practical considerations and preliminary suggestions for the integration of the core elements of mindfulness-based treatment are provided. The results of the analysis are suggestive of seven primary areas for consideration, which encapsulate the common elements of effective treatment. Each is presented and its practical utility discussed. Consistent with the APA's definition of evidence-based practice in psychology (EBPP), these considerations are discussed in relation to the best available research, patient population characteristics, and cultural considerations (APA, 2005) and, in some

instances, may serve as suggestions for practice. A clinician's summary handout, which outlines these areas for clinician consideration and suggestions for practice, is provided in Appendix I.

Table 7

Clinical Considerations Based on Common Elements of MB-ESTs

The mindfulness based clinician:
1. Balances acceptance with change strategies according to population characteristics
2. Prioritizes optimizing mindfulness
3. Emphasizes experiential understanding of mindfulness
4. Models and practices mindful awareness and acceptance
5. Normalizes client experience and balances power differential
6. Conceptualizes and practices from a holistic view
7. Elicits client commitment and personal responsibility for self care

Consideration 1

Balances Acceptance with Change Strategies According to Population Characteristics

The overarching categorization of a treatment as mindfulness-based requires the therapist to balance goals for change with mindfulness and acceptance strategies. Mindfulness strategies are those that intentionally bring one's attention to all aspects of experience (thoughts, feelings, and internal and external sensations) of the present moment. Concurrently, acceptance strategies are those, which promote acceptance of and willingness to hold these experiences in awareness in a non-judgmental way. Change strategies are those traditionally associated with cognitive and behavioral interventions, such as behavioral activation interventions, problem solving, and or exposure techniques.

In this section the distribution of these strategies will be broadly discussed based on the most rigorous empirical evidence for the effectiveness of the MB-ESTs.

Practice Implications

There are no formal standards for the dose ratio of how much mindfulness and acceptance is to be used to counterbalance change strategies. However, the differential emphasis in this balance in the MB-ESTs (see Appendix D) is suggestive of the patient characteristics to consider. Table 8 presents a summary of the most rigorous MB-EST outcome research. RCT studies have found ACT and DBT effective in the treatment of clients with the most severe psychological disorders. These treatments rely more on informal mindfulness interventions and traditional behavior change strategies. The most rigorous evidence for MBSR and MBCT has come from studies in non-psychiatric and in remission populations. These treatments rely heavily on formal meditation practice, with fewer (MBCT) or almost no change strategies (MBSR). A discussion of treatment in relation to individual diagnoses would be beyond the scope of this work. Instead, population considerations are discussed in accord with a single unifying conceptualization of psychopathology held in the MB-ESTs.

Table 8

Empirical Evidence for MB-ESTs

Population	Treatment	Research Design	Outcomes	Author(s)
Psychotic inpatients (*n* = 80)	ACT: 4 ind. sessions	• RCT	• Lower believability of symptoms • 50% reduction in rate of re-hospitalization at 4 months	Bach & Hayes, 2002
HIV Positive; Lower SES; Primarily African American male; Non-Clinical Pop (*n* = 39)	MBSR v. 1 day overview	• RCT • Single blind trial, • Pre-test/Post-test	• Equal improvements in quality of life, trait mindfulness, & psych distress. • MBSR subjects maintained CD4+ T lymphocytes, while 1-day subjects showed declines. • Dose-response relationship btwn practice and higher CD4+ lymphocytes.	Creswell, 2008
Healthy community sample (*n* = 41)	MBSR v Control	• RCT • 4 m follow up	• Decreases in trait negative affect in meditators,. • At time 2 & 3 meditators showed greater left sided activation, which predicted increases in influenza vaccine antibody titers.	Davidson et al., 2003
Outpatients with moderate-severe sxs of anxiety and depression (*n* = 101)	ACT v. CT with novice therapists	• RCT	• Equally large effect sizes on symptoms of depression, anxiety, quality of life and GAF scores • ACT effects associated with reductions in experiential avoidance and increases in "act aware" (KIMS*) and acceptance & experiential avoidance (AAQ*)	Forman, Herbert, Moitra, Yeomans, & Geller, 2007
Psychotic ethnically diverse inpatients (*n* = 40)	ACT: approx. 3 individual sessions	• RCT • Pilot	• Only 28% of ACT group were hospitalized at 4 months, versus 45% in TAU • 50% of ACT reached clinically significant improvement v. 7% in TAU • Decreases in believability associated with decreased distress.	Gaudiano & Herbert, 2005
Social Anxiety Disorder Outpatients (*n* = 53)	MBSR v 12 weeks of CBGT	• RCT	• CBGT: greater reductions in fear of interacting w/ others, being observed, clinician rated avoidance of social situations. • Equal improvement in depression, disability, and quality of life	Koszycki et al., 2007
Outpatients with variety of presenting problems (*n* = 28)	ACT v CBT with novice therapists	• RCT • Pre-test/Post-test, • 6 month follow-up	• Large effect sizes on GSI in ACT group v. Small effect sizes in CBT • ACT: Improvements in depression, social functioning and mood at post & FU • Medium size differences in favor of ACT on depression and social functioning.	Lappalainen et al., 2007
BPD female outpatients (74% with co-morbid substance dependence	DBT (1yr) v TAU	• RCT, • 4, 8, 12 & 16 month follow up	• Greater abstinence days on self report and urinalysis in DBT at all times • Better tx adherence • No between group differences on parasuicide episodes, Global adjustment, or anger at post-test • Greater social and global adjustment at 16 months	Linehan, Schmidt, Dimeff, Craft, Kanter, & Comtois, 1999
BPD & SA women outpatient (*n* = 23)	DBT (1 yr) v Comprehensive Validation Therapy (CVT) + 12 Step	• RCT, • 4, 8, 12 & 16 m follow up	• DBT maintained reductions in opiate use through active tx; • CVT +12S increased use during last 4 months of tx. • Both showed decreases at 12 &16 m follow up. • Greater discrepancies between the urinalyses scores of the CVT + 12S group and self report, suggesting under reporting of use.	Linehan et al., 2002

(table continues)

* Kentucky Inventory of Mindfulness Skills (Baer, Smith, & Allen, 2004)

* Acceptance and Action Questionnaire (Hayes, Strosahl et al., 2004)

Population	Treatment	Research Design	Outcomes	Author(s)
BPD female Outpatients (*n* = 101)	DBT (1 yr) v. Tx by Community Tx by Experts (CTBE)	• RCT, • Matched, blind, • 1 year follow up	• 50% fewer suicide attempts in DBT group • Less hospitalization for SI, • Fewer psych hospitalizations and psych emergency visits. • Equivalent decreases in depression in both groups	Linehan et al., 2006
Chronic Depression, in remission (*n* = 75)	MBCT v TAU	• RTC, • 3 m follow up	• 50% + reduction in relapse in subjects with 3+ prior episodes at follow up • Large effect size • Effectiveness on relapse increases with number of prior episodes	Ma & Teasdale, 2004
Women w/ 1 binge/purge per wk; (*n* =31)	DBT (20 wk adapted ind tx) v WL control	• RCT; • Pre-test/Post-test	• Moderate to large tx effect sizes for binge eating and purging. • Moderate effect sizes for emotional eating, anxiety and depression	Safer, Telch, & Agras, 2001
Healthy College Undergraduates (*n* = 44)	MBSR v Easwaran Meditation (EPP) v control	• RCT • Pre-test/Post-test • 8-week follow up	• No difference in mindfulness (MAAS) at f/u but at post-test • Home practices in both predicted pos outcomes • Mindfulness predicted reductions in rumination in MBSR only	Shapiro, Oman, Thorensen, Plante, & Flinders, 2008
Chronically depressed subjects, in remission (*n* = 132)	MBCT v. TAU	• RCT; • 1year follow up	• In patients with 3+ prior episodes, significantly lower relapse rate compared to TAU (40% v. 66%) • Medium effect size	Teasdale, Segal, Williams, Ridgeway, Soulsby, & Lau, 2000
Binge Eating Disorder (BED), women (*n* =44)	DBT v. Waitlist (20 wks; adapted individual tx for Binge Eating Disorder) v. WL control	• RCT, • 3 & 6 m follow up	• Tx effects for both binge days and episodes. • 89% of DBT group (compared w 12% of controls) were abstinent. • DBT subjects reported sig less weight, eating and shape concerns and less anger. • 67% (3 m) and 56% (6 m) abstinence was reported in DBT group.	Telch, Agras, & Linehan, 2001
Obsessive Compulsive Disorder (*n* = 34)	ACT (w/o exposure) v Progressive Relaxation Training (PRT); 8 wks	• RCT • pre-post, • 3 m follow up	• Greater decreases in OCD severity at post and follow-up • Improvements on measure of quality of life, thought action fusion, and experiential avoidance at post and follow up for the ACT compared to the PRT • No difference on depression scores. • Changes in ACT processes predicted changes in OCD severity better than vice versa.	Twohig, 2008
BPD Female Outpatients (*n* =58)	DBT (12 m) v. TAU	• RCT; • 6 month follow up	• Greater decreases in self-mutilating & impulsive bxs & alcohol consumption than controls at 12 m, sustained at 6m follow up.	Van den Bosch, Koeter, Stijnen, Verheul, & van den Brink, 2005
Unipolar Depression v. Bipolar (*n* =48)	MBCT (8 weeks)+1 day retreat v waitlist controls	• RCT; • Pilot study	• Greater reductions in BDI scores for MBCT group for both MDD and BP • Reduction in anxiety in BP subjects v. controls;	Williams et al., 2007
Depressed Outpatients (*n* = 41)	ACT v. Complt. Cog. Thx (CCT) v. Partial Cog, Thx (PCT) (12 weeks)	• RCT, • Pre-test/Post-test, • 2 m follow up.	• Sig. Equivalent decreases in depressive symptoms in all groups • Trend on BDI that favored ACT	Zettle & Rains, 1989

(table continues)

All of the MB-ESTs target secondary reactivity to primary negative internal experiences. The secondary reactivity, which underlies the diagnoses for which the MB-ESTs have been found effective, is emotion dysregulation. Emotion regulation has been found to mediate the inverse relationship between trait mindfulness and psychological distress (Coffey & Hartman, 2008). Emotion dysregulation has been proposed as an underlying feature in Borderline Personality Disorder (Linehan, 1993a), Major Depressive Disorder (Gross and Munoz, 1995) Anxiety Disorders (Mennin, Heimberg, Turk, & Fresco, 2005), Post Traumatic Stress Disorder (Wolfsdorf & Zlotnick, 2001), and even Attention Deficit Disorder (Philipsen, 2006). As can be seen, emotion dysregulation underlies the diagnoses in which the MB-ESTs have been found effective.[5]

As such, based on the underlying conceptualization and populations in which the MB-ESTs have been found effective, suggestions are made based on clients' degree of affect tolerance, rather than on discrete diagnoses. According to Hayes and Feldman (2004), "Individuals gripped by intense and frightening emotions are likely to have difficulty sitting with their emotions and accepting them without some preparation and additional skills to help them keep their balance" (p. 257). Therefore, population characteristic considerations will be made in relation to clients' degree of affect tolerance. Therapists should always consider the client's capacity to tolerate difficult negative experience and ability to effectively regulate emotional reactivity when deciding the ratio and kinds of mindfulness strategies to be utilized.

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[5] The only studies found using mindfulness in relation to Pervasive Developmental Disorders were mindful parenting interventions. None were found, which directly explored the effects of training PDD clients in mindfulness.

As with any conceptually informed treatment, a thorough psychosocial and psychiatric background assessment should be collected. In clients with a history of emotional and or behavioral dysregulation (e.g. Bipolar disorder, Borderline Personality Disorder) or a history of severe trauma (PTSD), skills training similar to those taught in DBT should be provided first. This training can help clients to better regulate their experience before being introduced to extended periods of formal practice or exercises that encourage high doses of exposure to affect. In the treatment of patients with a history of childhood sexual abuse (CSA), teaching DBT skills as part of a phase-based integration with exposure based treatment has been found effective in reducing symptoms of PTSD (Cloitre, Koenen, Cohen, & Han, 2002), depression (House, 2006) and anger (Zlotnick et al., 1997). In higher functioning clients treatment may weigh more heavily on mindfulness and acceptance strategies as a means of promoting insight and moving through difficulties. A practice heavily weighted on this end of the spectrum would include more formal practices, longer meditation time, and less emphasis on direct change strategies.

Consideration 2

Prioritizes Optimizing Mindfulness

Mindfulness-based interventions emphasize the optimization of mindful awareness and acceptance processes over directly targeting the reduction of symptoms. This conceptualization of mindfulness approaches has been compared to positive psychology, in which developing positive states of mind are prioritized over mere symptom relief (Styron, 2005). As noted above, the problem behaviors and psychological experiences that are targeted are conceptualized as secondary reactive strategies to an

unwanted primary experience. Reactive strategies are those, which while often effective in eliminating primary unwanted experience in the short term, become maladaptive long-term. Facilitating client awareness and acceptance of primary internal experience is in the service of reducing secondary reactivity. As such, the mindfulness-based therapist is concerned primarily with increasing mindfulness and long-term adaptive responding. As shall be discussed, the empirical evidence seems to support this suggestion.

Practice Implications

Case conceptualization. The first goal of the therapist is to develop a working model of what particular internal experiences (thoughts, feelings, and bodily sensations) the client finds unacceptable. The therapist first assesses the client's presenting problem and the degree to which these problems represent secondary versus primary experience. This assessment may be conducted similarly to how it is done in ACT. First, the therapist explores with the client all of the symptoms the client seeks to expunge in treatment. The therapist should make a list of all of the negative thoughts, emotions, memories, and somatic experiences the client perceives as problematic. Next, the therapist explores the client's past attempts to not have negative thoughts and feelings. Another list is generated of all the healthy and unhealthy strategies that the client has used in the past in order to not have these unwanted experiences. This enumeration of difficult internal experiences and problem solving strategies provides the clinician with a road map of potential targets for mindfulness and acceptance strategies (See Appendix J for a sample).

Treatment. The therapeutic goal is to increase awareness and acceptance of the client's primary difficult experience by optimizing the processes proposed to underlie mindfulness. Through the use of mindfulness interventions (described more fully below)

the client learns how to bring non-judgmental attention to all aspects of internal experience (somatic, cognitive, and affective), and to hold these experiences in awareness, with acceptance. They learn to observe the impermanence of these difficult experiences and distinguish them as experiential content, and not identical to the self. Through repeated exposure to his or her internal experience, the client gains clarity and insight, and thus awareness of more adaptive responses to difficult internal experience. Ultimately, the therapeutic goal is to promote clients' ability to respond effectively to negative internal experience. Based on the clinical conceptualization of the client, the therapist should choose interventions that best bring the client in experiential contact with the primary difficult internal experience in the present moment. In the remainder of this section the use of formal meditation practices will be discussed, which is but one means of optimizing mindfulness.

Using formal practice in treatment. Therapists should consider, not only the patient's degree of affect tolerance, but also personal and cultural preferences when deciding weather or not they will rely on formal mediation. Again, patient population decisions should be made based on the populations with which mindfulness based interventions have been found effective. Extended formal practice should be limited initially in clients with severe symptoms of mood, anxiety, or psychosis.

Client cultural preferences should also be carefully considered. Experts in the field agree that clinicians must be sensitive to clients' cultural and religious beliefs when introducing meditative practices. Although the MB-ESTs have all been designed as distinctly secular, there is an inherent spiritual quality in the concepts and practices of mindfulness (Hayes et al., 1999). Therefore, "it is important to present the concept of

mindfulness as separate from the Buddhist tradition from which it developed" (Roemer & Orsillo, 2008, p. 221). A client's religious beliefs may serve to make meditation practice more or less appealing. The therapist should explore with clients' their religious beliefs and affiliations before beginning formal practice. The clinician may highlight that "all major religious and spiritual disciplines have as an important part of their contemplative and/or meditative practice a focus on breathing" (Linehan, 1993b, p. 101). Naturally, should the client feel strongly that meditation is against their religious beliefs, other experiential interventions and informal practice should be utilized.

When formal meditation is used, the therapist should integrate the cognitive and behavioral elements that were found to be common across most of the MB-ESTs analyzed (see Appendix G) [6]. During formal practice it is the repeated systematic deployment of attention in a particular way contributes to the optimization of mindfulness. Consistent meditation practice teaches clients how to systematically observe the multiple aspects of internal experience (bodily sensations, feelings, thoughts, and impulses) in the present moment. Formal practice serves as a sampling of the client's habitual patterns of reactivity (clinging to and pushing away certain experiences). Bringing non-judgmental acceptance to difficult experiences facilitates the client ability to sit in direct contact with the primary experience. Over time a decentered awareness of reactive impulses is developed. The client comes to see that there is a consistent, objective self, who observes all experience.

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[6] A brief description of the use of formal meditation as used in MB-ESTs is provided here. However, because it is later recommended that clinicians who choose formal practice as a means of optimizing mindfulness obtain a similar degree of formal training. A lengthy description of the process is not included here.

Training mediation practice may be thought of as occurring in developmental stages. Sitting meditation practice begins by bringing one's attention into the body. This point of entry serves two purposes: a) sensations in the body of breathing serve as an anchor for attention (Kabat-Zinn, 1990), and b) attention to emotional expression in the body serves as a useful means by which to bring awareness to current difficult experience (Luomo et al., 2007; Segal et al., 2002). Many clients have difficulty describing difficult emotions. Physical sensations in the body provide a more objective and practical entry point (Kabat-Zinn, 1990; Luoma et al.; Segal et al.). Bringing attention to the body and feelings of breathing in the body facilitates the redirection of attention to experience in the present moment.

Practicing together with the client, practice begins by guiding the client to notice the sensations in the body of breathing. Early meditation practices should primarily focus on guiding clients to anchor attention on these sensations. This fosters concentrative ability, which is necessary in order to redirect attention when the mind wanders (Kabat-Zinn, 1990; Segal et. al., 2002). Practice should remain at this stage until the client has developed a substantial ability to regulate his or her attention. When training clients with impaired attention capacity, training should remain at this step for a significant period of time. Interspersed with periods of silence, the therapist guides the client to simply notice, without judgment, when the mind is pulled into thought and gently bring attention back to the feeling of breathing. Once the skill of regulating attention is developed, meditations increasingly expand awareness in a step-wise fashion. These steps, adapted from Kabat-Zinn (1990) are shown in Table 9. These cognitive "behaviors" are taught in a sequential manner across episodes of sitting practice as the practitioner learns

meditation. Ultimately, however, these elements are practiced concurrently within a single sitting practice in what is termed "choiceless awareness" (Kabat-Zinn, 1990).

Table 9

Sequential Steps of Attention Deployment in Formal Practice

Direction of Attention	Therapist Guides clients to….
1. Anchor attention on breathing	• Begin by bringing your attention to the sensations in the body of breathing. These may be in the nostrils, as the air comes in and out. Or the sensations of the chest expanding and contracting.
2. Attention to particular body sensations	• Notice any areas of the body that might be pulling for attention. • If this happens, guide clients to shift attention to this area and explore any changes. • Does it get stronger, or weaker, or change in quality?
3. Attention to the sense of the body as a whole	• Awareness of the body as a whole. • Does it feel heavy, or agitated, or calm, or dull?
4. Attention to sounds	• Listen to sounds as they emerge, as if they were a piece of their favorite music. • Listen to just the pure sound, without interpreting what the sound represents.
5. Attention to thoughts and feelings	• Observe thoughts, images, or memories as events in the mind. Simply noticing what the mind offers. • Notice from the perspective of the non-judging observer. • Notice the quality of thoughts. Are they about clinging, rejecting, liking or disliking? • Notice what feelings come up in relations to particular thoughts. • When they notice becoming pulled into the content, redirect attention to the breath.
6. Observe whatever comes up in "choiceless awareness."	• Practice watching whatever comes up, come and go, with open receptivity, in stillness.

Beginning sessions with meditation. The majority of MB-ESTs recommend beginning with experiential practice (Bach & Hayes, 2002; Batten, Orsillo, & Walser, 2005; Gaudiano & Herbert, 2005; Kabat-Zinn, 1990, Segal et al., 2002) and evidence suggests that even short meditative practice can promote willingness to engage in difficult experience (see table 3.5). Beginning sessions with a short meditation also brings the client into the room and prepares him or her to begin the work of therapy (Luoma et al., 2007). Whether or not the therapist decides to rely heavily on the use of formal mediation practice, it is therapists can introduce a short meditation at the beginning of each session.

Very brief meditations may be used even in populations with severe emotion dysregulation (Linehan, 1993a,b). In these populations guided instructions should be more structured and attention deployment more regulated, with shorter periods of silence, until it is clear that substantial skill has developed (Batten et al., 2005). In DBT, meditative awareness exercises primarily hold the clients' attention to a single fixed point of attention, such as counting breaths.

Exploration of experience and provision of didactic information. Following each mindfulness practice the therapist explores the client's experience and weaves this report together with conceptual information and psychoeducation. This exploration facilitates the client's ability to use words to label experience. This exploration should highlight a) the universality of mind wandering. Emphasizing the tendency of the mind to wander into thought and preoccupation helps to normalize any difficulties the client initially has with mindfulness practices, b) The therapist assists the client in noticing the multiple dimensions of experience (somatic, affective, and cognitive). The therapist should inquire

generally about the client's experience of the exercise, before asking more specific questions related to each domain, c) Clients will often report that they found the exercise relaxing. Therapists should point out that, while mindfulness meditation may lead to feelings of relaxation, this is not a goal. In fact, there is no goal or objective other than to observe any experience that comes into awareness, notice it and return to the sensations of breathing. Relaxation is merely a by-product. d) The therapist should also point out the types of thoughts (judgments, memories, planning) and impulses (clinging and pushing away experience) that often pull attention away from what is present in the moment. e) These experiences may be linked to reactions previously discussed in therapy.

Evidence

A relationship between mindfulness, its constituents, and other positive psychological outcomes appears to exist. Formal mediation has been found to increase mindfulness, and these increases mediated improvements in psychological functioning (e.g. Anderson, Lau, Segal, & Scott, 2007; Camrody & Baer, 2008; Shapiro, Oman, Thoresen, Plante, & Flinders, 2008). In the most comprehensive of these studies, Camrody and Baer (2007) also examined the relationship between different types of formal practice, informal practice, and changes in the five facets of mindfulness (FFMQ), well-being and psychological symptoms. While both body-scan and sitting meditation practice time were associated with increases in well-being, only body-scan was significantly associated with decreases in psychological symptoms (interpersonal sensitivity and anxiety).[7] Informal practice was not associated with any changes.

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[7] Hatha yoga practice was associated with the most improvements. Yoga practice time was related to increases in Observe, act aware, non judge, and non react. It also had the highest correlation with well-being ($p < .01$, $r = .42$).

Table 10

Elements Evidence

Element(s) Supported	Study Description	Findings	Author(s)
Observe, Breath as anchor	• Pre-test/Post test; Non-clinical Sample • M induction using 15-minute MM* in naïve and experienced meditators. • Subjects instructed to anchor attention on breath and redirect to breath when mind wanders.	• Correlation between M during meditation and subscales "observe" on FFMQ* in naïve but not experienced meditators. • Experienced meditators measured significantly higher on "observe" and "non reactivity to internal experience" than naïve sample. • Suggests naïve meditators may gain observe skills from single meditation practice.	Thompson & Walz, 2007
Act with Awareness, Breath as Anchor	• RCT: Non-clinical sample • Dysphoric Mood Induction following Distraction v. M induction v. Rumination • M = 8-minute MM focused on self acceptance and anchoring awareness on the breath	• Significantly lower levels of negative mood in M subjects than Distracted subjects ($p < .001$). • Significantly lower levels of negative mood in Distracted subjects than Rumination subjects ($p < .001$).	Broderick, 2005
Act with Awareness	• Within-(time) between (group) subjects; pre-test/post-test; No random assignment; Non-clinical sample • 10 day intensive MM retreat v. controls	• Significant improvements on self report mindfulness*, depressive symptoms, & rumination. • Significant improvements of working memory and sustained attention performance.	Chambers, Chuen-Yee Lo, & Allen, 2008

(table continues)

* MM = Mindfulness Meditation; M= Mindfulness
- Five Factor Mindfulness Questionnaire
- Mindful Attention Awareness Scale

Element(s) Supported	Study Description	Findings	Author(s)
Act-aware	• RCT, blind : • MM versus relaxation training: 1 month adapted MBSR (MM) v. Somatic Relaxation (SR) • Non-clinical sample	• Greater reductions in MM subjects pre-post distractive and ruminative thoughts and behaviors than controls. • Decreases in distress and increases in positive mood states in both groups. • MM effects on reducing distress partially mediated by reducing rumination.	Jain et al., 2007
Act-aware	• Pre-test/Post-test; Non randomized control • MBSR v. M Retreat ® v. Control • Effects on Attention Network Test (ANT): Response time and alerting, orienting, and conflict monitoring • Non-clinical sample	•Sig improved orienting attention during input selection, response selection, and orienting and conflict monitoring in MBSR compared to controls and R at post-test. • Sig improvements in stimulus detection in R group compared to MBSR and control.	Jha, Krompinger, & Baime, 2007
Act-aware, non-judge, non-react	• FFMQ validity • Correlational • Non-clinical sample	• Actaware, non-judge and non-react showed incremental validity in the prediction of psych symptoms.	Baer et al., 2006
Describe	• Correlational/Neuroimaging • Relationship between dispositional M (MAAS) and effects of affect labeling	• Strong negative associations between areas of prefrontal cortex and right amygdala response in subjects with high M but not in those with low.	Creswell, Baldwin, Eisenberger, & Lieberman, 2007

(table continues)

Element(s) Supported	Study Description	Findings	Author(s)
Non-reactivity, Exposure-Avoidance, Breath as Anchor	• RCT; M induction • Focused Breathing (FB) (15 minute M) v. Unfocused Attention (UA) vs. Worry (W) • FB = noticing the feeling of breathing and redirecting attention when wanders • Non-clinical sample	• FB group rated neutral slides more positively after induction than UA or W groups. • Less change in negative affect in FB group compared to W group, non significantly less compared to UA group. • More subjects in the FB than UA, viewed all optional negative slides. • Suggests greater willingness in FB group than UA group to tolerate uncomfortable emotions.	Arch & Craske, 2005
Non reactivity, Breath as Anchor	• M induction • Randomized controlled: Pre-post • 1 hr MM v. Guided visual imagery (GVI) • MM= Choiceless awareness while grounding attention on breath • Non-clinical sample	• Increases in pain tolerance in MM group only. • Trend towards M skills increase. • No correlation between increase in M and improved pain tolerance. • Diastolic BP decreased in both conditions.	Kingston, J., Chadwick, P, Meron, D., & Skinner, T.C., 2007
Non reactivity	• Randomized controlled: Pre-post • MM v. Relaxation meditation (RM) v. Waitlist Control (WL); (7 weeks; 1.5 hr/wk) • Non-clinical sample	• Only the MM group showed a reduction from T1 to T2 in interference from unpleasant pictures at 4s. • Intensity ratings for unpleasant pictures decreased from T1 to T2 for the MM group only. • Changes in TMS & MAAS predicted improvement on measures of well being, self compassion, life satisfaction and positive affect.	Ortner, Kilner, & Zelazo, 2007

(table continues)

Element(s) Supported	Study Description	Findings	Author(s)
Non reactivity	• Correlational: • Anxiety Sensitivity (AS) v. M v. Anxious Arousal (AA) • Non-clinical sample	• High AS + Low M predicted AA and agoraphobic cognitions, but not anhedonic depression symptoms or body vigilance. • No difference between Low AS + Low M and High AS + High M. • Suggests low M strengthens the relationship between AS and panic symptoms.	Vujanovic et al., 2006
Exposure-Avoidance, Acceptance	• RCT Carbon Dioxide Challenge: • Mindful Acceptance (MA) v. Control Symptoms (CS) v. No training • MA = Chinese finger trap metaphor • CS = training in diaphragmatic breathing, thinking "relax" to control • Anxiety sensitive female	• Less avoidant behavior and fewer cognitive symptoms of intense fear and catastrophic thinking in MA than the CS or no instruction conditions. • Fewer dropouts from trial 1 to trail 3 (0) in MA group than CS or no training. • Greater willingness to return	Eifert & Heffner, 2004
Acceptance, Non-judge	• RCT Mood induction (writing about the most stressful situation in lives currently) • Acceptance (ACC) v. Evaluative processing (EVAL) v. Objective description • ACC = attending to emotional response in an accepting way without negative evaluation • EVAL= considering whether emotions were appropriate or got in the way of managing stress effectively • Non clinical sample	• EVAL group showed greater increases in heart rate and significantly slower heart rate recovery than ACC or control groups. • No effect for condition on mood.	Low, Stanton, & Bower, 2008

(table continues)

Element(s) Supported	Study Description	Findings	Author(s)
Exposure-Avoidance, Acceptance	• RCT Carbon Dioxide Challenge: • Acceptance v. Suppression v. No instruction Control • Acceptance = 10 min recording "Being willing to experience your thoughts and feelings, good and bad, can free you up to focus on what really matters in your life" • Suppression = "When you are feeling anxious, but you know you have to do something, you can push the feelings away" • Panic Disorder Patients;	• Acceptance subjects reported significantly less anxiety and more willingness to participate in a second challenge than the Suppression or Control subjects. • No differences between self report panic symptoms or physiological measures.	Levit, Brown, Orsillo, & Barlow, 2004
Acceptance, Exposure-Avoidance, Act-aware	• RCT ACT v. CT with novice therapists • Outpatients with moderate-severe symptoms of anxiety and depression	• Equally large effect sizes on symptoms of depression, anxiety, quality of life and GAF scores. • ACT effects associated with reductions in experiential avoidance (AAQ) and increases in "act with awareness" (KIMS*) and acceptance (AAQ*). • CT effects associated with changes in "observe" and "describe" (KIMS).	Forman, Herbert, Moitra, Yeomans, & Geller, 2007

* Kentucky Inventory of Mindfulness Skills (Baer, Smith, & Allen, 2004)
* Acceptance and Action Questionnaire (Hayes, Strosahl et al., 2004)

Evidence, which supports the presence of specific constituents of mindfulness practice and their relationship to other positive psychological factors, is also slowly emerging (See table 10). Taken together, the evidence suggests that even a brief mindfulness induction (where attention is anchored on the breath) may buffer the effects of exposure to negative mood producing stimuli (Arch & Craske, 2006; Broderick, 2005), increase distress tolerance (Kingston, Chadwick, Meron, & Skinner, 2007) and increase the "observe" and "non-reactivity" elements of mindfulness as measured by the FFMQ (Thomson & Walz, 2007). Over time, mindfulness meditation may improve attention and awareness (Chambers, Chuen-Yee Lo, & Allen, 2008) and reduce distractive and ruminative thinking (Jain et al., 2007; Jha, Krompinger, & Baime, 2007). Simply increasing acceptance and refraining from judgment may reduce avoidance and cognitive symptoms of anxiety (Eifert & Heffner, 2003; Levit, Brown, Orsillo, & Barlow, 2004) and buffer the effects of negative mood on physiological reactivity (Low, Stanton, & Bower, 2008). Trait levels of the elements "act with awareness," "non-judgment," and "non-reactivity," have also been negatively correlated with psychiatric symptoms (Baer et al., 2006). This line of evidence supports the notion that optimizing mindfulness may decrease maladaptive reactivity, which may lead to improved outcomes.

Consideration 3

Emphasizes Experiential Understanding of Mindfulness

Treatment should be as experiential as possible. Experiential practice is emphasized in all of the MB-ESTs. The ultimate goal is to bring experience into the room as much as possible, providing opportunities for the client to practice their mindfulness skills in the presents of difficult experience. The therapist works in the here and now of

the client's emotional experience and uses experiential interventions to intentionally bring experience into the room. In order to facilitate EBPP's mandate of meeting the differential needs of clients, the therapist should provide a variety of experiential intervention options, which best suit a particular client. As with formal practice, interventions that elicit high degrees of interoceptive exposure should be used cautiously until the therapist has ascertained the client's level of affect tolerance. This suggestion is made based on trans-theoretical assumptions and expert agreement in the MB-ESTs, empirical evidence is still lacking.

Practice Implications

Working in the here and now. Treatment emphasizes providing clients with a felt sense of mindfulness. This requires the therapist to allow, facilitate, and bring attention to the client's moment-to-moment direct experience in session. It is only in the presence of the client's in-session difficult experience that the therapist can help the client to optimize the underlying skills of mindfulness. With such in session practice (and further home practice assignments) the client learns through experience the transient nature of experience and the felt sense of mindfulness practice. In this sense, the therapist is facilitating the interoceptive exposure as the client comes in contact with, remains present to, and observes the ever-changing nature of experience.

The inherent propensity for language to entangle humans in emotional experience and at the same time keep one from directly experiencing the here and now is emphasized in mindfulness-based treatment (Hayes et al., 1999; Segal et al., 2002). To circumvent this problem, the therapist is cautious not get caught up in the content of what is being said, but to focus on the client's experience. The referential content of language is

proposed to remove one from the full connection with experience (Hayes et al., 1999). In this sense, the therapist is continuously conducting a kind of functional analysis of the client's verbalizations and other covert behaviors that may function as forms of experiential avoidance or control strategies. Luoma et al., (2007, p.187) make some helpful suggestions about types of behaviors therapists should be alert for, which may signal experiential avoidance on the behalf of the client:

1. *Internal avoidance*: distraction, excessive worry, dissociation, telling self to think differently, daydreaming
2. *Overt emotional control*: drinking, drugs, self injury, thrill seeking, gambling, overreacting, avoiding physical situations or reminders
3. *In session avoidance:* topic changes, argumentativeness, aggressiveness, dropping out of therapy, coming late to sessions, chronic crises, laughing, focusing exclusively on the positive

These types of behavior should be targeted as functional avoidance of the primary difficult experience. In the presence of such behavior in session, the therapist might intentionally ask the client to slow down and explore what experience(s) precipitate such behavior. For example, when the therapist notices a sudden topic change in relation to a difficult idea or feeling, the client could be asked to repeat a particularly poignant phrase related to the internal experience.

This serves to hold the client in the experience of the difficult primary emotion. Thereafter, the therapist can facilitate the client's exploration of all aspects of internal experience in the moment. The "cubby holing" technique (Hayes & Smith, 2005) is a very effective technique for helping clients to develop their ability of looking into

experience, while remaining decentered and not becoming overly identified with it. This technique asks the client to label all aspects of their internal experience (bodily sensations, emotions, thoughts, memories, and impulses) preceded with the phrase "I am noticing the sensation of. . .(or thought. . .or impulse, etc.). Figure 2 demonstrates a short sample transcript of such a clinical interaction.

Bringing experience into the room. Opportunities to work with difficult affect or cognitions may occur in response to naturally arising difficult experience or such experience may be intentionally elicited with experiential interventions. Of course, beginning sessions with a short formal practice is one useful means of bringing the client's awareness into the here and now. However, comprehensive mindfulness-based therapy should use a variety of methods and interventions. A broad range of mindfulness practices is proposed to be instrumental in connecting with more individuals who have different dispositions and receptivity. This helps achieve higher levels of participant interest, engagement, satisfaction and adherence (Salmon et al., 1998). Other methods include informal practice, creative visualization, experiential exercises, metaphor, story, and poetry. Table 11 links a variety of treatment techniques and common practices with the conceptual elements to be optimized[8] (See Appendix J for brief descriptions). It is important to note, however, that individual experiential interventions should not be used in a "cookie cutter" fashion. "The therapist has to be sensitive to the context of each session and to pick and choose what is most likely to work" (Hayes et al., 1999, p. 175). Based on the mindfulness-based conceptualization, the therapist flexibly incorporates a chosen intervention to promote awareness in a given area.

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[8] Columns are not intended to suggest a one-to-one relationship. Rather they are a presentation of suggested methods for activating particular elements of mindfulness.

Client: I have so much to get done. I get so overwhelmed, you know, I feel like I just gotta get it done, get it over with and get on to the next thing.

Therapist: Joe, what was that you just said? Can you repeat what you just said?

Client: Well, I feel like I gotta get it done and get on to the next thing.

Therapist: OK, could you say that again for me, just a bit slower this time

Client: (confused, a bit annoyed) I feel like…I gotta get it done…get it over with… and get on to the next thing.

Therapist: One more time please, just a bit slower.

Client: (visibly annoyed) I… feel…like…I…just gotta..get …it over with…. And get…on…to.. the next….thing.

Therapist: And right now, can you tell me what else you noticed about your experience?

Client: I notice a sense of tension in my body, like an urgency to, well, get it over with.

Therapist: And any emotions or feelings?

Client: Yes, I notice the feeling of irritation.

Therapist: OK, and did you notice any thoughts go through your mind?

Client: Yes (pauses), well, first I had the thought, "Why is she asking me to do this?" But then I noticed the thought that you care for me and must have a good reason.

Therapist: Did you notice anything after that?

Client: Yes, I noticed that the tension in my body went away and I felt better

Figure 2. Sample transcript of working in the here and now.

Table 11

Integrated Table Linking Elements with Specific Techniques

Conceptual Element	Practice Elements	Treatment Techniques
*Act with awareness: Attention to the present moment, undistracted	• Formal Practice • Informal Practice • Attention to internal and external stimuli	• Walking meditation • Mindfulness of Pleasant and Unpleasant activities • Mindfulness during day to day activities • 3-Minute Breathing Space
*Observe: Bringing attention to various aspects internal and external experience	• Sitting meditation • Informal Practice • Other experiential exercises	• Leaves on a stream exercise • Awareness of Pleasant/Unpleasant Events • "Experience your fanny on the chair." • "Imagine that your mind is a conveyor belt.
*Describe: Labeling experience with words	• Therapist works in the here and now	• "Labeling your thoughts exercise"/Cubby holing • Therapist asks client to repeat a particularly poignant phrase very slowly
*Non-judge: stance of an impartial witness to your own experience	• Formal Practice • Metaphor	• Body-Scan* • Loving Kindness meditation* • Dandelions in the garden
*Non-Reactivity to internal experience	• Bringing attention first to the body • Formal Mediation • Experiential exercises	• Body Scan* • Paying attention to sensations in the face exercise • Half smile exercises: adopting a serene, accepting face
Observer Self/Wise Self: Invariant sense of "I" is beyond one's	• Formal meditation • Experiential Exercises	• Sitting meditation*; Walking meditation; Mountain meditation • Observer self exercise; Chessboard metaphor

(table continues)

Conceptual Element	Practice Elements	Treatment Techniques
experience.		
Direct/Objective Experience: Increased sense of clarity	• Formal Practice • Experiential exercises	• Sitting Meditation: mindful listening • Thoughts and feelings exercise • Labeling thoughts exercise
*Interoceptive Exposure	• Bringing attention first to the body • Experiential Exercises	• Bringing the difficult into awareness in the body • Body scan* • Physicalizing exercise • Contents on cards exercise • Tin can monster exercise:
Decentering	• Formal meditation • Redirecting attention to the present moment • Metaphor • Experiential exercise	• Sitting meditation • Leaves on a stream exercise • "Cubby holing" • Passengers on a bus metaphor • Milk, milk, milk,*
*Acceptance	• Therapist mindfulness • Metaphor • Poetry	• Therapist embodiment of acceptance • Therapist does not rush in with solutions to "save" the client from uncomfortable experience • Stuck in quicksand, Letting go of the struggle • Trying to fall asleep: acceptance, non striving • Be a blanket spread on the ground on a fall day, letting leaves fall as they may without fighting them off. • Joe the bum metaphor • Passengers on the bus

**Empirically supported*

Informal practice is described as simply bringing the elements of mindful awareness into one's everyday activities. Because bringing mindful awareness into one's life is the ultimate goal, all of the MB-ESTs highly emphasize this practice. In practice, however, the construct of this sort of informal practice remains ambiguous and hard to operationalize. This may be why simply asking clients to bring such awareness to daily activities has not been linked to improved outcomes (Camrody & Baer, 2007). A more structured means of teaching clients to intentionally bring awareness into daily life is the "Three-minute breathing space" used in MBCT (Segal et al.; 2002). This "mini-meditation" exercise consists of three steps, each of which is practiced for approximately one minute as follows:

1. Ask, "What is my experience right now?" Attention is brought to the range of internal experience currently happening
2. Focus full attention on the movement and sensations of breathing, noticing each in breath and out-breath as it occurs
3. Expand awareness to the body as a whole, including posture and facial expression, and notice the sensations that are present, with acceptance and non-judgment.

Experiential exercises in mindfulness-based practice may also consist of visualizations or in-session tasks that bring the client into experiential contact with one or many of the underlying concepts of mindfulness. For example, the therapist might intentionally ask the client to bring to mind difficult past experiences through the use of creative visualization. With this experience in process, the therapist can assist the client in using his or her mindfulness skills by walking the client through each aspect of

experience. The use of metaphor, story, parable, and poetry are also very useful means experientially connecting clients to experience. Although stories and metaphor are language based, they provide an opportunity for clients to engage with material in a different way than direct didactic presentations of abstract conceptual material. The result is that the listener creates pictures or images of the material in the mind (Linehan, 1993a). Metaphors and stories should be used with which clients may readily identify, based on their culture and background. The "tug of war with a monster" metaphor is a very useful general metaphor used in ACT, which highlights acceptance or letting go of the struggle aspect of mindfulness. In this metaphor the client's difficult experience is presented as a monster in which the client is in a tug of war. This metaphor can be adapted or acted out physically with the client by bringing a rope to session. Presented here is the metaphor as described by Hayes et al. (1999).

> The situation you are in is like being in a tug-of-war with a monster. It is big, ugly, and very strong. In between you and the monster is a pit, and so far as you can tell it is bottomless. If you lose this tug-of-war, you will fall into this pit and will be destroyed. So you pull and pull, but the harder you pull, the harder the monster pulls, and you edge closer and closer to the pit. The hardest thing to see is that our job here is not to win the tug-of-war… Our job is to drop the rope. (p. 109)

Once used, metaphors can also be used throughout treatment as a kind of short hand for an entire felt experience (Hayes et al., 1999), (E.g. "It seems like you are really back in that tug of war again Mary").

Evidence

Support for this element of treatment may be drawn from the trans-theoretical emphasis on experiential learning in psychotherapy. In psychodynamic practice the new experience of the client is fundamental to the "corrective emotional experience." In

cognitive behavioral tradition experiential learning comes from providing clients with contradictory evidence to automatic thoughts and core beliefs. In client-centered humanistic approaches, which are process oriented, the main task of the therapist is to facilitate an experiential process in the client (Greenberg, Rice, & Elliott, 1993).

None-the-less, the emphasis in the MB-ESTs on providing experiential treatment highlights the need for dismantling studies in order to determine the optimal form of delivery of such techniques (Roemer & Orsillo, 2003). To date, when segmented from other clinical variables traditionally associated with CBT, there is very limited research available. Research is beginning to emerge, which suggests the positive relationship between formal practice time in the MBSR program and outcomes in non-clinical samples (e.g., Camrody & Baer, 2008). However, a recent RCT in a community sample with the AIDS virus found equivocal results (Creswell, 2007). The control group, which received a one day seminar on mindfulness, demonstrated similar increases in quality of life related to AIDS, distress, and mindfulness as participants who engaged in the full MBSR program. Interestingly however, significant differences were found related to amount of formal practice and changes in bio-markers of immune function. Further dismantling studies are needed to differentiate which experiential processes are the active ingredients in effective treatment, and the degree to which they are essential with specific patient populations.

Consideration 4

Models and Practices Mindful Awareness and Acceptance

The degree to which clinicians wish to increase mindfulness in their clients, they too must practice. Experts in the field are clearly in agreement that the clinician using

mindfulness as an intervention must have a similar degree of experiential understanding of its practice (Hayes et al., 1999; Kabat-Zinn, 1990; Linehan, 1993a; Segal et al., 2002). The therapist's ability to embody the perspectives of mindful awareness and acceptance is highly emphasized in all of the treatments analyzed. However, empirical evidence has not yet supported the widely held reports of experts in the field. As such, this recommendation is given based on these opinions of experts. At present it seems that the old clinical psychology adage may be applicable here, that is, the student may go no further than the teacher.

Practice Implications

In application, therapist mindfulness entails two elements: (a) personal practice and mindfulness development, and (b) modeling mindfulness and acceptance in session. It is clear that the development of one's own mindfulness is an experiential learning process, which cannot be adequately articulated or acquired only from verbal or conceptual exposure. According to Segal et al. (2002), clients learn about mindfulness through both their own direct experience with the practice and the instructor's embodiment of mindfulness in the ways issues are dealt with in session. The question is, how much mindfulness practice is enough to be a competent teacher? Germer (2005) suggests, "A possible rule of thumb is that we need to have experienced what we teach" (p. 115). The more predominant the use of formal practices and acceptance strategies, the more important it will be for the therapist to maintain their own ongoing formal practice. For intensive mindfulness meditation training, "the therapist will have learned to work, alongside a skilled teacher, with the obstacles to mindfulness that inevitably arise during intensive practice" (Germer, 2005, p. 115). For the therapist who intends to rely more

heavily on integrating experiential exercises and metaphor into a mindfulness-based practice (as in ACT and DBT), at least some exposure to experiential workshops or trainings is recommended (Luoma et al., 2007; Roemer & Orsillo, 2008).

Modeling mindfulness in session entails embodying "from the inside," a gentle approach that is invitational, with a spirit of genuine curiosity and inquiry about participants' moment-to-moment experience over a problem solving stance (Segal et al., 2002). The instructor welcomes the occurrence of uncomfortable mood states in clients as opportunities for teaching. "The primary stance is to inquire and to question; suggestions, if they come, are born of such inquiry" (p. 136). The therapist takes a "mindful and experientially open approach to all private events" as they emerge during therapy and maintains the "observer perspective" (Hayes et al., 1999 p. 270). This type of therapeutic modeling requires the "acceptance of challenging content while also being willing to hold the client's contradictory or difficult ideas, feelings, and memories without any need to resolve them" (Luoma et al., 2007, p. 285). Segal et al., (2002), provide some helpful concrete behavioral recommendations to help mindfulness instructors embody this approach and are outlined in table 12.

Table 12

Modeling Mindfulness and Acceptance

Recommendation	Description
Use of the present participle	• Use the present participle: • E.g. "… just noticing whether your mind has wandered…" or ". . . bringing your attention back to the breath…" Rather than "Notice whether…" or "Bring your attention back…"
Instruction delivery	• Deliver instructions in a matter of fact way. • No need to adopt a special tone or deepen the voice to relax the client: Mindfulness is not a relaxation exercise. • Do not read instructions
Giving encouragement	• Use the phrase "as best you can" rather than using the word "try." • E.g., " … as best you can, bringing your awareness to settle on the breath" rather than "try to bring your awareness to the breath…"
Practicing with clients	• Do each practice with the client(s). • Guiding out of your own moment-to-moment experience during the guided meditations.
Allowing space for silence	• Allow for spaces and stretches of silence between instructions. • Give the client(s) the space to "do" the practice for themselves.

Evidence

In this new area of inquiry, the evidence for the relationship between therapist mindfulness and therapeutic processes and outcomes remains limited and mixed. Only one experimental study was found on this subject. The majority of studies have explored the correlation between therapist self report mindfulness and practices and process and outcome variables. In a double blind RCT, in-patients treated by therapists assigned to

practice Zen meditation[9] each morning showed significantly greater improvements on a variety of measures of psychological symptoms compared to therapists receiving the otherwise same training, but who were not practicing meditation (Grepmair et al., 2007). It has been proposed that therapist meditation may increase other therapeutic process variables, such as empathy and the therapeutic alliance (Morgan & Morgan, 2005). However, while meditation practice in therapists (Wang, 2006) and non-therapists (Shapiro, Schwartz, & Bonner, 1998) has been significantly correlated with self-report measures of empathy, this relationship has not been found when perception of received empathy is measured by the clients' report (Plummer, 2008). Furthermore, while therapist mindfulness levels have predicted *both* therapist and client perceptions of the therapeutic alliance (Wexler, 2006), it has not predicted improvements in outcomes (Stanley et al., 2006; Straton, 2006). While experts in MB-EST do agree about the essential nature of therapist practice and mindfulness, this evidence leaves the question unanswered empirically.

Consideration 5

Normalizes Client Experience and Balances the Power Differential

The therapeutic relationship in mindfulness-based treatment is less hierarchical than in traditional psychotherapy. The MB-ESTs all emphasized balancing the power differential between client and therapist and normalizing client experience. Self-disclosure of the therapist is proposed as one practical means of promoting this equality.

[9] Zen meditation is very similar to Mindfulness meditation in the goal of pure awareness of experience. In addition, Zen meditation uses riddles, or Koans, to trick or confuse the mind away from conscious thought and into pure awareness.

This suggestion is supported by qualitative research, which identifies therapist self-disclosure as being instrumental in improving the therapeutic relationship.

Practice Implications

Mindfulness-based therapy "focuses on the ubiquity of human suffering" and "the normalization of psychological distress" (Roemer & Orsillo, 2008, p. 218). The message that is communicated to clients is that therapists as well as clients are all susceptible to the wanderings of our minds and automatic, reactive thoughts and behaviors. "Minds operate in similar ways, and there is no basis for discriminating between the minds of those seeking help and those offering it" (Segal, 2002, p. 56). According to Hayes et al., (1999), "The successful . . . therapist is clear: "We are in this stew together. We are caught in the same traps. With a small twist of fate, we could be sitting across from each other in opposite roles'" (p. 272). Because mindfulness-based therapeutic and target processes are proposed to be universal, the same cognitive, emotional, and behavioral traps with which the client struggles also confront the therapist.

Such a stance may be communicated through both the style and content of the therapist's interactions with a client. The therapist uses a vocabulary and idiom, which connects with people rather that creates distance and resistance (Santorelli & Kabat-Zinn, 2007). The "therapist speaks to the client from an equal, vulnerable, compassionate, genuine, and sharing point of view and respects the client's inherent ability to move from unworkable to workable responses" (Luoma et al., 2007, p. 285). In MB-ESTs boundaries are less arbitrarily drawn based on theoretical absolutes. Instead, boundaries are determined by the therapist's unique set of interpersonal limits (Linehan, 1993a).

The effective mindfulness-based therapist often uses self-disclosure as a means of modeling the parallels between client and clinician experience. Self-disclosure of the therapist "is one way in which the therapist may foster a sense of camaraderie and reassurance, while allaying fears of being different or abnormal" (Hayes et al., 1999, p. 272). "If carefully done, self-disclosure tends to have an equalizing effect on the therapeutic relationship" (Luoma et al., p. 219). As an acceptance strategy, self-disclosure may be used to "normalize the patient's experience or responses by disclosing agreement with the patient's perceptions or interpretations of a situation, understanding of her emotions, or valuing of her decisions" (Linehan, 1993a, p. 377). When the hierarchy is exaggerated or indisputable, such as in an inpatient or forensic environment, the therapist acknowledges, but attempts to limit the power differential. In DBT, self-disclosure of the therapist is a form of reciprocal communication, which is "designed to reduce the perceived power differential between therapist and patient; to increase the vulnerability of the therapist to the patient, and thereby communicate trust and respect for the patient; and to deepen the attachment and intimacy of the relationship" (Linehan, 1993a, p. 373). This strategy can be particularly helpful when the therapist is from the dominant cultural background and the client identifies with one or more oppressed groups (Roemer & Orsillo, 2008). The "Two Mountains" metaphor may be particularly helpful in minimizing the power differential between therapist and client (Roemer and Orsillo). This metaphor (adapted from Hayes, Batten et al., 1999) is described in figure 3.

Two Mountains Metaphor:
"As your therapist, I will sometime offer some observations about your struggle and make some suggestions about possible options in response to those struggles. It may seem as if I am on the top of a mountain, with the mountain representing the barriers you face as you work toward obtaining a life that is fulfilling and satisfying. It may seem that from my perch on the mountain I can more clearly see the things that contribute to your struggle, as I have already succeeded with the climb, but that is not my view of therapy. I believe that the struggles you are experiencing are common to all human beings and that therapists are not immune to those struggles. In fact, therapists are just like other human beings and that therapists are not immune to those struggles. In fact, therapists are just like other human beings in that we all have our own mountain with our own struggles and obstacles. As your therapist, I may at times be able to offer some perspectives on your struggle because I have some distance and a unique perspective from my perch over here on my own mountain" (p. 72).

Figure 3. Two mountains metaphor.

Evidence

Garrett, M., Stone, D., & Turkington, D (2006) suggest that normalizing even the most profound of psychiatric symptoms is essential. "The clinician who can find and disclose analogies to [client experience] in his own experience places his relationship with the patient on a different footing" (p. 596). Self-disclosure of the therapist has been proposed as a means of fostering the therapeutic relationship (Simon, 1988), which has long been known to be one of the largest predictors of positive outcomes in psychotherapy (e.g. Hovarth, & Bedi, 2002: Horvarth & Symonds, 1991). It has been proposed as a means of "promoting feelings of universality" (Mathew, 1988, p. 530). In cognitive-behavioral orientations, self-disclosure is proposed to be "an effective tool for strengthening the therapeutic bond and facilitating client change" (Goldfried, Burckell, & Eubanks-Carter, 2003, p. 555). Qualitative research findings suggest that clients' perception of therapists who self disclose is that they seem more real and feel more normal to them (Knox, Hess, Peterson, & Hill, 1997). Clients' experience disclosures as

similar to their shared experiences (Barret & Berman, 2001), and helpful in modeling, normalizing, equalizing, and promoting positive feelings (Wandschneider, 2008). Client surveys have also found that clients rate therapists' self-disclosures as having a beneficial effect on therapy (Ramsdell & Ramsdell, 1993).

Consideration 6

Conceptualizes and practices with a holistic view

Mindfulness-based practice always considers the whole client within a holistic system, and does not bifurcate the individual's mind from his or her body, or the whole self from the greater relational and systemic whole. Mindfulness practices are proposed to work on these three interrelated and universal aspects of human experience. These include a moment-to-moment awareness and observation of (a) a connection between mind and body, (b) the interconnectedness of sensation, impulses, thoughts, feelings and meaning in coherent patterns; and (c) "a sense of belonging, of connectedness, of being in community in the largest sense" (Kabat-Zinn et al., 2002, p. 295). In clinical practice such awareness is further aimed at helping client's to engage in more effective responses, rather than reacting to, stressful interactions. Kabat-Zinn (1990) proposes that "our lack of awareness of the system as a whole will often prevent us from seeing new options and new ways of approaching problems" (p. 160). Thus, promoting such awareness in the client may promote more effective coping. In this section formal and informal strategies are proposed for targeting holistic awareness. Table 13 links the concepts and practices of holistic practice. Evidence supporting this clinical consideration is drawn from experimental research of the effects of specific holistic practices on psychological and physiological measures of well-being.

Table 13

Conceptual and Practice Components of Holistic Practice

Holistic concepts	Recommended formal and informal practices
1. Awareness to the interrelatedness of mind and body	• Body-scan mediation • Walking meditation • Brining awareness to the sensations of the body in the chair
2. Awareness of intrinsic wholeness	• Mountain meditation • Observer exercise • Chess board metaphor
3. Awareness and sense of interconnectedness	• Loving Kindness meditation • Raisin eating exercise

Practice Implications

The goal of the mindfulness-based therapist is to promote awareness in the client of this intra- and inter-relatedness in the service of living a more vital and fulfilling life. The therapist strives to promote the three interrelated processes: (a) awareness of patterns of reactivity in the mind and body, (b) a sense of wholeness in the client, and (c) awareness and a sense of connectedness to others and the larger whole. In this section clinical conceptualizations and some useful mindfulness interventions are described to promote each of these aspects of holistic mindfulness.

Mind-body awareness. Unawareness of the body's signals is proposed to lead to insensitivity to the effects of the environment as well as our own actions on the body, thoughts and emotions. Kabat-Zinn (1990), suggests, "physical symptoms are messages the body is giving us that allow us to know how it is doing and what its needs are" (p. 26). As noted above, directing attention first to the body is one of the four common cognitive elements of formal practice in the MB-ESTs. Beginning mindfulness practices with simple structured awareness of bodily sensations can be particularly helpful if

clients are not very effective in noticing what is present (Luoma et al., 2007).

According to Segal et al. (2002), there are two reasons why making the body the first object of attention helps participants learn better how to deal with emotion. First, "what happens in the body importantly affects what happens in the mind (p. 110)." Attention is believed to have an important influence on the feedback loops that sustain old habits of thinking and feeling. Second, bringing one's attention to manifestations of emotional expression in the body provides individuals with an alternate to ruminative thinking and ineffective problem solving. Cognitive attempts to solve the problem of negative thinking and mood are proposed as precisely what gets one stuck in negative spirals (Hayes et al., 1999; Segal et al., 2002). The body is proposed to provide cues to the presence of aversion and stress and provides a way to withdraw processing resources from the automatic thinking routines, while still keeping the problem "in process" (Segal et al.). This allows awareness to continue and let events unfold in the present moment, undisturbed by cognitive problem solving efforts, such as rumination and worry.

Mind-body awareness interventions. The body-scan technique, a common practice element of the MB-ESTs, is an excellent formal practice for teaching clients to become more in touch with signals from the body, which have previously been outside of awareness. As noted, in this practice the client is directed to bring systematic non-judgmental awareness to each area of the body, from the toes to the head. This practice teaches clients how to become more attuned to sensations and messages from the body. However, close-eyed formal practice is not always appropriate with all clinical populations. As such, the therapist should facilitate this awareness during other kinds of practice. For example, walking meditation is considered a formal practice, yet is

generally found to be more tolerable in clients with high levels of cognitive anxiety (Kabat-Zinn, 1996a). In walking meditation, the therapist helps guide the client's attention to the sensations in the feet, legs, and the body as a whole while moving (Kabat-Zinn, 1990). The client is guided similarly through the steps noted above in sitting mediation. A simple informal exercise used in DBT is instructing clients to notice the sensations of their bodies in contact with the chair. Clients are helped to identify the areas in their body with which they have the most difficulty sensing. It should be noted that different clients struggle with the identification of different aspects of their experience. Clients with a history of sexual abuse or other bodily trauma may have spent much of their lives diverting attention away from bodily signals. Should the client not readily identify specific location or sensation, the therapist should assist clients with developing this ability.

Intrinsic wholeness. Helping clients to know their intrinsic wholeness involves helping the client to break through beliefs that they are damaged or broken because of their past experiences or symptoms. This involves promoting the awareness of a self that is larger than the pain of disappointment, past traumas, or psychological problems. The therapist helps clients to experience that they are the containers of their experience and not synonymous with their experience. Linehan (1993a) calls this aspect of mindful awareness "Wise attention," in which the integration of emotion related and reason related information come together to more than the sum of their parts. "Wise attention involves bringing the stability and calm of mindfulness to your symptoms and to our reactions to them" (Kabat-Zinn, 1990, p. 279). In ACT, this sense of self is termed "self as context," and is described as a "continuous and secure I from which events are

experienced" (Luoma et al., 2007, p. 19).

Intrinsic wholeness interventions. "Mountain Meditation" is used as a formal meditation to promote this sense of wholeness in MBSR and MBCT and can "facilitate the client's connection with the core mountain that remains stable despite the changing seasons and sometimes turbulent conditions" (Batten, Orsillo, and Walser, 2005, p. 258). This meditation practice "reminds us that we might look upon some of the changes we are observing in our own minds and bodies as internal weather" (Kabat-Zinn, 1990, p. 127). The observer-self guided visualization technique is a core ACT intervention, which can be very useful for this purpose. In this guided visualization the client is directed to first bring awareness to various aspects of their experience in the moment. Next, the client brings to mind various benign memories. For example, a past summer, a time during adolescence, and a time when her or she was very small are brought to mind. The therapist asks the client to notice during all of these recollections, how the same self observed all of those events and is the same self who is here now. This intervention "can create a brief but powerful psychological state in which there is a sense of transcendence and continuity; a self that is aware of content but not defined by that content" (Hayes et al., 1999, p. 195).

The "Chess Board" metaphor is another core ACT intervention, which may be used as a non-meditative means of experientially helping clients to make the distinction between the content of one's experience and the observing self. The pieces on the board, which are at war against each other, are proposed as the "good" and "bad" thoughts, feelings, memories, etc. The therapist highlights the idea that as long as the client engages in this battle, large portions of the self are his or her own enemy, and there is

something inherently wrong with the client. The metaphor emphasizes that as long as one perceives content at this level (from the pieces perspective) the struggle remains. The therapist guides the client to consider who he or she might be in this game. If the client is the player then, who is he or she playing against? The therapist attempts to elicit from the client that he or she is the board. It is the board that holds the pieces, but is not synonymous with the client.

Interconnectedness. The mindfulness-based therapist considers the cultural context of the client and works to promote a sense of connectedness within this context. For example, in ACT it is highlighted that in Western culture, "experiential avoidance is often amplified by the social/cultural community, which promotes the idea that healthy humans do not have psychological pain (e.g. stress, depression, memories of trauma) and specifies the actions that need to be taken to avoid such negative private events" (Luoma et al., 2007, p. 13). Linehan (1993a) points out that the "borderline individual may result in part from the collision of a relational self with a society that recognizes and rewards only the individuated self" (p. 32). These and other contextual and cultural variables are proposed to contribute to a sense of isolation and disconnection. According to Kabat-Zinn (1990) "The ability to perceive interconnectedness and wholeness in addition to separateness and fragmentation can be cultivated through mindfulness practice" (p. 157).

Interconnectedness interventions. Loving kindness meditation is a formal mindfulness practice intervention that "directs compassion and wished for well-being toward real or imagined others" and "is designed to create changes in emotion, motivation, and behavior in order to promote positive feelings and kindness toward the self and others" (Hutcherson, Seppala, & Gross, 2008, p. 720). This practice directs the

client to use silent mental phrases of the wished for well-being (e.g. “May I be happy, May I be free from suffering”). These phrases also focus on the inherent connectedness in the world and the universality of the desire to be happy and free from suffering. They are intended to cultivate attitudes, intentions, and feelings of love, kindness, and compassion. Intentions are set, first for oneself, and then for a sequence of other recipients that typically includes a loved one, a friend, a neutral person, one’s community, a person with whom one has difficulties, all people, or all beings (Chödrön, 1996; Salzberg, 1995).

A useful informal mindfulness technique used in the MB-ESTs is the “raisin eating” exercise. In this mindfulness exercise clients’ attention is directed to seeing the raisin, and observing it carefully as if one had never seen one before. The client is asked to consider, not only the most detailed sensory aspects of the raisin, but also to consider the origin of the raisin. They are guided to notice the “belly button” of the raisin and consider who picked the grape that became the raisin, before it went into the box to get to the store, etc? This seemingly simple exercise effectively opens up the awareness of not only the world of experience previously outside of awareness, but also the connection one has to others (MBSR protocol).

Evidence

The evidence to support these suggestions is drawn from studies of the effects of body-scan (BSM) and loving kindness meditation (LKM). As noted, time spent practicing BSM between sessions has been significantly correlated with improvements on measures of psychological well-being, anxiety, and the “observe” and “non-reactivity” scales on the FFMQ (Camrody & Baer, 2008). BSM has also been found to positively influence physiological measures when compared to progressive muscle relaxation

(PMR), or quietly just sitting (with no instruction), (Ditto, Eclache, & Goldman, 2006). Two concurrent studies found BSM subjects showed significantly greater increases in respiratory sinus arrhythmia (RSA), a measure of physiological adaptability (Porges, 1995). Laboratory studies of the effects of acute psychosocial stressors have found lower RSAs (thus lower adaptability) in patients with Major Depressive Disorder (Rottenberg, Clift, Boden, & Salomon, 2007), Generalized Anxiety Disorder (Thayer, Friedman, & Borkovec, 1996), and Borderline Personality Disorder (Austin, Riniolo, & Porges, 2007) as compared to non-clinical controls. These findings seem to suggest the capacity for non-striving awareness in the body to promote adaptive processes.

Two recent RCTs have explored the effects of LKM, one as a weekly four session intervention (Weibel, 2007), the other as a loving kindness induction (Hutcherson et al., 2008). In the intervention study the LKM group demonstrated significantly greater increases on measures of "compassionate love" (love towards others) and "self compassion" at post-test, and significantly greater decreases in trait anxiety at two-month follow up than controls. While increases in self-compassion were maintained at follow up, increases in compassionate love were not, suggesting the need for more research to determine long ranging influence of such interventions.

In the induction study the effects of a very short LKM exercise (7 minutes) were compared to a structurally similar imagery exercise. Following the intervention participants were shown a photograph of a neutral stranger, and directed to redirect LKM phrases to the image (LKM group) or focus on attention of visual details of the face (controls). Next, participants were shown images of themselves, close others, and neutral strangers. Implicit (reaction time to affectively valenced words associated with an image)

and explicit (evaluative responses) of positivity toward neutral strangers were measured as outcomes. The LKM group demonstrated significantly greater explicit and implicit positivity towards all of the photos, but implicit positivity was found only towards the target photo. Together these studies support the notion that bringing intentional awareness to the body and one's sense of connectedness to others may have positive influences on subjective as well as objective well-being and interpersonal connectedness respectively.

Consideration 7

Elicits Client Commitment and Personal Responsibility for Self Care

The mindfulness-based interventions consider client commitment to treatment and adherence to practice as a primary target. This explicit intent of motivating commitment to take personal responsibility for self-care is somewhat akin to Motivational Interviewing (MI). "Motivational interviewing is a client centered, directive method for enhancing intrinsic motivation to change by exploring and resolving ambivalence" (Rollnick & Miller, 1995, p. 325). Most of the MB-ESTs include pretreatment assessment interviews in which client appropriateness for treatment and motivation for practice is assessed and an informal learning agreement established. According to Linehan (1993a), "The therapist is often functioning like a good salesperson" (p. 286). Another similarity is that MI treatments have commonly been used to target unhealthy behaviors, such as substance abuse, binge eating, and smoking, and encourage self-care (Burke, Arkowitz, & Dunn, 2002). In the MB-ESTs self-care is encouraged as the client's personal responsibility in the collaborative relationship. Because experiential practice is so essential to mindfulness-based treatment, the therapist (a) elicits client commitment, (b)

discusses personal response-ability for self-care, and (c) targets barriers as opportunities to practice. Evidence for this suggestion is drawn from a variety of areas of psychology treatment process and outcome studies.

Practice Implications

Eliciting initial client commitment. Pretreatment assessment of client willingness to engage in the experiential techniques and practice necessary in mindfulness-based treatment may be ideal to ensure client commitment. This approach is not always appropriate however, in the context of a particular theoretical orientation or treatment setting. As such, a more subtle approach is to conduct a mindfulness-informed functional analysis of the client's past attempts to improve symptoms, to not feel feelings, or have negative thoughts. Once an exhaustive list is made (similar to the one suggested in Consideration 2), the therapist explores with the client the long-term effectiveness of these strategies. In most cases, these strategies could not have been very effective, or the client would not be back in treatment.[10] The goal of the therapist is to bring the client into experiential contact with the awareness that past strategies have not work, and thus open up their willingness to commit to the practices of treatment. Once the client comes to see the futility of experiential avoidance as a long term coping strategy, the therapist obtains concrete commitment (either verbally or in a learning contract) to commit to try something new. The therapist might say, "Would you be willing if in order to live a healthy, vital meaningful, and satisfying life, you needed to give up trying to control your internal thoughts and feelings before you could move in the direction you want to go?"

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[10] Special considerations may naturally be in cases where the client presents with acute grief or trauma. In such cases a longer period of grief counseling and relationship building may be optimal.

(Luoma et al., 2007, p. 34).

Discussion of personal "response-ability." The therapist further works to engage the client's commitment with a discussion of personal responsibility. Particularly following a discussion of past strategies (which may include outright harmful behaviors), it is important for the therapist to explore the notion of personal responsibility and differentiate responsibility from self-blame. The responsibility of the client lies, not in what has happened to them or how they have coped in the past, but in what they do from this moment forward (Hayes et al., 1999; Linehan, 1993a). At this juncture the therapist emphasizes that the client is not to blame, but has simply been using strategies that, while somewhat effective in the short-term, can become problematic in the long run. It may be helpful for the therapist to differentiate responsibility from *response-ability*. In the context of mindfulness-based treatment, the client will learn that he or she is able to respond differently to the experiences with which they are having difficulty.

Targeting barriers. As treatment progresses, the therapist consistently emphasizes the need for continued practice of skills. Practice, practice, practice, is the battle cry for maintaining commitment in mindfulness-based treatment. As cognitive behavioral treatments, this usually entails giving the client a practice log in which to record home practice. Difficulties the client encounters, however, are seen as opportunities to investigate common cognitive processes such as mind wandering, clinging to or avoiding experience, or attachment to a particular outcome. Recommendations from Segal et al. (2002) for contending with common client difficulties with treatment are outlined in Table 14.

Table 14

Recommended Therapist Responses to Difficulties with Practice

Client Difficulty	Therapist response
"I couldn't find the time to do the homework"	• Be explicit: inform client that not doing the homework will affect how much they will get out of treatment. • Instruct client in the coming week to bring awareness to thoughts and feelings that might be blocking homework activity, and note what was found.
"Its boring!" or "I got irritated"	• Respond empathetically and accepting way. • Be curious about their experience: Ask, "At what point did this arise/" How long did it last?" etc. • Suggest that the client simply choose to note any irritation or boredom as a state of mind, from which, once noticed, attention may be redirected to the breath.
"I got sleepy/fell asleep" or "It was really relaxing"	• "That's interesting, I hope that eventually this will lead to "falling awake." • "Ok, but keep in mind that the aim of meditation is more to cultivate awareness than relaxation."
"I'm trying my best and I still don't think I get it" or "I need to work harder at it."	• Tell clients: "the emphasis is on allowing things to be held in nonjudgmental awareness, exactly as they are in this moment." • The only goal is to practice, but it is not a striving to achieve some special state.
"I just got too upset."	• The therapist should be vigilant for signs that the client is experiencing difficulties related to past traumas. • Sensitively guide client in how to relate skillfully by not retreating away entirely or being blown away by intense experience.
"My mind wouldn't stay still."	• Explore with client the power of thoughts and feelings to shape behavior (not practicing). • Encourage client to "just do it" and continue to observe the thoughts, feelings, and impulses that arise from their wandering mind.

Evidence

While the influence of this element in the MB-ESTs has yet to be studied, supportive evidence comes from a number of other areas of study. In social psychology publicly made commitments have been found to be relatively stable and are more likely to result in commitment consistent behaviors (e.g., Cialdini, 1993; Hall, Havassy, & Wasserman, 1990). Motivational interviewing, which aims to assist clients in readiness for change related to unhealthy behaviors, has demonstrated substantial success in this area (Burke et al., 2002).

In studies evaluating substance abuse program adherence and outcomes, self reported commitment to adherence has been repeatedly related to actual treatment compliance and retention (Edelen et al., 2007) as well as significant reductions in use (McKay, Weiss, Koppenhaver, Merikle, & Mulvaney, 2001). Furthermore, clients' expectations to assume responsibility for and commitment to working in therapy have been found to predict their agreement with their therapist on tasks and objectives of therapy, as well as the quality of their perceived bond with the therapist (Patterson, Uhlin, & Anderson, 2008; Tokar, Hardin, Adams, & Brandel, 1996).

While interventions that integrate MI and CBT have been found effective in patients with substance abuse disorders (McKee et al., 2007) and dually diagnosed populations (Baker et al., 2006), no studies were found that compared the effectiveness of treatment alone to treatment plus MI. It seems reasonable to suggest, however, that integrating some degree of client commitment strategies can be an effective means of improving client adherence to practice and potentially improving outcomes.

Chapter 4

Conclusion

The goal of this work was to provide clinical considerations for the integration of mindfulness-based interventions, based on the APA's recent mandate of evidence-based practice in psychology (EBPP). This work has explored and discovered numerous common elements of the MB-ESTs and mindfulness practices within these treatments. These elements were consolidated to form the basis of seven core clinical considerations. Empirical evidence related to the elements and their clinical use was presented. This evidence supported the clinical suggestions and patient population considerations made here as empirically based. Specifically, clients' degree of affect tolerance was proposed as the underlying characteristic to consider when providing mindfulness-based treatment. Where noteworthy, cultural considerations were also discussed. The findings of this work have important implications for the future provision of EBPP using mindfulness, clinician training, and research endeavors. In this section these implications are discussed together with limitations of the analysis and future research directions towards integrating MB-ESTs.

Implications of Common Elements for Clinical Integration

The derivation of the core elements of the MB-ESTs can make a substantial contribution to EBPP using mindfulness. Perhaps the most important contribution is the facilitation of clinical decision-making. In many treatment settings it is not possible, nor desirable, to adopt an entire manualized EST. Currently, it is likely that clinicians in the community, who do not practice in academic or research facilities, choose the techniques they use in a more or less ad hoc fashion. This work provides seven core treatment

considerations, which encapsulate the common elements of the MB-ESTs. These can provide clinicians with a type of checklist (see Appendix I), which can simplify decision-making and ensure a larger degree of adherence to the standards of effective treatment (Chorpita, 2007; Daleiden et al., 2006).

The common elements approach also facilitates more flexible adaptation of the MB-ESTs to meet the needs of diverse patient populations. At present, the vast majority of the published MB-EST outcome research has been conducted in primarily Caucasian populations. With a broader categorization of what a particular technique or intervention represents, therapists can choose alternative techniques, which are better suited for particular groups or individuals. For example, it was noted that a client with strong fundamental religious beliefs and practices may object to the use of formal sitting or supine meditation practices. The therapist could adapt these practices to include other core components, such as informal practices, which can also optimize mindfulness. In minority or lower SES populations, therapists can (and should) adapt metaphors and the use of story to better identify with the client's context. Knowing the core elements of effective treatment helps the clinician to keep the purpose of the specific techniques in mind.

Implications for Clinical Practice

Clinician practice. The novelty of mindfulness-based therapy also has implications for clinical practice. Not the least of the elements of treatment, which will require clinician adaptation, is the need for personal mindfulness practice. Patient population characteristics and the decision of whether or not to use formal practice will dictate the degree of need for the therapist's own practice. None-the-less, without some

degree of experiential understanding of mindfulness, the clinician simply will not be able to provide many of the core elements of treatment. For example, the therapist will not be able to model and guide clients through mindful acceptance of distressful experience if he or she does not explicitly know what this *feels* like. Furthermore, without some degree of personal practice, the therapist's attempts to normalize clients' difficulties with practice will not have the same authenticity (Hayes et al., 1999). Put simply, one cannot teach tennis, unless one has trained and played one's self.

Optimization versus remediation paradigm. Another implication is the paradigm shift for clinicians accustomed to working from the traditional clinical psychology view of symptom remediation. Mindfulness-based treatments have been related to decreases in symptoms of psychopathology and elements of trait mindfulness have been negatively correlated with psychiatric symptoms**.** However, the MB-ESTs are equally (i.e. DBT) or more (i.e. ACT, MBSR, MBCT) targeted towards the promotion of adaptive processes, than the removal of symptoms. This paradigm shift is particularly difficult in treatment settings and a culture that places tremendous value on results and feeling "good" (Luoma et al., 2007). With the increasing demand for demonstrated results by health maintenance organizations (HMOs), this value has become even more entrenched. Outcome variables are understandably primarily measured as decreases in symptoms, not increases in vitality, life goals, or other process variables. Balancing the need to show "results" and the value of optimizing mindfulness will undoubtedly prove challenging in many treatment settings.

Implications of Common Elements for Clinician Training

The common elements approach to integrating mindfulness could be a more efficient means of providing clinical training. The use of mindfulness-based interventions is a relatively new area in clinical practice and is only just beginning to emerge in mainstream practice. Currently none of the MB-ESTs have developed accreditation programs. To this writer's knowledge, formal training programs are almost non-existent in traditional graduate programs. Training in the individual MB-ESTs is primarily conducted at academic and research treatment settings, where adherence and structure of the treatments is well controlled. This type of highly specialized training in individual treatment applications is simply not practical in graduate psychology programs. The common elements approach would allow for training to consist of one broad application, which could more easily be integrated into theoretical orientations other than CBT.

Implications of Considerations s for Clinical Training

Before EBP in mindfulness can truly make its way into mainstream treatment settings, adaptations would have to be made, which emphasize experiential learning, as well as therapists' own practice. Most of the MB-ESTs emphasize the need for at least some form of experiential training in mindfulness before using it with clients (Hayes et al., 1999; Luoma et al., 2007; Santorelli & Kabat-Zinn, 2007; Segal et al., 2002). Imparting the non-verbal understanding required to learn mindfulness interventions will require a different sort of learning environment for therapists in training. Traditional methods of teaching conceptual knowledge and pencil and paper assessment of student readiness would likely be inadequate. Just as clinicians must impart experiential understanding to clients, teachers must convey to therapists. As mindfulness training

programs emerge in graduate and continuing education programs, teachers must be ready for more interactive teaching and assessment methods.

Meditation training specifically has been proposed as a powerful means of clinician training, which promotes important therapeutic processes, such as empathy, attention, and non-judgmental acceptance (Fulton, 2005). “Mindfulness practice may be an untapped resource for training therapists of any theoretical persuasion, because it offers therapists a means to influence those factors that account most for the success in treatment” (p. 55). Providing experiential training in the fundamentals of mindfulness may foster in therapists in training the intangible abilities, which have previously been difficult to instantiate. However, the evidence supporting the relationship between therapist mindfulness and therapeutic process and outcome variables has been equivocal. The influence of therapist meditation practice is clearly an area much in need of future study.

Research Implications

The findings of this analysis may be considered an important first step in discovering the essential elements of effective mindfulness-based treatment. The common elements approach seems to be a viable interim research method, until substantial dismantling studies can be conducted. These results suggest that, overall the MB-ESTs include many elements that are common to traditional CBT, as well as many distinct features, which may influence their effectiveness. It will be incumbent upon future studies to determine to what degree the CBT elements versus those unique to MB-ESTs contribute to effective outcomes. For example, the importance placed in these treatments on eliciting and maintaining commitment to practice and compliance may be

of particular interest for future studies. While findings on the relationship of between-session homework compliance and outcomes have been equivocal (Edelman & Champless, 1993), more recent studies suggest that the quality of engagement in homework may be a more significant predictor of outcomes (Schmidt & Woolaway-Bickel, 2000). Thus, eliciting client commitment and "buy in" as a target of treatment may significantly influence outcomes, regardless of the type of treatment.

Correspondingly, what appears to make these treatments unique is the targeting of secondary reactivity and increasing experiential acceptance. Experimental studies were cited here, which support the notion that inducing certain elements of mindfulness and acceptance reduces experiential avoidance and secondary reactivity. Focused breathing, simple instruction, and metaphors have been found effective in non-clinical samples. However, the differential impact of such interventions remains ambiguous in clinical patient populations. Future research is needed to develop specific operational definitions of how to induce such experiential acceptance in clinical practice.

The specific elements of mindfulness within the MB-ESTs may be a basic first step in the development of such clinical practices. This analysis supported the operational definition developed by Baer and colleagues in the FFMQ. It appears that most of the MB-ESTs incorporate the five facets of the FFMQ in their use of mindfulness. Future factor analysis research may examine the degree to which these conceptual elements of mindfulness and the remaining elements found in this study overlap. For example, the observe scale on the FFMQ also suggests the ability to decenter from experience and the presence of an observer self. Non-reactivity to internal experience is likely to be a function of allowing interoceptive exposure, which interacts with direct experience.

Attempting to dissect the conceptual components of mindfulness into discrete categories may, however, prove impossible, without turning to reductionism, which looses the some of the value of the whole.

Deriving the particular behavioral, cognitive, and therapeutic components, which instantiate mindfulness will be essential to the development and empirical study of effectiveness on clinical outcomes. This analysis found a number of such elements to be used in the MB-ESTs. Noticing when the mind wanders and repeated practice in redirecting attention to the breath as an anchor in the present moment appears to be at the core of mindfulness practice in effective treatment and experimental studies. Future research should explore the degree to which this simple practice, in and of itself, can influence clinical patient outcomes.

Limitations

As noted in the methods section, there is reason to be cautious in the interpretation and supposition of generalization of these findings. A primary limitation of this analysis was the lack of outside reviewers or an expert review board. This lack of alternative perspectives may have resulted in significant researcher bias. Second, the common elements approach merely identifies the presence of certain concepts or practices within effective treatment. However, the presence of such elements does not prove that these elements are necessary or sufficient for clinical change. In lieu of these methodological deficiencies, integrated practice suggestions were authenticated by a comprehensive review of the theoretical and empirical literature to support their inclusion as empirically based. Many of the suggestions were supported by empirical studies in the mindfulness and other psychology literature.

Support was derived as follows: (C1)[11] Balancing acceptance and change according to patient population characteristics (degree of affect tolerance) was supported by the differential distribution of this balance of strategies used in the effective treatment of particular patient populations (see table 8). (C2) Optimizing mindfulness was directly supported by both experimental and intervention research. Increased mindfulness appears to be related numerous other positive psychological factors and adaptive coping. (C3). (C5) Normalizing client experience and balancing the power differential may be important aspects of a strong therapeutic alliance **(**Mathews, 1988, Simon, 1988**),** which is fundamental to effective treatment (e.g. Hovarth & Symonds, 1991). (C6) Interventions that promote mind-body awareness and inter-connectedness have been related to improved psychological (Camrody & Baer, 2008; Hutcherson et al., 2008; Weibel, 2007) and physiological outcomes (Ditto et al., 2006. (C7) Finally, eliciting client commitment to self-care, while not unique to mindfulness treatments, may be particularly important to treatment in which behavioral adherence is so essential. This recommendation was supported from research demonstrating personal commitment as instrumental in promoting adherence (e.g. Edelen et al., 2007) and related to taking personal responsibility for therapeutic work (Patterson et al., 2008; Tokar et al., 1996).

However there was a lack or equivocal findings in support of two of the treatment suggestions, therapist mindfulness and experiential treatment. Despite their lack of empirical support these suggestions were made based of their trans-theoretical support and *essential* nature in of the MB-ESTs. Present moment awareness of the therapist and learning through experience is emphasized across theoretical orientations. Experimental

[11] C = Consideration

research specifically related to mindfulness treatment, however, is still needed in these domains. Therapist formal practice may be related to improved client outcomes (Grepmair, 2007). However, correlational findings related to therapist self-report mindfulness and therapeutic process and outcome variables have been equivocal. Evidence for providing experiential treatment was drawn from long held trans-theoretical assumptions. However, uncertainty remains for the specific influence of the non-meditation experiential versus other therapeutic factors in mindfulness-based treatment. The conflicting, and sometimes counter-intuitive findings related to therapist mindfulness, highlights the continued need for the development of more precise measures of a construct as experiential as mindfulness. The limitations of relying on self-report measures of mindfulness has been noted elsewhere (e.g. Walsh & Shapiro, 2006). It is of note that the evidence supporting the influence of therapist mindfulness practices (meditation) came from the study with the most methodological rigor.

The conflicting evidence was correlational research between self-report therapist mindfulness and other process and outcome variables. The equivalent increases in self-report mindfulness in the Creswell (2007) study (where controls received a one day mindfulness seminar) highlight the probability that demand characteristics may greatly influence scores on self-report measures. Alternatively, the disparities in the Creswell and other studies may reflect a larger limitation in the mindfulness literature. As noted, the MB-EST outcome literature reviewed consisted of largely Caucasian samples. The vast majority of experimental and assessment development research has also been conducted in overwhelmingly Caucasian populations, which generally consist of undergraduate students. The Creswell study is unique in that it was conducted in a population consisting

of primarily African American males. While his study is hopeful for the generalization of the health benefits of mindfulness, the dearth of mindfulness studies in ethnically and socio-economically diverse populations casts a severe limitation of the proposition of generalization of these treatments in underserved minority populations.

Future Directions

This work is not the first attempt to explore and consolidate the major components of effective treatments (e.g. Chorpita et al., 2005: Chorpita et al., 2007; Garland et al., 2008). However, the common elements approach is a new emerging method of simplifying clinical decision making in integrating ESTs. For example, Hawaii's Department of Health Child and Adolescent Mental Health Division (CAMHD), has been implementing the common elements methods described in Chorpita et al., 2005 since 2003 (Daleiden & Chorpita, 2006), with demonstrated improvements measured by longitudinal data (Daleiden et al., 2006). This work contributes to this growing area in demonstrating that the MB-ESTs also have certain core constituents, which may form the basis of the essential features related to positive outcomes. A basic next step in solidifying the findings of this analysis would be to submit them to an expert panel review for validation and psychometric degree of relevance. With such evidence the effectiveness of treatments that incorporate the common elements could be studied. These elements may also contribute to future dismantling studies, in order to patrician out the exact elements that contribute to the efficacy of the individual treatments.

In general, mindfulness research still has many gaps to fill in moving from "probably efficacious" to "well established" as defined by APA. More research is needed, which validates and improves mindfulness measures and elements of treatment in diverse

populations. In conducting these studies, future researchers may identify specific adaptations that are needed to meet the needs in different cultural and ethnic groups. At present, these considerations and adaptations lay in the hands of culturally competent clinicians, to explore the unique backgrounds of those they serve, and adapt treatment accordingly.

In conclusion, this work identified a number of common elements of MB-EST as a whole and the use of mindfulness practices within these treatments. Seven clinical practice considerations were provided based on these common elements. Although some methodological limitations may have influenced the findings, empirical and theoretical evidence supports their inclusion in an evidence-based treatment plan. As such, these suggestions were consistent with the APA's recent mandate for evidence-based practice in psychology. Future research should submit these findings to an expert review panel, before testing their effectiveness as a whole.

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Appendix A

Sample Data Coding Sheets

Sample Coding Sheet A:
Treatment:
MBSR = 1
MBCT = 2
DBT = 3
ACT = 4

Manual Title:

Manual Authors:

Target Population:

Empirical Support for Treatment:
1. RCTs: yes/no #
2. Active control: yes/no #
3. Wait list control: yes/no #
4. Pre-test/Post-test: yes/no #
5. Other: yes/no #

Empirical Support for Manual:
1. RCTs: yes/no #
2. Active control: yes/no #
3. Wait list control: yes/no #
4. Pre-test/Post-test: yes/no #
5. Other: yes/no #

Margin Headings/Categories and Page Number(s).

Chptr/pg(s)	Heading/Categories(s)	Elements Type C-P-M	Thx/Clt M/T	
Ch. 1	You have only moments to live			
	Practicing “non doing”/being	C	Clt	M
	Actively tuning in to each moment	C	Clt	M

C = Conceptual, P= Practical, M = Mechanistic; Thx = Therapist; Clt = Client;
M = Mindfulness; T = Treatment

Sample Coding Sheet B:

Practice Elements of Treatment

Elements	Data
Commitment Strategies	
Experiential	-
Range of interventions and techniques targeting same processes	

Conceptual Elements of Mindfulness-Based Treatments

Elements	Data
Solution is the problem	
Personal responsibility/self care	

Practice Elements of Mindfulness (Inductive and Deductive)

Practice Elements	Data
Formal Practices	
Informal Practices	
Practice, Practice, Practice	-

Conceptual and Functional Elements of Mindfulness (Deductive)

Conceptual Element	Data
Observing/noticing/ attending to sensations /perceptions/ Describing/labeling with words	

Conceptual Elements of Mindfulness (Inductive)

Elements	Data
Direct Experience v. Meaning making/ conceptualization	
Invariant/Transcendent space/self/ Inter-relatedness of the whole	

Therapist and Training Characteristics

Elements	Data
Willingness to experience discomfort	
Modeling/Embodying acceptance and mindfulness	

Practice Elements Common to CBT practices

Elements	Data
Assessment	
Homework/ Goal Setting	

Sample Coding Sheet C:

Elements	Treatment Data
E.g. Solution is the problem	
	MBSR MBCT ACT DBT

Level of Relevance to Mindfulness Training

Categories	Highly Relevant	Very Relevant	Relevant	Fairly Irrelevant	Irrelevant
e.g. Non-Reactivity					

Appendix B

MB-EST Resources

Treatment	Resources Retrieved
I. MBSR	Mindfulness-based Stress Reduction (MBSR) A. *Full catastrophe living: Using the wisdom of your body and mind to face stress, pain, and illness (*Kabat-Zinn, 1990). Popular press book cited by the treatment developer, as the primary seminal and comprehensive description of the program. Chapters assigned to participants in the MBSR program. B. MBSR training materials from the Center for Mindfulness in Medicine, Health care and Society (CMMHS). 1. Mindfulness-based Stress Reduction Professional Training; Mindfulness-based Stress Reduction Curriculum Guide and supporting materials; Integrating Mindfulness Meditation into Medicine and Health care. 2. Readings (primarily by Kabat-Zinn and Santorelli) describe how to represent MBSR including curriculum outlines, selected chapters, and monographs on MBSR. Background readings that include numerous theoretical articles on mindfulness and the MBSR program: Scientific papers from The Stress Reduction Clinic and The Center for Mindfulness in Medicine, Health Care, and Society. Practice manual provided to participants includes homework assignments, practice monitoring sheets, mindful yoga postures and sequences (to be used with guided recordings). 3. Recordings of formal sitting, body scan, and mindful yoga were obtained and practiced and analyzed.
II. MBCT	Mindfulness-based Cognitive Therapy (MBCT) A. *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse* (Segal, Williams, & Teasdale, 2002). 1. Written for treatment providers interested in learning about and using the treatment in practice and contains. a. Full description of the development of the treatment. b. Theoretical underpinnings proposed to lead to the recurrence of Major Depressive Disorder. c. Conceptual and applied methods of the treatment. d. Session by session description of t treatment protocol, handouts, excerpts of dialogue that demonstrate clinical interactions.

Treatment	Resources Retrieved
III. ACT	Acceptance and Commitment Therapy (ACT) A. *Acceptance and commitment therapy: An experiential approach to behavior change* (Hayes, Strosahl, & Wilson, 1999) 1. Seminal volume on treatment and an in depth description of the theoretical underpinnings, processes, and applied intervention strategies and techniques. B. *Learning ACT: An Acceptance and Commitment Therapy skills-training manual for therapists* (Luoma, Hayes, & Walser, 2007). 1. Provides theoretical and conceptual understanding of the universal processes posited to underlie a broad range of psychological difficulties. 2. Outlines specific core competencies the clinician to administer treatment and practice exercises for experiential understanding. 3. Provides DVD recording demonstrating clinician-client interactions, core processes, and competencies. C. *The ACT Treatment Manual for Depression* is a group version of the original ACT manual (Zettle & Hayes, 1989). 1. Provides effective treatment of Major Depressive Disorder (Zettle & Hayes, 1987; Zettle & Raines, 1989). D. *Get out of your mind and into your life: The new Acceptance and Commitment Therapy* (Hayes and Smith, 2005). 1. Self-help workbook designed for clients to use independently or in conjunction with individual therapy[12].
IV. DBT	Dialectical Behavioral Therapy (DBT) A. *Cognitive-Behavioral treatment of borderline personality disorder* (Linehan, 1993a). 1. Provides detailed discussion of the core philosophical roots of the treatment of borderline personality disorder (BPD) using DBT, descriptions of specific acceptance and change strategies to be used by the individual therapist and the competencies necessary in the therapist. 2. *Skills training manual for treating borderline personality disorder* (Linehan, 1993a, b). a. Provides review of the theoretical conceptualization of BPD and detailed outlines of each group skills training session. b. Volume and companion manual are the only currently available descriptions of the original treatment, which are associated with the treatment developer (for adults).

[12] The resources above were chosen to represent ACT as a whole as per the recommendation of the originator (Hayes, personal communication, 08/13/08).

Appendix C

Cognitive Behavioral Therapy (CBT) Elements

Elements	Treatment Use
I. Assessment	A. Mindfulness-based Stress Reduction (MBSR): 1. Pre-program individual assessment interview a. Gain understanding of individual and life context b. Explain nature of MBSR and relevance to candidate c. Ascertain readiness and appropriateness of candidate d. Evaluate and assess (post-program) e. Review participants experience with the program f. Fine tune MBSR methods and develop short and long term health goals g. Make appropriate referrals B. Mindfulness-based Cognitive Therapy *(*MBCT): 1. Initial assessment interview: Collect background Orient to MBCT Emphasize MBCT will involve hard work Determine if person will benefit C. Acceptance and Commitment Therapy (ACT): 1. ACT case conceptualization conducted, including a. Presenting problem b. Experiential fusion and/or avoidance c. Behaviors functioning as avoidance d. Domains in which avoidance is causing functional impairment e. Core ACT processes to target f. Factors limiting motivation for change g. Social and physical environment h. Strengths D. Dialectical Behavioral Therapy (DBT): 1. Pre-treatment stage Assessment and data collection of behavior Diagnostic and assessment interview a. History taking
II. Homework/ Behavioral rehearsal	A. MBSR: 1. Formal and informal mindfulness meditation 2. Six days per week; 45min-1hr, with tapes 3. Pleasant and unpleasant events monitoring 4. Biblio-therapy

Elements	Treatment Use
II. Homework/ Behavioral rehearsal (cont'd)	B. MBCT: 1. Formal and informal mindfulness meditation 2. Six days per week; 45min-1hr 3. Pleasant and unpleasant events monitoring 4. 3-minute breathing space 5. Activity scheduling C. ACT: 1. Behavioral assignments to foster core therapeutic processes D. DBT: 1. Behavioral and written assignments towards skill development
III. Self Monitoring	A. MBSR: 1. Practice journal 2. Pleasant and unpleasant events calendar B. MBCT: 1. Homework record form 2. Pleasant and unpleasant events calendar C. ACT: 1. Clean versus dirty distress diary 2. Daily pain diary D. DBT: 1. Diary cards
IV. Protocols and Agenda Setting	A. MBSR: Structured 8 week protocol with key themes and practices set 1. Week 1: Theme: "More right with you than wrong with you" "Meditative awareness and present moment as opportunity for growth." 2. Week 2: Theme: Perception and creative responding, "expanding the field of awareness," "role of prevention and individual responsibility." 3. Week 3: Theme: The pleasure and power of being present. 4. Week 4: Theme: Awareness of being stuck in one's life and how to get unstuck. 5. Week 5: Theme: Reacting and responding to stress. 6. Week 6: Theme: Stressful communications; assertiveness; knowing our feelings; expressing feelings effectively, barriers to doing so. 7. Week 7: Theme: How what we take in to ourselves affects our health and well-being. 8. Week 8: Theme: Keeping up the momentum; "The eighth week is the rest of your life."

Elements	Treatment Use
IV. Protocols and Agenda Setting (cont'd)	B. MBCT: Structured 8 week Protocol with key themes and practices set 1. Week 1: Theme: Automatic pilot and learning how to step out of it to become aware of each moment. 2. Week 2: Theme: Focus on the body shows how the mind chatters and can control reactions to everyday events. 3. Week 3: Theme: Learning to take awareness intentionally to the breath offers the possibility of bring more focused and gathered. 4. Week 4: Theme: The mind is most scattered when it tries to cling to some things and avoid/escape other things. 5. Week 5: Theme: Learning to relate differently to experience with acceptance. 6. Week 6: Theme: Negative moods, and the thoughts that accompany them, restrict ability to relate differently to experience. 7. Week 7: Theme: Identifying relapse signatures; Taking a breathing space and deciding on what action, if any, to take. 8. Week 8: Theme: Maintaining regular mindfulness practice; Linking such intentions to a positive reason for taking care of self. C. ACT: 1. Flexible protocol and agenda setting targeting six core processes. 2. Two basic patterns of use (Luoma, Hayes, & Walser, 2007). 3. Basic Format: a. Undermine the current psychological system towards creative hopelessness (w/ HW) b. Willingness work & control as the problem (w/ HW) c. Defusion work (w/ HW) d. Self as context e. Values assessment and clarification f. Committed action (willingness reintroduced related to allowing action toward valued ends) g. Systematic behavior change (behavior analysis and therapy): All processes intermixed with exposure, skills development, and behavior change 4. When motivation is problematic: a. Values assessment and clarification b. Committed action c. All other ACT processes are contextualized in terms or relationship to valued action

Elements	Treatment Use
IV. Protocols and Agenda Setting (cont'd)	D. DBT: 1. Skills Training: Structured protocol with flexibility in sequencing of modules (6-12 months). a. Mindfulness module b. Distress tolerance module c. Emotion regulation module d. Interpersonal effectiveness module e. Target hierarchy: i. Stopping behaviors likely to destroy therapy ii. Skill acquisition, strengthening and generalization iii. Decreasing therapy interfering behaviors 2. Individual Therapy: Therapist assists client to integrate skills into individual life circumstances. a. Agenda set by client behavior during week b. Stage 1: i. Decreasing suicidal behaviors ii. Decreasing therapy interfering behaviors iii. Decreasing quality of life interfering behaviors iv. Increasing behavioral skills c. Stage 2: i. Decrease posttraumatic stress d. Stage 3: i. Increase respect for self ii. Achieve individual goals
V. Targets Barriers to progress	A. MBSR: 1. Weekly review of participant practice 2. Mid program review of commitment 3. Emphasize continuous practice, "whether you feel like it or not" B. MBCT: 1. Weekly review of participant practice 2. Continuous exploration of participant difficulties with practice C. ACT: 1. Weekly review of client skills practice 2. Explore control and avoidance strategies as barriers to willingness and link to valued living D. DBT: 1. Weekly review of client skills practice 2. Chain analysis of "therapy interfering behaviors"

Elements	Treatment Use
VI. Psycho-education	A. MBSR: 1. Educational rather than therapeutic format a. Instructors and Participants rather than therapist and clients/patients b. Attitudinal factors of mindfulness c. Stress and psycho-physiological stress reactivity related to health B. MBCT: 1. Educational rather than therapeutic format a. Instructors and participants rather than therapists and clients/patients b. Nature of major depression c. Common automatic thoughts C. ACT: 1. Psycho-education can be used, but primarily with experiential learning strategies a. Nature of learned behavior b. Problems inherent in language D. DBT: 1. Skills training a. Skills trainers and participants i. Mindfulness ii. Distress tolerance iii. Emotion regulation iv. Interpersonal effectiveness 2. Individual therapy a. Biopsychosocial theory of BPD b. Tenets of learning and behavior
VI. Relapse prevention/ continued practice/ looking ahead	A. MBSR: 1. Setting strategies for keeping up the momentum of practice 2. Session 8; materials and resources for continued practice 3. Open day long retreat for graduates B. MBCT: 1. Generate list of pleasure and mastery activities to engage when mood slips 2. Plan how best to schedule such activities 3. 3-minute breathing space as first step before mindful action 4. Identify relapse signatures 5. Identify actions to deal with threat of relapse. 6. Select an outlined continued practice

Elements	Treatment Use
VI. Relapse prevention/ continued practice/ looking ahead (cont'd)	C. ACT: 1. Therapist helps client to learn how to integrate relapses into the larger patterns of effective action they are trying to build into their lives. 2. Therapist teaches client to expect set backs as part of being human. 3. Therapist "aligns with the client's desires, even when the client's mind is not being supportive, and encourages the client to reengage in valued action, while working with thoughts, feelings, and other private events with acceptance, mindfulness, and compassion" (Luoma et al., 2007, p. 169). a. Concrete tools to help client prepare for set backs: two core acronyms. i. For dealing with difficult situations: Accept, Choose, Take action. ii. Helps to identify what is keeping them stuck: Fusion, Evaluation, Avoidance, Reason Giving. iii. Journeying metaphors: to emphasize that life is not a perfectly straight road toward continuous improvements. iv. Skidding out while driving metaphor: Keeping your eyes on the road. v. Identifying high risk situations and developing ACT-consistent plans for dealing with these situations. D. DBT: 1. Therapist teaches "client to plan realistically for relapse, develop strategies for accepting relapse non-evaluatively, and for mitigating the negative effects of relapse" (Linehan, 1993a, p. 154).

Appendix D

Skills Training and Commitment Elements

Table D1

Skills Training

Treatment	Skill	Interventions

MBSR	• Mindful Awareness	• Formal Practices
		  ○ Sitting Meditation
		  ○ Mindful Hatha Yoga
		  ○ Body Scan
		  ○ Mindful Walking (optional)
		• Informal Practices
		  ○ Mindfulness in Daily Living

MBCT	• Mindful Awareness	• Formal Practices
		  ○ Sitting Meditation
		  ○ Mindful Hatha Yoga
		  ○ Body Scan
		  ○ Mindful Walking (optional)
		• Informal Practices
		  ○ Mindfulness in Daily Living

	• Cognitive Awareness	• Thoughts and Feelings Exercise: ○ Distinguishing direct experience of event from conceptualized interpretation
	• Three Minute Breathing Space	• Orient ("where am I?") → attention to breath → expand to include breath and body as whole.
ACT	• Acceptance	• Willingness to experience negative private events as alternative to experiential avoidance.
	• Cognitive Defusion:	• Creating non-literal contexts to loosen the fused relationship to thought.
	• Being Present	• Present moment awareness: Promotes ongoing, nonjudgmental contact with psychological and environmental events.
	• Self as Context:	• Continuous and secure "I" from which events are experienced; Observer self.
	• Defining Valued Directions:	• Client identifies domains of importance in life (e.g. family, work, spirituality, etc.), and intentions within each domain.
	• Committed Action:	• Helps clients to identify behaviors that represent personal values and commit to such behaviors.
DBT	• Mindfulness	• Integration of "Emotional Mind" and

Treatment	Skill	Interventions
		"Reasonable Mind" to achieve "Wise Mind" o "What" skills: ▪ Observe: Sensing or experiencing without describing or labeling the experience ▪ Describe: Using words to represent what is observed ▪ Participate: Entering wholly into activity, becoming one with the activity o "How" skills: ▪ Non-Judgmentally: Neither good, nor bad evaluations ▪ One-Mindfully: Focusing on one thing in the moment ▪ Effectively: doing what works
	• Distress Tolerance	• Crisis Survival Strategies: o Distracting, self-soothing, improving the moment, and thinking of pros and cons • Acceptance skills: o Skills for accepting life as it is in the moment: "Radical Acceptance," "Turning the mind towards acceptance," "Willfulness versus Willingness"
	• Emotion Regulation	• Understanding and identifying emotions and their function • Reducing emotional vulnerability • Decreasing emotional suffering
	• Interpersonal Effectiveness	• Interpersonal problem solving • Social and assertiveness skills to modify aversive environments and obtain goals

Table D2

Commitment, Personal Responsibility and Self Care

Treatment	Conceptualization	Practice
I. MBSR	• Treatment proposed as generic approach to self-care, adjunct to medical care. • Participants are physician referred to the MBSR program to help clients develop an array of "self-regulatory" and self care skills. • Program designed to "Help participants to recognize and mobilize their inner psychological resources for taking better care of themselves" (Kabat-Zinn, 1990, p. 89). • "Taking responsibility for learning more about your own body by listening to it carefully…is the best way to hold up your end of the collaboration with your doctors" (Kabat-Zinn, 1990, p. 27).	• The theme of personal responsibility is woven throughout the eight-week program. • Week 2: Theme: the importance of individual responsibility and its role in the prevention of health problems is presented. • Week 6: Participants are shown videos and assigned readings in week six related to self care. • Week 7: Theme: How what one takes in to their body affects health and well-being. o Mindfulness of impulses related to food and diet. • Homework: pay more attention to what one puts into body.
II. MBCT	• Personal responsibility, self-care related specifically to difficulties faced with chronic depression and relapse. • Use of term instructors, left responsibility clearly with patients themselves, saw [their] primary role as empowering patients to relate mindfully to their experience" (Segal et al., 2002, p. 59.). • Cognitive and motivational issues targeted, rather than physical health responsibility. • Personal responsibility placed on client to notice warning signs. Take action to better take care of self.	• <u>Three-minute breathing space</u> used when individual relapse signatures are noticed. • Client chooses to either practice the skills he has learned to relate *to* thoughts rather than *from* thoughts in a decentered way, or take action using relapse prevention plan.

Treatment	Conceptualization	Practice
II. MCBT (cont'd)	• "No amount of awareness of the signs of relapse and planning to take action is likely to affect what actually happens to participants unless they are able to learn to gradually take care of themselves and to value the qualities of moment to moment experience" (Segal et al., p. 273). • "Looking after yourself is not an optional extra. Taking action starts with simply noticing what is going on around you" (p. 277).	• Each client develops specific strategies to prepare for likelihood that mood may interfere with motivation to take action, e.g. involving family members or writing self a letter of encouragement to open at first sign of relapse.
III. ACT	• Response-ability is acknowledging that you are able to respond and that were you to do so, the outcome would be different. • One is not responsible for pain caused by life events, but always s able to respond differently to pain. • One remains stuck when one avoids willingness to feel feelings in the context of committed action.	• Personal responsibility is integrated into the processes of willingness and committed action. • Responsibility is explicitly differentiated from response-ability, in the sense that there is always an ability to respond. • Qualifies inference of blame. When one blames themselves for their difficulties there is a resulting sense of lack of vitality or empowerment.
IV. DBT	• Bio-psycho-social conceptualization of BPD highlights the transaction between the individual's biological and psychological predisposition and the social environment as resulting in the disorder. • Philosophical assumption (untested, yet presumed):"The patient is not responsible for being the way she is, but she is responsible for what she becomes" (Linehan, 1993a, p. 209).	• Therapist conscientiously and continuously validates the understandability of client's behavior, thoughts, feelings related to a given situation, and also works collaboratively with her to make needed changes in her responses. • Self care and health behavior in Emotion Regulation module:

Treatment	Conceptualization	Practice
IV. DBT (cont'd)		• Targets self-care, health behavior as important aspect of personal responsibility in reducing vulnerability to extreme emotionality. • Psycho-education provided about aspects of health behavior influencing mood. • Includes balanced nutrition and eating habits, sufficient sleep, adequate exercise, treat physical illnesses promptly, stay off non-prescribed mood-altering drugs.

Commitment, Personal Responsibility and Self Care (cont)

Treatment	Qualitative Data
I. MBSR	A. Individual preprogram orientation and commitment meeting with each of the participants. B. Commitment assessed and discussed verbally in the form of an informal learning contract. C. Participants oriented about commitment to homework and reminded that the commitment to spend time on homework is essential part of the class. D. Recommitment elicited at halfway point. E. Barriers to adherence are gently targeted with encouragements to remain present with any and all possible distracters or reasons for not practicing as opportunities to practice remaining present to all experiences. F. In the final week there is a pointed discussion of how participants will maintain the use of mindfulness practices in the future, and what barriers they might foresee. G. Participants are encouraged to consider that, "the eighth week lasts the rest of your life" (Kabat-Zinn, 1990, p. 145). H. Continuing support, such as books, tapes, retreat centers are noted. I. Participants are given a "Hints and Reminders" booklet for maintaining their practice.
II. MBCT	A. Individual preprogram orientation and commitment meeting with each of the participants. B. Commitment assessed and discussed verbally in the form of an informal learning contract. C. Participants oriented about commitment to homework and reminded that the commitment to spend time on homework is essential part of the class. D. Clients are provided with handouts at the beginning of the program highlighting the importance of practice and soliciting the clients' adherence, stating "The commitment to spend time on homework is an essential part of the class; if you do not feel able to make that commitment, it would be best not to start the classes" (Segal, Williams & Teasdale, 2002, p. 97). E. Throughout treatment barriers to adherence are gently targeted with encouragements to remain present with any and all possible distracters or reasons for not practicing as opportunities to practice remaining present to all experiences. F. In the final week there is a pointed discussion of how participants will maintain the use of mindfulness practices in the future, and what barriers they might foresee. G. Participants are asked to think of one positive reason for maintaining the practice and link this with something about which they care deeply.

Treatment	Qualitative Data
II. MBCT (cont'd)	H. Participants are given a token of remembrance, such as a bead or a stone, with which a final meditation is practiced.
III. ACT	A. Utilizes indirect and direct methods to elicit commitment. B. Indirect method: Therapist elicits creative hopelessness in the service of developing willingness process. C. Creative Hopelessness; the process of discovery that nothing has worked and nothing will to rid client of negative internal experience. 1. Therapist explores in detail client's previous attempts at control and avoidance to eliminate unwanted negative internal experience. 2. Therapist explores workability (effectiveness) in the client's life until it is clear that nothing has worked to eliminate such experiences. 3. Therapist introduces acceptance and willingness as the alternative. 4. Therapist asks, "Would you be willing if in order to live a healthy, vital meaningful, and satisfying life you needed to give up trying to control your internal thoughts and feelings before you could move in the direction you want to go?" (Luoma, Hayes, & Walser, p. 34). D. The therapist links willingness and committed action using the Jump Exercise to highlight that committed action requires 100% willingness. E. Direct Method: Therapist directly targets building patterns of committed action and works toward behavior change in the service of client chosen values (with room for experience). 1. Therapist helps the client clarify valued life directions and commit to what he or she wants in their life to stand for. 2. The therapist encourages the client to make and keep commitments in the presence of perceived barriers (negative internal events) and to expect additional barriers as a consequence of engaging in committed actions. F. Four steps towards committed action: 1. Identify one or two valued domains and develop an action plan for behavior change based on the functional analysis; 2. Help client commit to actions that are linked to values (between sessions) in concert with larger behavior patterns to be assembled; 3. Attends to and overcomes barriers to action with acceptance, defusion, and mindfulness techniques; 4. Returns to step one and generalizes to larger patterns of action in order to generalize without therapist support. G. Client commitments are made concrete in the form of written or other physical reminders.

Treatment	Qualitative Data
III. ACT (cont'd)	H. Committed action homework is linked to concrete short, medium and long term behavior change that is values consistent.
IV. DBT	A. "At the initial stages of therapy, the commitment sought from a patient is to participate in DBT with this particular therapist for a specified period of time and to keep the patient agreements" (Linehan, 1993a, p. 284). B. "Selling commitment" is an explicit directive to DBT therapists and skills trainers using strategies from social psychology to obtain the "buy in" of the client and maintain adherence (Linehan, 1993a). C. Commitment strategies: The therapist 1. Evaluates pros and cons of a commitment to change. 2. Uses the "devil's advocate" technique to strengthen patient commitment. 3. Utilizes "Foot in the door" and "door in the face" techniques to obtain commitments to DBT goals and procedures. 4. Highlights prior commitments the patient has made when problems arise. 5. Emphasizes client's freedom to choose while at the same time presenting realistic consequences of choices. 6. Uses principles of shaping in eliciting commitment. 7. Generates hope in the client by cheerleading. 8. Agrees, along with client, specifically on homework. D. Continuous and repeated commitment is considered both a prerequisite for effective therapy and a goal of the therapy. E. Commitment is viewed as a targeted behavior in and of itself. F. Commitment is sought at three levels. 1. Early stages of treatment: the client must agree to work towards eliminating self harm behaviors. 2. At second level the patient commitment is elicited to collaborate with the specific treatment procedures (i.e. skills training, exposure, cognitive modification, and contingency management). 3. At the third level, commitment from the patient is elicited to engage in a new behavior or work on specific problems that emerge during the process of solution analysis. G. Clients are asked to make public commitment during skills training to increase follow through.

Appendix E

Data Supporting Treatment Elements

Table E1

Treatment Element 1: Balances Acceptance and Change Strategies

Treatment	Mindfulness & Acceptance Elements	Change Elements
I. MBSR	• Letting go of goals/ non-striving: Participants explicitly asked to drop goals for change and simply cultivate awareness • Meditation to practice acceptance of emotions, thoughts, and bodily sensations • Letting go of attachments to things being otherwise • Non-striving/not trying to get anywhere or fix or change anything	• Commitment to formal practice • "You don't have to like it, you just have to do it" • Adaptive responding: awareness of one's own bodily signs, which are signaling the need for self care and healthy adaptive responding to these signals
II. MBCT	• Cultivation of "Being Mode," accepting and allowing what is • Acceptance of emotions, thoughts, and bodily sensations to counterbalance ruminative repertoire characteristic of chronic depression • Help clients to bring awareness to and accept small changes in mood, rather than disputing them	• Formal disciplined practice • Effective responding to signs of depressive relapse • "Three minute breathing space" • Relapse Prevention: o Activity scheduling, o Relapse plan of action
III. ACT	• Acceptance/willingness: o To experience negative internal events • Present moment awareness • Defusion from thought content and meaning and awareness of thoughts as events in the mind • Awareness of Self as context o The container for experience, not the experience itself	• Increase present moment awareness of internal and external events • Decreasing attachment to conceptualized self and increasing contact with self as context- • Values clarification: Increasing awareness of what gives client's life meaning

Treatment	Mindfulness & Acceptance Elements	Change Elements
III. ACT (cont'd)	• Experiential mindfulness exercises and metaphor used to elicit core processes that invite the acceptance of difficult internal events	• Committed Action: Commitment to values consistent behaviors • Traditional behavioral change strategies: o Graded exposure, o In vivo behavioral experiments
IV. DBT	• Validation: o Finding the "wisdom, correctness, or value in the individual's emotional, cognitive, and overt behavioral responses" (Linehan, 1993a, p. 99) • Reciprocal communication of the therapist: o The therapist's use of warm, empathetic, and direct responsiveness to the client and includes self-disclosure as a means of normalizing her response • Direct environmental intervention: o Used minimally; when there is risk of substantial harm to the patient (and not intervening out weighs this harm) or when the environment is significantly more powerful than the client, the DBT therapist may intervene • Mindfulness and Distress Tolerance/Acceptance & Willingness Skills	• Problem solving strategies: o Helps client to understand and accept the problem at hand—chain analysis, providing insights, feedback, and psychoeducation o Solution analysis, orienting strategies and commitment strategies • Irreverent communication of the therapist: o Use of off the wall and unexpected statements that throw the client somewhat off balance (E.g. "If you kill your self, I won't be your therapist anymore.") • Consultation to the patient about their environment: o Consults with the patient on how to interact with the environment in order to best get her needs met, and help her to cope with difficult interactions, rather than make attempts to reform others

Treatment	Mindfulness & Acceptance Elements	Change Elements
IV. DBT (cont'd)		• Emotion Regulation, Interpersonal Effectiveness Skills, Distress Tolerance/Distract, Self-soothing, improving the moment, & pros & cons

Table E2

Treatment Element 2: Optimization of Universal Processes

Treatment	Qualitative Data
I. MBSR	A. Mindfulness is an inherent human capacity subject to the universal processes of attention deployment (Kabat-Zinn, 2003). B. Seven attitudinal qualities of mindful awareness introduced at the outset of MBSR program. 1. Non-judging: assuming a stance of an impartial witness to experience. 2. Patience: understanding and accepting that sometimes things must unfold in their own time. 3. Beginner's Mind: a mind that is willing to see everything as if for the first time. 4. Trust: in yourself and your feelings. 5. Non-striving: No goal other than trying less and being more. 6. Acceptance: Willingness to see things as they really are in the present. 7. Letting Go: Letting things be as they are.
II. MBCT	A. "Participants have to learn how to disengage from one mode of mind and enter another, incompatible, mode of mind that will allow them to process depression related information in ways that are less likely to provoke relapse. This involves *moving from a focus on content to a focus on process,* away from cognitive therapy's emphasis on changing the content of negative thinking, toward attending to the way all experience is processed" (p. 75). B. Optimizing "Being Mode:" 1. "The mind has nothing to do and nowhere to go, processing can be dedicated exclusively to the moment by moment experience … Not motivated to achieve particular goals." 2. "No need for constant monitoring and evaluation … No need to emphasize discrepancy-based processing. Instead, the focus is accepting and allowing what is, without any immediate pressure to change it." 3. Characterized by direct, immediate, intimate experience of the present. The relation to thoughts and feelings is similar to sounds or other aspects of moment to moment experience, simply objects of awareness. 4. Freedom, freshness, and unfolding of experiences in a new way. 5. Not easily conveyed in words, best appreciated directly, experientially.

Treatment	Qualitative Data
II. MBCT (cont'd)	C. Decreasing "Doing Mode" 1. "Doing Mode": discrepancy analysis of "how things are versus ideas of how things ought to be" (p. 70). Automatically triggers some form of negative feeling Sets in motion certain habitual patterns of mind designed to reduce gap between present (or anticipated) state and desired state. a. Processing is usually not intentional, conscious, or planned, but an automatic mental habit (p. 72).
III. ACT	A. ACT is defined as a "psychological intervention that applies mindfulness and acceptance *processes*, and commitment and behavior change *processes* to the creation of psychological flexibility" (Luoma, Hayes, & Walser, 2007, p. 22). B. Six Core Therapeutic Processes to be optimized in the service of reducing process proposed to contribute to psychological rigidity and psychopathology: 1. *Acceptance/Willingness*: targets experiential avoidance; "the attempt to control or alter the form, frequency, or situational sensitivity of internal experiences (i.e. thoughts, feelings, sensations, or memories), even when doing so causes behavioral harm (Hayes, Wilson, Giford, Follette, & Strosahl, 1996). a. "Being open to one's whole experience while also actively and intentionally choosing to move in a valued life direction" (Luoma et al., 2007, p. 24). 2. *Cognitive defusion*: targets fusion: tendency to get caught up in content of thinking, missing out on the ongoing process of thinking itself. a. Looking at thoughts rather than through them. b. "Drawing the client's attention to thinking as an ongoing behavioral process, and helping clients to spend more time seeing thoughts as thoughts, so those thoughts can be responded to in terms of their workability rather than their literal truth" (p. 58). c. Aims to create another context for thoughts and feelings and thus change the function of the thought in an individual's life. 3. Contact with the *present moment*: targets the process of "dominance of the conceptualized past and future/limited self knowledge." a. "Bringing our awareness to internal and external experience as they occur in the moment" (p. 92). b. When one is absorbed by the conceptualized past and future, awareness of direct and current experience is lost.

Treatment	Qualitative Data
III. ACT (cont'd)	c. Self-knowledge becomes limited because paying attention to feelings, thoughts, sensations, and memories is likely to elicit painful emotions, and thus be avoided. 4. *Self as context:* targets attachment to the conceptualized self; the story one has developed over time about one's self. a. "A continuous and secure I from which events are experienced, but that is also distinct from those events (Luoma et al., 2007, p. 19). 5. Defining *valued life directions**:*** targets "lack of values clarity and contact;" knowing what one stands for and wants from their lives. a. "Help client be more aware, mindful, and intentional in the pursuit of their life goals and values" (p. 131). b. Asks clients to ask themselves what gives their lives meaning and look for the change possibilities that make the struggle worthwhile. c. Serves as a compass for effective action. 6. *Committed action*: targets "inaction, impulsivity, and/or avoidant persistence;" the dominance of short-term relief from discomfort with resulting patterns of action that are detached from long-term desired qualities of self and living. a. "A step-by-step process of acting to create a whole life, a life of integrity, true to one's deepest wishes and longings" (p. 158). b. Involves persistence, change, and a range of behaviors, which require flexibility in the service of valued directions. c. Uses traditional behavior therapy approaches (e.g. exposure, skills acquisition, shaping, goal setting) to encourage increasing patterns of effective committed action linked to the client's chosen values.
IV. DBT	A. Increase dialectical thinking and the process of integrating thesis and antithesis into syntheses. 1. "Therapy is the process of going up and down, [as if on a teeter-totter] trying to balance it so that we can get to the middle together and climb up to a higher level…representing growth and development, a synthesis of the preceding level" (Linehan, 1993a, p. 30). B. Emphasizes skills acquisition, rather than the reduction of psychopathology, aims to reduce vulnerability and increase "hardiness" (Linehan, 1993a). C. Mindfulness Module: Increase cognitive and behavioral skills proposed to represent the operational definition of mindfulness awareness.

Treatment	Qualitative Data
IV. DBT (cont'd)	1. Integration of emotional mind, reasonable mind to achieve wise mind 2. "What" skills; Observe, Describe, Participate 3. "How" skills; Non-Judgmentally, One-Mindfully, Effectively D. Distress Tolerance Module: Increase acceptance 1. Long-term: Acceptance skills: Skills for accepting life as it is in the moment: Radical acceptance, turning the mind towards acceptance, willfulness versus willingness."

Table E3

Treatment Element 3: Equality of Therapist and Client

Treatment	Qualitative Data
I. MBSR	A. Instructor language: Instructor "uses a vocabulary and idiom which connects with people rather that creates distance and resistance." B. Instructor behavior: Instructor spends a great deal of time down on the floor with and among participants. C. Instructor respect for participants: Classes are conducted in such a way that the energy, expertise, and creativity is identified as residing in all individuals, and is not the exclusive domain of the instructor (Kabat-Zinn, 1990). D. Basic message of the [MBSR] program: "we all (whether patient or clinician) frequently find ourselves swept away by the currents of thought and feeling related to the past, present, or future" (Segal et al., 2002, p. 82).
II. MBCT	A. Instructor assumptions: 1. "The assumption [is] of continuity between the experiences of the instructor and the participants" (Segal et al., 2002, p. 55). 2. "Minds operate in similar ways, and there is no basis for discriminating between the minds of those seeking help and those offering it" (p. 56).
III. ACT	A. "ACT seeks to promote nonhierarchical, humanizing relationships between therapists and clients" (Luoma, Hayes, & Walser, 2007, p. 270). B. "The successful ACT therapist is clear: "We are in this stew together. We are caught in the same traps. With a small twist of fate, we could be sitting across from each other in opposite roles'" (Hayes et al., 1999, p. 272). C. The same cognitive, emotional, and behavioral traps with which the client struggles also confront the therapist. D. Core Competencies of the ACT therapeutic alliance: 1. "The ACT therapist speaks to the client from an equal, vulnerable, compassionate, genuine, and sharing point of view and respects the client's inherent ability to move from unworkable to workable responses" (Luoma et al., 2007, p. 285). 2. "The therapist is willing to self-disclose about personal issues when it serves the interest of the client" (p. 285). 3. "If carefully done, self-disclosure tends to have an equalizing effect on the therapeutic relationship" (Luoma et al., p. 219). E. Philosophy underlying ACT : "…concepts such as sick/well, whole/broken, weak/strong, disordered/ordered, dysfunctional/ functional are not inherent in any person, but rather are all ways of speaking or thinking propagated by our culture that are more or less useful depending upon the context" (p. 218).

Treatment	Qualitative Data
IV. DBT	A. Therapist acknowledges power differential, attempts empower the client. 1. "Effective therapy requires that the therapist be particularly sensitive to [the power differential] dilemma" (p. 373). B. "Reciprocal communication strategies are designed to reduce the perceived power differential between therapist and patient; to increase the vulnerability of the therapist to the patient, and thereby communicate trust and respect for the patient; and to deepen the attachment and intimacy of the relationship" (p. 373). C. Reciprocal communication strategies: 1. The therapist is responsive to the client and attends to the client in a mindful manner. 2. The therapist self discloses as validation and to enhance the strength of the therapeutic relationship by increasing intimacy and warmth. a. "Self-disclosure involves the therapist's communicating his or her own attitudes, opinions, and emotional reactions to the patient, as well as reactions to the therapy situation or information about pertinent life experiences" (Linehan, 1993a, p. 376). 3. The therapist expresses warm engagement. 4. The therapist is genuine; behavior and limits are natural, rather than arbitrary.

Table E4

Treatment Element 4: Paradoxical Conceptualization: Solution is the Problem

Treatment	Qualitative Data
I. MBSR:	A. Central Paradoxical Conceptualization: 1. Not trying to change anything in the service of change. 2. "The best way to 'get somewhere' is to not try to get anywhere at all but just to be where they already are, with awareness" (Kabat-Zinn et al., 2002, p. 290). 3. "We will teach you how to be so relaxed that it is OK to be tense" (Kabat-Zinn, 1996a). B. Differentiates secondary from primary pain: 1. Suffering is differentiated from pain. Suffering is described as "an emotional interpretation" of "basic sensory input," which is painful (Kabat-Zinn, 2002, p. 292). C. Practices targeting secondary reactivity: 1. Formal/ informal practice of mindful awareness/acceptance of individual patterns of reactivity (aversion, attachment) to internal/ external events. 2. Homework assignments to practice awareness of tendency to block, numb, shut off moment as it happens. Participants asked to bring awareness to moment of reacting, explore options for responding with greater mindfulness, creativity during home formal/ informal practice, practice opening up space to respond in present moment (MBSR protocol).
II. MBCT	A. Central Paradoxical Conceptualization: 1. Cognitive problem solving efforts (rumination) to solve the problem of depression leads to depressive spiral. 2. "Attempts to solve problems by endlessly thinking about them can serve merely to keep individuals locked into the state from which they are trying to escape" (Segal, Williams, & Teasdale, 2002, p. 68). 3. "If we cope with our unpleasant feelings by pushing them away or trying to control them, we actually end up maintaining them" (Segal, Williams, & Teasdale, 2002, p. 292). B. Differentiates secondary from primary pain: 1. Instructor discusses how chronic depression makes even mildly depressive thoughts and feelings feed off of each other to create a vicious spiral. C. Practice targeting secondary reactivity: 1. Formal and informal practice of mindful awareness and acceptance of individual patterns of reactivity (rumination) to internal and external events.

Treatment	Qualitative Data
II. MBCT (cont'd)	2. "Staying present with what is unpleasant in our experience … lets the inherent "wisdom" of the mind deal with the difficulty, and allows more effective solutions to suggest themselves" (p. 190). 3. CBT thoughts and emotions exercise to differentiate objective qualities from interpretations of event.
III. ACT	A. Central Paradoxical Conceptualization: 1. Rule of internal events: "If you aren't willing to have it, you've got it." While solution oriented problem solving can be very effective with external problems, it is precisely one's attempts at changing negative content that is a major source of much psychopathology (Hayes et al., 1999). (e.g. "Don't think about a banana"). B. Differentiates suffering from normal pain: 1. "Clean pain" distinguished from "dirty pain." C. Practice targeting secondary reactivity: 1. Therapist helps client make direct contact with the paradoxical effects of emotional control strategies. 2. "Willingness" to experience "clean pain" as alternative to avoidance/ control strategies; facilitates reduction of second order pain/"dirty pain" increases pursuit of values-based life in the face of first order pain. 3. Client assigned clean pain/dirty pain diary. D. Direct Paradoxical application: 1. Inherent Paradox: produced by a functional contradiction between the literal and functional properties of a verbal event (Try hard to be spontaneous). 2. Therapist uses paradox to help break down rule governed behavior.
IV. DBT	A. Central Paradoxical Conceptualization: 1. "Therapeutic change can only occur in the context of acceptance of what is; however, "acceptance of what is" is itself change" (Linehan, 1993a, p. 99). 2. "From the patient's perspective, maladaptive behaviors are often the solutions to the problems she wants solved" (p. 99). B. Differentiates suffering from normal pain: 1. "Dysfunctional and maladaptive emotions … are usually secondary emotions that block the experience and expression of primary emotions" (p. 227).

Treatment	Qualitative Data
IV. DBT (cont'd)	C. Practice targeting secondary reactivity: 1. "If an emotion secondary to a primary emotion has been targeted for reduction (e., fear of fear, or shame about anger), the therapist wants to expose the patient to the primary emotion cues (fear and anger respectively). The aim in this case is not to change expressions of the primary emotion, but instead to expose the patient to the primary emotional cues (including somatic cues)" (Linehan, 1993a, 356-57). D. Central Paradox of entering into the Paradox 1. All behavior is "good" yet the patient is in therapy to change "bad" behavior (Linehan, 1993a, p. 208). E. Paradoxical dilemma: 1. "If I didn't care for you, I would try to save you." F. Direct paradoxical application: 1. Therapist enters multiple paradoxes faced by the BPD patient in attempting to solve dialectical dilemmas: a. Extreme vulnerability *versus* invalidating and vulnerability. b. Unrelenting crises *versus* blocking and inhibiting the experience of emotional components of the crisis. c. Passive inability to resolve problems and painful emotional states versus apparent independence, invulnerability and competence.

Table E5

Treatment Element 5: Highly Experiential

Treatment	Qualitative Data
I. MBSR	A. "Discussions are secondary to the actual practice of mediations. Doing it is most fundamental" Kabat-Zinn, 1990, p. 140-141). B. Formal meditation practices (sitting meditation, mindful hatha yoga, and body scan) require participants to be actively involved by "getting down on the floor and be with their minds and bodies". C. Each session begins with mindfulness exercise or meditation followed by discussion. D. Interactive nature of instruction designed to evoke a sense of active participation and ignite a passion for self observation, inner exploration, and self inquiry. E. "Once a person has "tasted" the relaxation and calmness associated with inner stillness and wakefulness, these experiences become powerful motivators for continued practice" (Kabat-Zinn, 1990, p. 24).
II. MBCT	A. The aim is to be "as experiential as possible…participants learn from them by first having the experience and only afterwards trying to make sense of what it means" (Segal et al., 2002, p. 102). B. Experiential learning is one of the "core themes" of MBCT in that the required skills/knowledge of mindfulness can only be acquired through direct and repeated experiences (Segal et al., 2002,). C. "Getting a taste for "being "mode, and being able to enter this at will, provides a powerful alternative route when depression-creating "doing" routines are assembling themselves" (Segal et al., 2002, p. 85). D. Each experience with meditation is followed by an in depth discussion of the participant's experience with the exercises and interwoven with stories and poetry or further practice. E. Instructor weaves experiential and conceptual input together to create shifts in mental mode (doing to being mode). F. Instructors rely primarily on experiential rather than verbal problem solving and avoid premature explanations. G. The instructor uses open ended questions to foster participants' curiosity about and tuning into experience. H. Individual difficulties with or objections to each exercise are intentionally invited as opportunities for group learning and instructors use participants' own experiences to frame didactic information. I. Teaching moments are based on participants' own experience rather than lectures from the instructor, and should embody the assumption that the participants are the experts on themselves (Segal et al., 2002).

Treatment	Qualitative Data
II. MBCT (cont'd)	1. Instructor keeps explanations brief/ as experiential as possible with experiential first, explanation second. 2. Focus on experience, not thought content, in order to disentangle language. 3. Instructor provides repeated learning experiences in order to gain accumulated effects.
III. ACT	A. In ACT the experience of the client is the absolute arbiter of truth. B. "The therapist always brings the issue back to what the client's experience is showing, and does not substitute his or her opinions for that genuine experience" (p. 285). C. "A cardinal sign of getting lost is usually that the therapist begins to overuse logic with the client" (Hayes et al., 1999 p. 173). D. Experiential exercises are designed to help the client contact troublesome thoughts, feelings, memories and physical sensations or to experience the odd workings of their own verbal processes (Luoma, Hayes, & Walser, 2007). E. Therapeutic stance: "Core competency" 1. "The therapist introduces experiential exercises, paradoxes, and/or metaphors as appropriate and de-emphasizes literal sense-making" (Luoma et al., p. 285). F. Willingness "Core competency": 1. "The therapist helps client to experience the qualities of willingness" (p. 286). G. Cognitive Defusion "Core competency": 1. "Therapist actively contrasts what the client's mind says will work with what the client's experience says is working" (p. 286). 2. "The therapist works to get the client to experiment with "having" difficult private experiences, using willingness as a stance" (p. 287). 3. "The therapist uses various interventions to reveal both the flow of private experience and that such experience is not toxic" (p. 287). H. Contact with the present moment "Core competency": "The therapist uses exercises to expand the client's sense of experience as an ongoing process" (p. 287). Distinguishing the conceptualized self from self as context "Core competency": 1. "The therapist utilizes behavioral tasks to help the client notice the workings of the mind and the experience of emotion while also contacting a self who chooses and behaves with these experiences, rather than for the experiences" (p. 288).

Treatment	Qualitative Data
IV. DBT	A. "Dialectical reasoning, both on the part of the therapist and as a style of thinking taught to patients…. requires the individual to assume an active role, to let go of logical reasoning and intellectual analysis as the only route to truth, and to embrace experiential knowledge" (Linehan, 1993a, p. 204). B. During phase one experiential exercises are linked to skills learned in group. C. Imaginal practice is used as a scaffolding exercise before real world practice is elicited. Behavioral rehearsal is practiced in-group and in vivo during the week (Linehan, 1993a). D. Co-leaders in the skills training group rely more heavily on concrete didactic lecture and offer the rationale for each skill and exercise before hand. E. Experiential exercises are more similar to traditional CBT, making heavy use of behavioral activation and role-play. F. Interactive discussion of clients' moment-to-moment experience is emphasized. G. Efforts at skill practice are explored in depth with the clients to foster awareness of relatedness of the clients' overt and covert response patterns.

Table E6

Treatment Element 6. Contextual-Holistic

Treatment	Qualitative Data
I. MBSR	A. Meditation is proposed to work on three interrelated and universal aspects of human experience. These include a moment-to-moment awareness and observation of; 1. A connection between mind and body; 2. The interconnectedness of sensation, impulses, thoughts, feelings and meaning in coherent patterns; 3. "A sense of belonging, of connectedness, of being in community in the largest sense" (Kabat-Zinn et al., 2002, p. 295). B. "Our lack of awareness of the system as a whole will often prevent us from seeing new options and new ways of approaching problems" (p. 160). C. As an approach to health and well-being, Kabat-Zinn (1990) proposes that a more systemic view is needed in order to solve problems in this domain, because parts cannot be considered apart from the whole. D. "At each level of our being there is a wholeness that is itself embedded in a larger wholeness. The web of inter-connectedness goes beyond our individual psychological self" (Kabat-Zinn, 1990, p. 156-57). E. "The ability to perceive interconnectedness and wholeness in addition to separateness and fragmentation can be cultivated through mindfulness practice" (Kabat-Zinn, 1990, p. 157). F. "Perhaps more than anything else, the work in [the MBSR program] involves helping people to see and feel and believe in their wholeness, helping them to mend the wounds of disconnectedness and the pain of feeling isolated, fragmented, and separate, to discover an underlying fabric of wholeness and connectedness within themselves" (Kabat-Zinn, 1990, p. 151). 1. Raisin eating exercise: Participants are led to notice and experience all of the sentient elements of the raisin and the raisin's "belly button" as a signaling that it was once connected to something larger, which nourished its growth. 2. Loving kindness meditation: Interpersonal awareness exercise.
II. MBCT	A. No discussion of context or cultural variables was found in the materials. B. Does practically integrate the interconnectedness of mind and body in the individual. C. "Withdrawing attention from the body means that "processing" such emotional experiences remains uncompleted" (Segal et al., 2002, p. 139).
II. MBCT	D. "Reconnecting to the body" is proposed to promote healing and

Treatment	Qualitative Data
(cont'd)	facilitate the completion of unfinished emotional processing. E. Application: 1. Participants led to identify, experience emotional expression in body as a means of disengaging from thinking about emotion in lieu of experiencing emotion.
III. ACT	A. In Western culture, "experiential avoidance is often amplified by the social/cultural community, which promotes the idea that healthy humans do not have psychological pain (e.g. stress, depression, memories of trauma) and specifies the actions that need to be taken to avoid such negative private events" (Luoma et al., p. 13). B. "ACT is essentially a contextual therapy in that it attempts to alter the social/verbal context rather than the form or content of clinically relevant behavior" (Hayes et al., 1999, p. 19). C. ACT is based on the philosophical tradition of *functional contextualism.* D. Core components of contextualism (Hayes et al., 1999) 1. "The unit of analysis is an interactive whole. Specifically, an act alone and cut off from a context is not viewed as a psychological event at all" (p. 18). 2. There must be sensitivity to the role of context in understanding the nature and function of an event. 3. "Pragmatic truth criterion;" what is true is what works. Clients are encouraged to stay with experience of what works or does not work pragmatically. E. "Acts," (thoughts, feelings and behaviors) can only be changed by changing the context. F. "The context of verbal activity is the key element rather than the verbal content. It is not that people are thinking the wrong thing—the problem is thought itself and how the verbal community supports its excessive use as a mode of behavior regulation" (Hayes et al., p. 46). 1. Combats the *context of literality* in which symbols and what they are symbolizing become indistinguishable. 2. The "dominant verbal community" supports the context of literality, which makes change more difficult. "A context is created in which one set of actions (emotions, thought, and so on) 'causes' another, not because the two are mechanistically linked but because the conventions of the verbal community glues them together" (p. 50). G. Five implicit views of human problems and their solutions in the verbal community, which support the context of literality. 1. Problems are caused; Reasons are considered causes; thoughts and feelings are good reasons; → thoughts and feelings are causes → to control the outcome, we must control the cause (thoughts and feelings).
III. ACT	H. "From a functional contextualistic perspective, only events external

Treatment	Qualitative Data
(cont'd)	to behavior can "cause" behavior" (p. 55).
	I. "Reasons that begin as explanations for behavior later come to exert control over our behavior because of this social context of reason giving," which "quickly expands into a context of experiential control" (Luoma et al., 2007, p. 14).
IV. DBT	A. A primary characteristic of the dialectical perspective on the nature of reality is "the principle of interrelatedness and wholeness" (Linehan, 1993a).
	B. The systems perspective of dialectics assumes that "the analysis of parts of a system is of limited value unless the analysis clearly relates the part to the whole" (p. 31).
	C. "It appears that there is a "poorness of fit" between women's interpersonal style and Western socialization and cultural values for adult behavior" (p. 55).
	D. "Borderline individual may result in part from the collision of a relational self with a society that recognizes and rewards only the individuated self" (p. 32).
	E. The dialectical thinking that is promoted in DBT emphasizes "observing fundamental changes that occur through people's interaction with their environment" (p. 121).
	F. The use of dialectics in DBT directs therapeutic attention to both immediate and larger contexts of behavior, and to the interrelatedness of individual behavior patterns (Linehan, 1993b).

Appendix F

Data for Conceptual/Functional Elements of Mindfulness

Table F1

Element 1: Act with Awareness:

Treatment	Qualitative Data
I. MBSR	A. In MBSR, the intentional and deliberate "self-regulation of attention" is considered "the heart of practice" (Kabat-Zinn et al., 2002, p. 286).
	B. "Mindfulness builds greater concentration and awareness" (Kabat-Zinn et al., 2002, p. 285).
	C. Mindfulness is an inherent human capacity subject to the universal processes of attention deployment (Kabat-Zinn, 2003).
	D. The formal meditation interventions "enhance concentration and awareness as an individual focuses systematically and intentionally on particular aspects of his inner or outer experience" (Kabat-Zinn et al., 1998, p. 768).
	E. From the outset of these treatments mind wandering, distraction, and "auto-pilot" reactions are highlighted as normal.
	F. Mindfulness practices are proposed to foster a sustained quality of attention that is gathered and focused rather than dispersed and fragmented.
	G. The coming back is as much a part of the meditation as the staying on the object of attention (Kabat-Zinn, 1990).
	H. Meditation practice is the intentional staying with the breath, noticing that attention has moved away, once noticed, gently returning.
	I. "By repeatedly bringing attention back to the breath each time it wanders off, concentration builds and deepens, much as muscles develop by repetition of exercise" (Kabat-Zinn, 1990).
	J. Concentration cultivated together with mindfulness to foster flexibility of attention.
	K. Awareness proposed as a way of deliberately interrupting habitual behaviors and choosing more effective responses.
II. MBCT	A. In MBCT also, "the ability to deploy and maintain attention on a particular focus is central to all other aspects" of the treatment (Segal, Williams, & Teasdale, 2002, p. 87).
	B. From the outset of these treatments mind wandering, distraction, and "auto-pilot" reactions are highlighted as normal.
	C. In MBCT, one of the core skills is to disengage from old habits of mind.

Treatment	Qualitative Data
II. MBCT (cont'd)	1. The first half of the program is teaching client's how to become aware of how the mind shifts from one topic to another, how to bring it back to a single focus (first in the body, then breath) and how mind wandering can allow negative thoughts and feelings to occur (Segal et al., 2002). D. If attention moves off the breath a hundred times, then one just calmly brings it back a hundred times as soon as they are aware of it (cite). E. Basic tool: "intentional use of attention and awareness to choose what we going to attend to and how we are going to attend to it" (p. 77). F. Concentration: The ability to deploy and maintain attention on a particular focus is central to all other aspects of MBCT.
III. ACT	A. "Being Present" therapeutic process: helping clients "sustain a pattern of ongoing attention to, awareness of, presence with, and contact with their immediate, ongoing, changing experience, without having to retreat from it or get pulled up into conceptual thought" (Luoma, Hayes, & Walser, 2007, p. 96). B. "The therapist detects the client's drifting into past or future orientation and teaches him or her how to come back to now" (Luoma et al., p.287). C. "The ACT therapist spends significant amount of time helping clients develop a stronger ability to return to the present moment through structured exercises, which increase defusion, acceptance, and mindfulness (Luoma et al., 2007, p. 92). D. The concentrative attention quality of "act with awareness" element is not highlighted in ACT. E. Instead, an effortless, non-clinging to experience as it arises and then falls away is fostered in order to focus on the present, show up to the life that is being lived in this moment, and more directly, fully, and mindfully contact the here and now (Hayes & Smith, 2005). The interventions used in this treatment reflect the prioritization of more fluid ongoing awareness and non-distraction over concentrated awareness. F. Fusion and avoidance pull one out of the present moment awareness. G. Returning to now from the conceptualized past and future. H. No effort needed; we do not cling to experience; it arises, then falls away. I. Focus on the present; show up to the life that is being lived in this moment; step out of the world as restructured by thought and to more directly, fully, and mindfully contact the here and now. 1. Bringing awareness to internal and external experience as they occur in the moment.

Treatment	Qualitative Data
III. ACT (cont'd)	J. The key practice of mindfulness exercises is to help clients sustain a pattern of ongoing attention to, awareness of, presence with, and contact with their immediate, ongoing, changing experience, without having to retreat from it or get pulled up into conceptual thought. K. Therapist spends significant amount of time helping clients develop a stronger ability to return to the present moment through structured exercises, such as mindfulness meditation. L. Therapist detects the client's drifting into past or future orientation and teaches him how to come back to now.
IV. DBT	A. "Mindfulness in its totality has to do with the quality of awareness that a person brings to activities" (Linehan, 1993b, p. 64). B. "One mindfully": one of the three qualities of attention ("how" skills) taught in the psychological skill of mindfulness. 1. Requires one "to focus the mind and awareness in the current moment's activity, rather than splitting attention among several activities or between a current activity and thinking about something else" (Linehan, 1993b, p. 64). 2. The essence of this skill is to act with "undivided attention," which requires control of attention. 3. Clients are taught to focus their attention on one task at a time, engaging with alertness, awareness and wakefulness.

Table F2

Element 2: Observing/ noticing/ attending

Treatment	Qualitative Data
I. MBSR	A. Mindfulness is the intentional and active tuning in to each moment and cultivation of nonjudgmental awareness of all aspects of experience. B. Kabat-Zinn (1990) describes formal meditation as the "process of observing body and mind intentionally" and notes that this process "takes a good deal of energy and effort" (p. 23). C. Repeated practice is posited to increase one's capacity to attend more precisely to stimuli and heighten ones ability to encounter all of life with such awareness (Kabat-Zinn, 1990). D. Mindfulness in daily living asks one to "looking deeply into the ordinary" (p. 135). E. Greater awareness of the entire field of experience (ability to recognize thoughts as thoughts and feelings as feelings) is proposed to bring composure, inner stillness and a sense of personal power and greater nonattachment and selflessness. F. Participants learn to give systematic and purposeful attention to all aspects of experience and to pay attention to the full range of whatever is present in unfolding experience.
II. MBCT	A. The cultivation of awareness of patterns of thought feelings and bodily sensations is an essential first step in recognizing the need for corrective action (Segal, Williams, & Teasdale, 2002).
III. ACT	A. Clinical attention is given to building new behaviors that are about embracing, holding, and compassionately accepting experience (Luoma et al., 2007). B. The process of the self as context, or observer self, is one of the six core therapeutic processes in this treatment. C. From this place of the observer self, experience may be observed as content, which the self as context holds, but is not synonymous with the self. D. Mindfulness techniques are used to gain experiential knowledge of what it is like to observe what is going on in one's mind and body without getting attached to thoughts and feelings (Hayes & Smith, 2005).
IV. DBT	A. In DBT "observe" is the first of the sequential "what" skills taught in the mindfulness module, followed by describing one's experience with words and participating without self consciousness. B. The "observe" scale on the FFMQ is largely based on the KIMS (11 of 15 items) and thus essentially encapsulates the skill of "observe" found in DBT mindfulness training.

Treatment	Qualitative Data
IV. DBT (cont'd)	C. Observing entails "attending to events, emotions, and other behavioral responses, even if these are distressing ones" (Linehan, 1993a, p. 145). D. Clients learn to allow themselves to experience whatever is happening in the moment, rather than avoiding a situation or terminating an emotion through maladaptive behaviors. E. In skills training, clients are taught that observing is "sensing or experiencing without describing or labeling the experience. It is noticing or attending to something" (Linehan, 1993b, p. 67). F. A number of experiential exercises are suggested to concretize this understanding. For example, clients might be guided to tune into a number of different experiences including the sensation of their fanny in the chair, or sensing their stomach and shoulders, or watching in their mind the first two thoughts that come in.

Table F3

Element 3: Describing/labeling with words

Treatment	Qualitative Data
I. MBSR	A. MBSR does not explicitly target the participants' ability to verbalize or use words to describe their experience. B. Interactive discussion is emphasized following each experiential exercise. C. During discussions, participants are encouraged to identify aspects of their experience through the instructor's genuine curiosity and inquiry. D. Instructors engage in detailed inquiry using open ended questions in order to not lead participants in a particular direction. E. Following each practice, participants are asked to describe their actual experience during practice and to offer any comments they might have. F. Clients instructed that the way we speak about thoughts and feelings can reduce one's identification with them. "Rather than saying "I am afraid" or "I am anxious," both of which make "you" *into* the anxiety or fear, it would actually be more accurate to say "I am having a lot of fear filled (or fearful) thoughts." In this way you are emphasizing that you are not the content of your thoughts and that you do not have to identify with their content" (Kabat-Zinn, 1990, p. 344).
II. MBCT	A. Does not explicitly target the participants' ability to verbalize or use words to describe their experience. B. Interactive discussion is emphasized following each experiential exercise. C. During discussions, participants are encouraged to identify aspects of their experience through the instructor's genuine curiosity and inquiry. D. Instructors engage in detailed inquiry using open ended questions in order to not lead participants in a particular direction. E. "Instructors seeks to explore with client how each aspect of their experience can teach them something of their "internal geography" and facilitates connections between thoughts, feelings and bodily sensations" (Segal, Williams & Teasdale, 2002, p.159). F. For the "three minute breathing space," instructors ask participants to observe and describe their experience as in DBT. The instruction is to "put experiences into words, for example, say in your mind, "A feeling of anger is arising" or "Self-critical thoughts are here" (Segal et al., 2002, p. 241).

Treatment	Qualitative Data
II. MBCT (cont'd)	G. In MBCT this convention is integrated into the instructions for the "three minute breathing space" mini meditation, asking clients to simply note feelings or thoughts as events, rather than identifying with them. (E.g. "A feeling of anger is arising" or "Self-critical thoughts are here.").
III. ACT	A. Although ACT emphasizes the inherent constraints of language, it also recognizes that flexible verbal self-knowledge is essential to living a healthy life (Hayes et al., 1999). B. The ACT therapist models the ability to verbally describe what is happening in themselves and in clients during therapy. He or she also looks for direct descriptions of content, rather than interpretations, analyses, judgments, or expectations (Hayes et al., 1999). C. "Many ACT exercises train clients to contact psychological content and simply describe it, without adding or subtracting anything" (p. 184). D. Mindfulness exercises teach this ability as a function of the cognitive defusion skill. E. "Labeling your thoughts exercise" (Hayes & Smith, 2005, p. 75) Clients are encouraged to use the verbal convention of preceding each description of experience with "I am having the thought…" or "I am having the feeling…" or "I am feeling the bodily sensation of…." F. "Labeling thoughts" and "cubby holing" exercises are used to help client deliteralize and defuse from the effects of language. The therapist asks the client to "state things as experiences they are currently having, rather than as something they actually are" (Luoma et al., 2007, p. 70). A client might be asked to change a statement or thought such as "I am worthless," to "I am having the thought that I am worthless" or the feeling "I feel anxious" to "I am having the feeling of anxiety."
IV. DBT	A. Describing ones experience with words is the second step in the treatment's conceptualization of mindfulness. B. Together with the "observe" skill, verbal labeling of experience is considered a necessary developmental step in learning the new skill of mindfulness, which can be dropped later. C. "Actively observing and describing one's own behavioral responses are only necessary when new behavior is being learned, there is some sort of problem or a change necessary" (Linehan, 1993a, p. 145). D. This step emphasizes the description of "just the facts" of experience, without judgment.

Treatment	Qualitative Data
IV. DBT (cont'd)	E. These skills are also used in the Emotion Regulation module. In this module, clients are taught to observe and verbally describe in detail (in writing) on worksheets all of the contingent processes leading up to, during and following a particularly disturbing event, including the prompting event, interpretation of the event, experience of the emotion, expressive behaviors associated with emotion, and aftereffects. F. In DBT the "describe" skill of mindfulness exemplifies this verbal convention and functions in this same way, asking the client to say to themselves something like, "sadness has just enveloped me.").

Table F4

Element 4: Non-Judging of Experience

Treatment	Qualitative Data
I. MBSR	A. One of seven essential attitudinal qualities necessary to cultivate mindfulness. B. "Mindfulness is cultivated by assuming the stance of an impartial witness to your own experience" (Kabat-Zinn, 1990, p. 33). C. Judging is proposed to often lead to automatic reactions, that don't necessarily have any objective basis (Kabat-Zinn, 1990). D. The ubiquity of judging in our lives is highlighted and participants are encouraged to begin noticing how often experiences are labeled as "good" or "bad." E. It is further emphasized that one should "not judge the judging," just bring awareness to it. F. According to Kabat-Zinn (1990) the first thing one must do to be more effective in handling stress is to be aware of automatic judgments. G. "Loving kindness" can be thought of as an antidote to judgment. H. In MBSR "loving kindness and forgiveness" meditation is included in the all day intensive. This meditation practice is intended to evoke feelings of "kindness, generosity, goodwill, love, and forgiveness," and "can help us cultivate strong positive emotions within ourselves, and let go of ill will and resentment" towards oneself and others (Kabat-Zinn, 1990, p. 182).
II. MBCT	A. In the treatment of clients who suffer from chronic episodes of depression, MBCT highlights that rumination involves judgments about experience. B. The thoughts about experience become confused with the "raw experience." (Segal et al., p. 190). C. MBCT encourages clients to cultivate a "friendly," "welcoming" awareness to all aspects of the experience cycle, rather than to try to find a solution to them.
III. ACT	A. In ACT the terms "evaluation" and judgment are used interchangeably. B. "Evaluations are subjective judgments about internal or external processes" (Hayes & Smith, 2005, p.95). C. ACT undermines evaluation by reducing the dominance of literal language by teaching healthy distancing and non-judgmental awareness (Hayes, Strosahl, & Wilson, 1999). D. According to Hayes and Smith (2005), one of the largest causes of pain is the process of evaluation. "Part of the elusiveness of mindfulness is that it is purposive, and thus evokes evaluations, but the whole purpose of being mindful is to learn how to defuse from your evaluations" (p. 110).

Treatment	Qualitative Data
III. ACT (cont'd)	E. In structured mindfulness exercises the client is asked to gently observe without judgment a specific event or ongoing set of events that occur. F. In ACT a sense of self as process is encouraged as an aspect of the being present process. "Self as process…is characterized by the defused, nonjudgmental, ongoing description of thoughts, feelings, and other private events" (Luoma et al., p. 19).
IV. DBT	A. In DBT non-judgment is one of the three qualities of awareness taught as a "how" skill in mindfulness. B. The goal of this skill is to take a nonjudgmental stance when engaging in the "what" skills; observing, describing, and participating (Linehan, 1993b). C. Skills leaders explicitly differentiate describing from judging. When taking a non-judgmental stance, clients are taught, judgments are eliminated and "just the facts" are observed and described. D. Because "borderline individuals tend to judge both themselves and others in either excessively positive terms (idealization) or excessively negative terms (devaluation), the position here is not that they should be more balanced in their judgments, but rather that judging should in most instances be dropped altogether" (Linehan, 1993a, p. 146). E. Judging is sometimes used to compare something to a standard, state a preference, or describe the consequences of an event (Linehan, 1993b). F. A non-judgmental approach observes the consequences and may suggest changing behaviors or events, but does not add a label of bad to them; it is as it is. Problems occur when one forgets that judgments are shorthand for describing a preference and begin to believe judgment as statement of fact. G. The dialectical dilemma emerges for clients with BPD as they often believe that if one is said to not be "bad," this must mean that they are good. A substantial amount of time may be dedicated to clarifying this discrepancy.

Table F5

Element 5: Non-reactivity to Internal Experience

Treatment	Qualitative Data
I. MBSR	A. Mindfulness training is proposed as a means by which participants can become more aware of their experience, whatever the quality, so that they might respond more effectively rather than to react automatically. B. In MBSR, mindfulness fosters an awareness of the body's signals, which might suggest the need for self-care as adaptive responding. C. Attention to the breath is used specifically to foster concentration or calm, inner stillness and non reactivity of mind. D. "By actively practicing redirecting your attention, one is training the mind to be less reactive" (Kabat-Zinn, 1990, p. 23). E. Practice is proposed to "cultivate an intentionally non reactive, nonjudgmental, moment to moment awareness of changing field of objects" (Kabat-Zinn et al., 2002, p. 310). F. Participants are encouraged to also just notice and observe particular patterns of internal reactivity related to attachment to pleasant experiences and aversion to negative experiences. G. In MBSR Kabat-Zinn (1990) describes this pattern as "greed" and "rejection" of experience. The greed pattern is described as "the desire for "more for me" in order to be happy" (p. 345). The rejection pattern is driven by the need to eliminate what one doesn't want in order to be happy. H. The aim of mindfulness practice is to gain freedom from the tendency to get drawn into automatic reactions.
II. MBCT	A. Participants are instructed to notice when negative thoughts or feelings arise, allowing them to be there, before taking steps to respond skillfully, rather than reacting automatically. B. "The message" of mindfulness training "is for people to explore ways of becoming more aware of their experience, whatever its quality, so that they might learn to respond mindfully rather than to react automatically" (Segal et al., 2002, p. 191). C. Participants encouraged to observe patterns of internal reactivity related to attachment to pleasant experiences and aversion to negative experiences.

Treatment	Qualitative Data
II. MBCT (cont'd)	D. Describes "attachment" and "aversion" as "two forms of automatic reactions to experience" (Segal et al., p. 191). E. Attachment is wanting to hold on to experiences we judge to be pleasant or wishing for experiences not present. Aversion is reacting by wanting a reaction to go away or wanting to get rid of unpleasant experiences. F. During meditation participants are asked to simply observe these reactions of aversion or attachment in the body, and to notice how they compete for attention to the breath. G. It is highlighted that "the practice of mindfulness can be a powerful ally, allowing us to notice when this has occurred and to regain the ability to choose where we wish to place our attention in this moment" (p. 193). H. The aim of mindfulness practice is to gain freedom from the tendency to get drawn into automatic reactions.
III. ACT	A. In ACT the term "non-reactivity" not explicitly noted as an element of mindfulness. B. Patterns of unhealthy experiential avoidance and control are proposed as the root problem in the ACT model of psychopathology. C. Control and avoidance of internal experience may be considered the primary reactive patterns targeted. D. Reactivity in the form of avoidance and control are proposed to be antithetical to the therapeutic processes proposed to underlie mindfulness. E. The mindfulness processes of being present, cognitive defusion, and acceptance are proposed to undermine such reactions, and thus implicitly represent the practice of non-reactivity to internal experience.
IV. DBT	A. DBT emphasizes fostering awareness and acceptance of primary emotions, in the service of reducing problematic extreme secondary behavioral, cognitive, and emotional reactions. B. Unawareness is explicitly proposed to be a characteristic of impulsive behavior (Linehan, 1993b). C. Mindfulness skills are combined with Distress Tolerance skills to foster clients' ability to bring awareness to distressing experience, while practicing "radical acceptance" respectively.

Table F6

Element 6: Interoceptive Exposure

Treatment	Qualitative Data
I. MBSR	A. The original MBSR treatment descriptions and treatment protocol do not include a discussion of mindfulness serving the function of interoceptive exposure. B. Informal practices may "provide an effective vehicle for generalizing treatment effects that is similar to psychotherapeutic exposure" (Salmon et al., 1998, p. 256). C. The in vivo nature of informal practice in particular increases the likelihood that one will come into more challenging experiences outside the classroom. D. Mindfulness meditation is compared to the "non-reinforced exposure" proposed in DBT providing "a conceptual framework and practical strategy for limiting the direct impact of negative thoughts and feelings on behavior when they occur and potentially reduces aversive reactions in the face of challenging intrapsychic material" (p. 255). E. However, perhaps due to the conceptual background and targeted population in a behavioral medicine setting, the functionality of exposure to affect is not emphasized in the treatment itself.
II. MBCT	A. Rumination is often "motivated (ineffectively) by the goal of escaping/avoiding depression or problematic life situations," (Segal et al., p. 91). B. As a function of the problematic cognitive discrepancy analysis proposed to underlie depressive relapse, "Avoidance and preoccupation reflect a desire for things to be different than they actually are at the moment" (p. 191). C. Depressed patients may find it "safer" to remain in their heads and think about emotions, rather than to experience it directly as it manifests in the body. D. This response pattern may have originated as a basic coping style or as a result of emotion linked to specific bodily trauma. In either case, a continuing effort is made to avoid having emotion-related bodily sensations enter awareness. E. Participants in the MBCT program are helped to contend with (i.e. exposed to) cognitive patterns of attachment and avoidance by redirecting their attention to the expression of difficult material in the body. F. MBCT proposes that by including the body in the field of awareness, participants are given a different perspective from which to observe, which discourages avoidance to some extent and encourages one to turn towards and look into experience.

Treatment	Qualitative Data
II. MBCT (cont'd)	G. Although this process is not described as an "exposure exercise" to avoided experience, participants are led to intentionally bring to mind a difficult experience or memory. They are then asked to hold in awareness the expression of negative emotions in the body until the pull for attention dissipates. This direction functionally does describe the process of an exposure exercise.
III. ACT	A. Because experiential avoidance and control are proposed as the core problem in the ACT model of psychopathology, exposure to internal stimuli is highly emphasized. B. In engaging in the process of committed action in accord with one's values, it is expected that this process will evoke thoughts and feelings that were previously avoided by the client. C. "When clients engage in committed action, they are engaging in exposure to feared and avoided stimuli" (Luoma et al., 2007, p. 163). D. "ACT is an exposure based method" (p. 163). E. Difference in exposure in ACT versus CBT: 1. Exposure to previously feared and avoided stimuli is intended to increase willingness to experience discomfort and response flexibility, rather than to necessarily reduce emotions or eliminate responses respectively. 2. Willingness exercises encourage clients to observe dispassionately their experience, while being exposed to difficult internal experiences. Similar to traditional exposure protocols, therapist and client collaborate to develop an exposure hierarchy (Hayes & Smith, 2005). 3. "Often clients benefit from practice with basic awareness exercises and meditation, and eventually progress to more exposure-like mindfulness exercises in which they are asked to invite in distressing content (Luoma et al., p. 96).
IV. DBT	A. In DBT mindfulness in psychotherapy is considered a form of exposure to painful emotions without association to negative consequences. B. Used as an intervention to extinguish the ability of primary emotions to stimulate secondary negative emotions. C. "Mindfulness is an instance of exposure to naturally arising thoughts, feelings and sensations" (Linehan, 1993a, p. 354). D. The focus on "experiencing the moment" in mindfulness skills training is explicitly noted to be "based on both eastern psychological approaches and Western notions of nonreinforced exposure as a method of extinguishing automatic avoidance and fear responses" (Linehan, 1993b, p. 145). E. Reconditioning occurs as the client remains present and observes the rise and fall of thoughts, feelings, and sensations, with no

Treatment	Qualitative Data
IV. DBT (cont'd)	need to control or avoid the experience, and no negative outcome. F. It is proposed in DBT that reduction of the secondary emotions requires exposure to the primary emotions in a nonjudgmental atmosphere. G. "Mindfulness to one's own emotional responses can be thought of as an exposure technique" (Linehan, 1993a, p. 149).

Table F7

Element 7: Meta-cognition-Cognitive Defusion- Decentering

Treatment	Qualitative Data
I. MBSR	A. Many claim that the most valuable thing they get out of their meditation training is the realization that they are not their thoughts (Kabat-Zinn 1990). B. "When we are mindful of the process of thought itself, we can more readily catch our own lapses of mind, the inaccuracies in our thinking, and the self subverting behaviors that often follow from them" (Kabat-Zinn, 1990, p. 230-231). C. This meta-awareness extends to emotional experience and physical sensations as well. "The MBSR program [teaches] people to explore how they might have a different relationship not only to thoughts, but also to feelings and bodily sensations" (Segal et al., 2002, p. 58). D. In meditation one directs attention to particular region of the body and couples this attention with a sense of the breath moving in and out of that region, observing changes in sensations from moment to moment. One discovers that thoughts/feelings about pain are different from the actual sensations themselves (Kabat-Zinn et al., 2002). E. By program week five participants learn to expand their field of awareness to include the observation and recognition of thoughts as "events" in consciousness, and how to distinguish the event from the content.
II. MBCT	A. In MBCT meta-cognitive awareness is explicitly proposed as the functional element, which helps participants disengage from the ruminative processes underlying depression. B. The ultimate aim of MBCT is to foster a radical shift in the relationship to the thoughts, feelings and bodily sensations that contribute to depressive relapse and the ability to recognize and disengage from mind states characterized by self perpetuating patterns of ruminative negative thought. C. Makes explicit the underlying process in CBT of the changing relationship to thoughts, rather than their content[13]. D. "Decentering," is "seeing thoughts in a wider perspective, sufficient to be able to see them as simply "thoughts" rather than necessarily reflecting reality (Segal et al., 2002, p. 39). E. Broadening the scope of decentering, beyond the realm of thinking to feelings and bodily sensations, allows more ways into difficult experiences.

[13] It is an interesting historical note that it was Marsha Linehan, the developer of DBT, that proposed mindfulness as a means of achieving a shift in relationship to thoughts and mentioned the name Jon Kabat-Zinn to the researchers.

Treatment	Qualitative Data
II. MBCT (cont'd)	F. Decentering, is not disconnection or dissociation from experience, rather it "is taught as a way of becoming really aware of thoughts, feelings, and bodily sensations" (p. 93). G. Body-focused awareness is a central way in which participants learn to relate differently to experience by fostering awareness of how negative thoughts and feelings are often expressed through the body. H. "Breathing or a neutral focus in the body [can] be used as a base or center from which to steady oneself if the work of looking at one's experience became overwhelming" (Segal et al., p. 61). I. Attention to the breath is proposed to involve "metacognitive monitoring," which promotes the skill of decentering, that is needed to prevent affect spirals (p. 163). J. Regular meditation provides experiential understanding of the nature of thoughts simply as thoughts and the opportunity to observe the relationship one has to them.
III. ACT	A. Cognitive defusion: One of six core therapeutic processes; the stepping back from the thinking process and learning to look at thought rather than from thought. B. As previously noted, de-fusing clients from their thoughts is one of the primary targets of ACT (Hayes et al., 1999).[14] C. When one becomes fused with their thoughts, behavior becomes the product of derived stimulus relations and rigid verbal rules, and less based on direct experience and the effectiveness (workability) of the behavior. D. Clients are helped to see thinking as a process, which can be responded to in terms of the workability of a given thought in the service of the client's values, rather than their literal meaning (Luoma et al., 2007). E. Some of the core mindfulness processes in ACT, defusion exercises are aimed at creating non-literal contexts in which to loosen the relationship with thought content.
IV. DBT	A. The ability to "step back" from experience is proposed as inherent in the "observe" skill of mindfulness. B. "The ability to attend to events requires a corresponding ability to step back from the event; observing an event is separate or different from the event itself" (Linehan, 1993a, p. 145). C. During experiential "observe" exercises participants are reminded to "step back" in their minds, and observe when they become engrossed in describing rather than just observing.

[14] This is such a core element of the treatment it was initially called "Comprehensive distancing therapy," distancing referring to objectively noticing the process of thinking (Zettle & Hayes, 1986).

Treatment	Qualitative Data
IV. DBT (cont'd)	D. Because dissociation is a common coping strategy for BPD clients, skills trainers highlight the difference between stepping back within one's self and not outside themselves (Linehan, 1993b). E. In the Emotion Regulation module participants learn how to use their mindfulness skills to step back from overwhelming emotions. F. Skills trainers highlight that mindfulness of emotions "is useful because it allows you to get distance from your emotions. Distance is crucial for figuring things out and for problem solving in regard to emotions" (Linehan, 1993b, p. 93).

Table F8

Element 8: Acceptance

Treatment	Qualitative Data
I. MBSR	A. At the beginning of the MBSR program, instructors describe seven interrelated attitudinal factors, which "constitute the major pillars of mindfulness practice" (Kabat-Zinn, 1990, p. 32). 1. They include, non-judging, patience, a beginner's mind, trust, non-striving, acceptance, and letting go. 2. The interdependent nature of these qualities is highlighted. 3. For example, acceptance has also been conceptualized as an extension of non-judgment (Germer, 2005; MBSR training materials), patience suggests non-striving, and a beginner's mind suggests letting go of preconceived ideas. B. "By sitting with some discomfort and accepting it as part of our experience in the moment, we discover that it is actually possible to relax into physical discomfort" (Kabat-Zinn, 1990, p. 193). C. Acceptance is proposed as a way to honor and work with the full range of emotions and thoughts. D. Non-striving is proposed in contrast to the energy required to actively observe experience, it is "non-doing." In non-striving, one is "trying less and being more" (Kabat-Zinn, 1990, p. 37). E. "Letting go is a way of letting things be, of accepting things as they are" (p. 40). F. "Acceptance is willingness to see things as they are…..If you are practicing being present in each moment and at the same time you are allowing your breathing and your attention to purify the body within this context of awareness and with a willingness to accept whatever happens, then you are truly practicing mindfulness and tapping the its power to heal" (Kabat-Zinn, 1990, p. 89). G. What is most important is the quality of attention and one's willingness to look deeply into and embrace one's moment to moment experience.
II. MBCT	A. "Acceptance is actively responding to feelings by allowing or letting be before rushing in and trying to fix or change them" (Segal et al., p. 221). B. Acceptance, letting go, and "being rather than doing" (i.e. non-striving) are emphasized as three of eight core skills to be learned (together with concentration, awareness of thoughts, emotions, and bodily sensation, being in the moment, decentering, and bringing awareness to the manifestation of a problem in the body). C. "Acceptance of what is" is proposed to undermine the habitual patterns of attachment and aversion in the mind (p. 93). D. Similar to ACT, acceptance is also proposed to increase behavioral control by allowing experience.

Treatment	Qualitative Data
II. MBCT (cont'd)	E. In order to achieve "being mode," one has to "let go of the impulse to fix or change things, to escape or make better, or to be somewhere else in this moment" (Segal et al., 2002, p. 138). F. Letting go is proposed as "a key skill both in preventing oneself getting into and in stepping out of unhelpful cycles" (p. 93). G. The active qualities of willingness are tapped into in a more circumscribed way in MBCT. The use of the term willingness is only one of many descriptors used to emphasize the active qualities of moving into experience. H. Acceptance "takes a conscious commitment and the deliberate deployment of energy" (p. 221). This more active quality of acceptance is intermittently described as "embracing experience," engaging in friendly awareness, and curiosity.
III. ACT	A. As one of the core therapeutic processes proposed in ACT the term acceptance is used synonymously with willingness (Luoma et al., 2002). B. Therapists should use the word willingness "because acceptance is often interpreted by the client to mean "toleration" or "resignation" (Hayes et al., 1999, p. 133). C. The active turning towards experience is given greater emphasis in ACT than in the other treatments. D. Clients in ACT are encouraged to respond actively to their feelings, by feeling them. 1. The goal in applying willingness in ACT is to help clients let go of the agenda to control internal experience and see willingness as an alternative. The goal is to "*feel* better, rather than to feel *better"* (Hayes et al., p. 132). E. Willingness is proposed as the active alternative to avoidance and control strategies (Hayes et al.). F. Conversely, non acceptance is posited to lead to and exacerbate psychological distress. G. Willingness is proposed as a "process of making choices, not a desired outcome" (Luoma et al., p. 23) and has an all or none quality to it. H. While the degree of values consistent action can be increased or decreased, willingness as an action must be 100%. 1. Jumping metaphor: One may be jumping from a chair, building, or a book, but the action of jumping and willingness is always all or none (Hayes et al.). I. "The therapist actively encourages the client to experiment with stopping the struggle for emotional control and suggests willingness as an alternative" (Luoma et al., p. 286).

Treatment	Qualitative Data
IV. DBT	A. Acceptance skills are introduced and linked to mindfulness in the Distress Tolerance module. B. "Distress tolerance skills constitute a natural progression from mindfulness skills. They have to do with the ability to accept, in a nonjudgmental fashion, both oneself and one's current situation" (Linehan, 1993a, p. 147). C. DBT balances crisis survival with acceptance strategies in the Distress Tolerance module. D. Crises survival skills are taught before acceptance skills and are to be used when there is no obvious solution to the problem in order to survive it without making it worse (Linehan, 1993b). E. It is emphasized that these skills are temporary in the service of learning longer-term acceptance skills. 1. DBT teaches skills in effective "distracting," "self-soothing," "improving the moment," and "thinking in pros and cons" in order to simply survive a crisis. 2. This inclusion represents a dialectical balance between acceptance and change of one's current emotions. F. The idea behind this integration of acceptance and change in the midst of crises is that the inability to accept pain (and thus avoiding it), will lead to increased suffering, and tolerating it is essential to circumvent impulsive actions. G. Acceptance skills: a. "radical acceptance," i. focused breathing exercises, opposite action ("accepting and tolerating with the body"), and awareness exercises similar to mindfulness in daily living. The skill of radical acceptance utilizes the construct of "letting go" in the sense that clients are taught to let go of fighting reality. ii. Clients are told in the Distress Tolerance module that suffering comes when one is unable or refuses to accept pain as a natural part of living. "Radical acceptance transforms suffering to pain" (Linehan, 1993b, p. 102). iii. Because this concept is so difficult for BPD clients to understand, the terms "acknowledge," "recognize," or endure," may be used as a shaping strategy. b. "turning the mind toward acceptance" i. Choosing to accept reality as it is over and over again.

Treatment	Qualitative Data
IV. DBT (cont'd)	c. "willingness versus willfulness." i. Willingness is also incorporated in the DBT conceptualization of acceptance. Clients are taught to turn the mind toward acceptance, which requires the active choice to do so, over and over again. Skills trainers highlight that one must actively practice "willingness" to accept what is. Willfulness is proposed in contrast as attempting to "impose one's will on reality—trying to fix everything, or refusing to do what works" (p. 103). H. Emotion Regulation module, clients are taught "basic steps in letting go" (Linehan, 1993b, p. 93). These steps include; a. Observing, acknowledging and stepping back from ones emotion, b. Experiencing the emotion as a wave coming and going (through the body) while not trying to block, judge, push away or cling to it, c. Noticing that one is not their emotion, d. Practicing willingness and loving your emotion (Linehan, 1993b).

Table F9

Element 9: Wise-Observer Self

Treatment	Qualitative Data
I. MBSR	A. "During mindfulness practice, there may be moments in which the practitioner realizes that the observer, commonly associated with the pronoun, "I" is different from what is being observed" (Kabat-Zinn et al., 1998). B. The "true aim [of mindfulness] is to nurture an inner balance of mind that allows you to face all life situation with greater stability, clarity, understanding, and wisdom, and to act or respond effectively and with dignity out of that clarity and understanding" (Kabat-Zinn, 1993, p. 261). C. Participants are instructed to bring "wise attention" to the experience of symptoms and other difficult experiences. D. "Wise attention involves bringing the stability and calm of mindfulness to your symptoms and to our reactions to them" (Kabat-Zinn, 1990, p. 279). E. Wise attention is differentiated from the usual preoccupation, judgment, reactivity and fear that can come with attention to difficulties. From this place of wise attention emerges a greater degree of equanimity/ acceptance of experience and clarity from which better choices can be made. F. The "wisdom dimension," characteristic of mindfulness, allows the capacity to question what it means to be a "self", a "self in relationship" is included from the very beginning in the program (Kabat-Zinn, 1990, p. 278). G. "Meditation can be extremely useful in helping you ground yourself in the depths of your being and in what is most important to you" (Kaba-Zinn et al., 2002, p. 315). H. Such moments include an experience of wholeness, moments when you connect with the domain of your own being, and often include a palpable sense of being larger than your illness or your problems. This suggests a place where one can act as a container of experience, rather than the experience itself (Kabat-Zinn,1990).
II. MBCT	A. Given less emphasis. B. It is suggested through out the program that there is a "larger space" within which experience can be held in awareness. C. Practicing mindfulness of the present moment "allows the process to unfold, lets the inherent "wisdom" of the mind deal with the difficulty and allows more effective solutions to suggest themselves" (Segal et al., p. 190). D. One can more readily practice acceptance of experience and stay close to the mental struggle by finding a calm place from which to observe.

Treatment	Qualitative Data
II. MBCT (cont'd)	E. An "invariant space" is suggested, which is beyond the ups and downs. F. "The wisdom that helps us to deal with the tragedies and disappointments is the same wisdom that sees, in the ordinary and everyday things of life, how things change from one moment to the next" (p. 332). G. Through the practice of mindfulness, the mind can "find ways of handling difficulties that are wiser than their thinking" (p. 191).
III. ACT	A. ACT places great emphasis on this domain of mindfulness. B. Self as context is one of the core therapeutic processes and is described as a transcendent sense of self, which is stable beyond the content of experience. C. Self as context is proposed as "experientially boundless" (Hayes & Smith, 2005, p. 95). As noted, it is described as a "continuous and secure I from which events are experienced" (Luoma et al., 2007, p. 19). It is also described as the "spiritual aspect of normal human experience" (p. 20), "a transcendent sense of self as perspective," which is "continuous and stable, and yet hard to define" (p. 111). In this sense one is not defined by their pain, but rather is the conscious container for it (Hayes & Smith, 2005). D. "'I' in some meaningful sense is the location that is left when all of the content differences are subtracted" (Hayes et al., 1999, p. 185)…and "has the exact properties of "spirit" (p. 186). E. Self as context process (Observer self) targets attachment to the conceptualized self. 1. Defined as the self who is "the object of summary verbal categorizations and evaluations" (Luoma et al., 2007, p. 90). 2. The conceptualized self is often the more familiar sense of self, due to a lack of contact with the observer self. 3. Conceptualized self emerges from the content of thoughts, feelings, bodily sensations, memories, and behavioral predispositions that one buys into and integrates into a stable verbal picture (Luoma et al.). 4. Problems and a lack of awareness of the more transcendent sense of self arise because identification with the conceptualized self makes new, contradictory information a threat (Hayes et al., 1999). 5. A fluid sense of self as an ongoing process of awareness is diminished when attachment to the conceptualized self dominates (Luoma et al., 2007). 6. Self-conceptualizations can lead to psychological rigidity because they are taken as literal truth and distort objective experience (Hayes & Smith, 2005).

Treatment	Qualitative Data
III. ACT (cont'd)	F. A "sense of observing self is critical to acceptance work because it means that there is at least one stable, unchangeable, immutable fact about oneself that has been experienced directly" (Hayes et al., 1999, p. 186). Self as context is proposed as the place from which it is fully possible to be accepting, defused, present in the moment and valuing, because it is immutable and solid (Hayes & Smith).
IV. DBT	A. "Wise mind" is at the heart of the conceptualization of mindfulness. B. The very first thing clients learn in the mindfulness module is that there is a space between and beyond logical analysis ("Reasonable mind") and emotional over determination ("Emotion mind"). C. "'Wise mind' adds intuitive knowing to emotional experiencing and logical analysis," which "is guided by "feelings of deepening coherence" (Linehan, 1993a, p. 214). D. Wise mind draws from all aspects of knowing, including observation, behavioral learning, logical analysis, kinetic and sensory experiences. It is characterized by direct experience of reality and deeper understanding. E. Because it is not dependant on any one form of knowledge, wise mind is proposed to serve as validation of the inherent wisdom of the BPD clients' experience, which counterbalances a history of invalidation. F. This larger sense of knowing is repeatedly referenced in terms of the clients' experience. 1. During times of uncertainty, the therapist or skills trainers will often ask a client, "What does your wise mind tell you?"

Table F10

Element 10: Direct Experience/Objective Consciousness

Treatment	Qualitative Data
I. MBSR	A. Mindfulness is "an invitation to allow oneself to be where one already is and to know the inner and outer landscape off the direct experience in each moment" (Kabat-Zinn, 2003, p. 148). B. "Meditation practice is at the core of [an] orientation toward reality and its direct experience" (Kabat-Zinn, 1996b). C. The cumulative affect the busyness of life and our minds leads to missing much of what is present. Thinking is a particular culprit in distorting and missing our direct experience. D. We become so consumed by thoughts and feelings about our experience, that in actuality we are experiencing through a veil of embellishments with the past and other ideas about experience (Kabat-Zinn, 1990). E. MBSR highlights that in addition to the increased objectivity and clarity in relation to our internal and external world, mindfulness practice provides a direct sampling of a sense of intrinsic wholeness and connectedness. F. Mindfulness "is a door into direct experiences of wholeness" (p. 164).
II. MBCT	A. "Being mode is characterized by direct, immediate, intimate experience of the present" (p. 73). B. Instructors guide participants toward quality of direct experience .juxtapose this type of awareness to what happens during depressive episodes. C. Rumination is proposed to take one away from a direct sense of the difficulty. D. Because judgments are "concept-based thinking—thinking about the feelings rather than directly experiencing them… it becomes difficult to separate the raw experience from the judgments about it" (p. 190). E. Participants are explicitly made aware of how their minds jump from observation of the direct experience to judgments and self-criticism. As in traditional CBT, participants are helped to distinguish the difference between an event and an interpretation of an event. F. In MBCT however, "the task [is] to observe anything that [arises] with bare attention" (p. 272), rather than to gather evidence for or against what comes up. This direct perception /observation can foster the ability to experience thoughts, mood, physical sensations in a new way, which is different from one's habitual patterns of reactivity, seeing, thinking about things.

Treatment	Qualitative Data
III. ACT	A. The relational frames of language and thinking can be helpful in learning because they allow us to learn without requiring direct experience. However, the referential content of language removes one from the full connection with experience (Hayes et al., 1999). B. "When we are caught up in the world as conceptualized by our minds, we tend to miss some of the opportunities that are present in the current situation" (Luoma et al., 2007, p. 87). C. As we enter the conceptualized world, we lose awareness of our non-conceptual, direct, and current experience. D. The meaning of thought (conceptualization) is confused with literal events (Hayes & Smith, 2005). E. Attachment to the conceptualized self, cognitive fusion, experiential avoidance, dominance of the conceptualized past and future add levels of separation between the person and direct experience (Luoma et al.). F. The processes that constitute mindfulness (being present, acceptance, cognitive defusion, and self as context) elicit increased direct experiencing.
IV. DBT	A. "Direct experience" is proposed as a quality of "Wise Mind." B. The skills taught in mindfulness are taught in the service of stripping away judgment, distraction, imposition of mood on direct experience in the here and now (Linehan, 1993a) and achieving "Wise Mind." The "observe" and "describe" skills teach clients to differentiate between objective qualities of sensations, feelings, thinking and their derived meaning (Linehan, 1993b). C. Experiential exercises during the Mindfulness module help clients learn to differentiate between observing and describing an event, and between describing and judging an event. a. E.g. clients are guided in a creative visualization where they practice observing thoughts/ feelings as they arise (either as clouds in the sky or placing them in boxes on a conveyor belt). "If you find yourself describing thoughts, sensations or feelings, 'step back', in you mind so to speak, and observe your describing (Linehan, 1993b, p. 67). b. Describing is differentiated from judging and examples of this difference are elicited from clients in interactive discussion.

Appendix G

Practice Elements of Mindfulness

Practice Element	Description	MBSR	MBCT	ACT	DBT
I. Formal Practice Behaviors					
A. Sitting meditation	Engaging in processes of mindful awareness while seated either with crossed legs on a cushion on the floor or in a straight chair.	H	H	R	I
B. Body Scan	The practice involves lying on one's back and moving attention through the different regions of the body.	H	H	R	I
C. Proper positioning	Adopting an erect and dignified posture, with the head, neck, and back aligned.	H	H	H	I
D. Designated place and time	Deciding in advance a consistent place and time exclusively reserved for formal practice.	H	H	V	I
E. Practice, Practice, Practice!	Emphasizes the importance of practice over conceptual understanding of mindfulness.	H	H	H	V
II. Formal Practice Cognitions					
A. Body as first point of entry	Bringing attention to the body as the first point of entry into experience of difficult emotions.	H	H	R	F
B. Redirecting attention to the present moment	Noticing when the mind has wandered from the present moment and redirecting attention to the here and now.	H	H	H	H
C. Anchoring Attention on the breath	Bringing attention to the sensations of breathing to anchor attention in the present moment.	H	H	F	H
D. Expanding awareness	Systematically moving attention in a step-wise fashion to include observation of the flow of all experience.	H	H	H	F

Practice Element	Description	MBSR	MBCT	ACT	DBT
III. Informal Practices					
A. Behavioral Practice: Mindfulness in daily living	Deliberate effort to bring moment to moment awareness into all aspects of one's daily life	H	H	H	H
B. Experiential exercises	Range of interventions and techniques other than formal practice to promote felt sense of mindful awareness.	H	V	H	V
C. Cognitive: Attention to internal and external stimuli	Bringing awareness to all aspects of the situation as well as one's internal responses.	H	H	H	H
IV. Clinician Behaviors					
A. Therapist practices with client	The therapist practices in session meditations together with client(s).	H	H	H	I
B. Working in the here and now	Clinician deliberate- in depth-detailed inquiry of clients' moment to moment experience.	V	H	H	F
C. Therapist Mindfulness	The therapist embodies mindfulness and acceptance perspectives and actively practices the methods he/she uses in treatment.	H	H	V	R

Appendix H

Range of Interventions

Treatment	Technique	Core Methods
I. MBSR	A. Formal Meditation	1. Sitting meditation 2. Body-Scan meditation 3. Mindful Hatha Yoga 4. Mindful Walking (In day long intensive)
	B. Informal Practice Exercises	1. Raisin eating exercise 2. Awareness of daily activities 3. Awareness of pleasant and unpleasant events
	C. Experiential Exercises	1. Nine dots exercise 2. Akido-based interpersonal dynamic exercise
	D. Metaphor and Analogies:	Mindfulness as: 1. Trying to fall asleep: Illustrates acceptance, non striving 2. Tuning the instrument: To optimize awareness 3. Skilled athlete: Mindful participation: responding flexibly but smoothly to the demands of the task with alertness and awareness 4. Upstream/Downstream story: Interconnectedness 5. Letting go: 6. Monkey metaphor and Illustrative story: Illustrates how attachment to pleasurable experience keeps one stuck.
	E. Poetry:	1. Thoreau's "bloom of the present moment" Martha Graham's "make the moment vital and worth living…do not let it slip away unnoticed and unused."
II. MBCT	A. Formal Meditation	1. Sitting meditation 2. Body-Scan meditation 3. Mindful Hatha Yoga 4. Mindful Walking (optional)
	B. Informal Practice Exercises	1. Raisin eating exercise 2. Awareness of daily activities 3. Awareness of pleasant and unpleasant events
II.MBCT (cont'd)	C. Experiential Exercises	1. Thoughts and feelings exercise 2. Bringing the difficult into awareness in the body

Treatment	Technique	Core Methods
	D. Poetry:	1. Mary Oliver's: "Wild Geese" conveys a "felt sense" of connectedness. 2. "The Guest house" by Rumi, a 13-century Sufi poet conveys "active acceptance" of experience.
	E. Metaphor	Mindfulness 1. Gear shifting analogy (from doing to being mode) 2. Thoughts as "clouds in the sky" coming and going 3. Be like a mountain; beyond verbal descriptions, impervious to the weather of experience 4. Seeing the "tape in the mind"; naming thought patterns 5. Acceptance: Emotions as a rain storm
III. ACT	A. Formal practices (core)	1. Soldiers in a parade/Leaves on a stream exercise 2. Awareness of experience meditation
	(Recommended)	3. Sitting meditation 4. Body-Scan meditation
	B. Informal practices	1. Raisin eating exercise 2. Awareness of daily activities
	(Recommended)	1. Paradox of control: a. Chocolate cake exercise b. Rules of the game exercise c. Daily willingness diary d. Clean versus dirty discomfort diary
	C. Experiential Exercises	2. Defusion and acceptance exercises a. Milk, milk, milk b. Taking your mind for a walk c. Cubby holing d. Tin can monster exercise i. Systematically explore response dimensions of difficult overall event; teaches client to let go of struggle and instead accept a difficult private experience e. Physicalizing exercise (willingness, visualization)

Treatment	Technique	Core Methods
III. ACT (cont'd)		f. Contents on cards exercise (physical metaphor for how avoidance increases effort without delivering on the promise reducing contact) 3. Self as context exercises: a. Mental polarity exercise b. Observer self exercise c. Pick an identity exercise
	D. Metaphors	1. Paradox of control: a. Chinese handcuffs: i. No matter how hard the client pulls to get out of them, pushing in is what it takes. b. Driving with the rearview mirror: i. Even though control strategies are taught, it doesn't mean they work. c. Feedback screech: Its not the noise that is the problem, it's the amplification caused by control strategies d. Box full of stuff e. Tug of war with a monster i. The goal is to drop the rope, not win the war f. Jelly doughnut/ Falling in love i. Illusion of control; shows that even positive emotions or thoughts can't be controlled. g. Polygraph i. Shows that the higher the "stakes" for extablishing control, the more uncontrollable the results. 2. Acceptance/Letting go of the struggle: a. Stuck in quicksand, b. Gambler playing a rigged game c. Investing with a bad investment advisor, d. Person in a whole with only a shovel: e. Illustrate that the client is doing something and it is not working, but nothing else can work until the client stops digging. 3. Willingness as an action in the presence of difficult internal experience: a. Joe the bum b. Passengers on the bus

Treatment	Technique	Core Methods
III. ACT (cont'd)		4. Defusion: a. Passengers on a bus b. Bad cup metaphor (non judging) 5. Self as context a. Chessboard metaphor
IV. DBT:	A. Formal practices	1. Observing your breath exercises (very brief closed focus meditation exercises in Distress Tolerance module)
	B. Informal practices	1. Awareness exercises (informal mindfulness exercises in Distress Tolerance module)
	C. Experiential Exercises	1. "Observe" exercises: 2. "Experience your fanny on the chair." 3. "Watch in your mind the first two thoughts that come in." 4. "Imagine that your mind is a conveyor belt, that thoughts / feelings are coming down the belt. Put each thought and /or feeling in a box near the belt." a. "If you find yourself distracted, observe that; observe yourself as you become aware that you were distracted." b. "Observing" and "Describing" emotions exercise c. "Effectively" exercises: i. Role playing objective, relationship, and self respect effectiveness d. Paying attention to sensations in the face exercise (in Emotion Regulation module)
IV. DBT (cont'd)		a. Get in touch with a current pain → notice experience → say acceptance prayer → notice the difference. b. Get in touch with a current pain → notice experience → ruminate → notice experience → say in mind "just this moment" and let go of thoughts of the future and past → notice difference in experience

Treatment	Technique	Core Methods
		Half smile exercises: adopting a serene, accepting face
	D. Metaphors:	c. Like learning to be a blanket spread on the ground on a fall day, letting leaves fall as they may without fighting them off.
	1. Learning Radical Acceptance	a. Like a gardener's learning to love the dandelions that come into the garden year after year, no matter what the gardener does to get rid of them
	2. Learning Acceptance	
	3. Life led Willingly:	b. Like playing a game of cards (the object is to play each hand as well as possible, not to control what cards are dealt
		c. Like hitting baseballs or tennis balls thrown by a ball throwing machine (the person can't stop or even slow down the balls coming, so she just swings as well as she can and then focuses on the next ball)

Appendix I

Clinical Considerations Checklist

The therapist:

1. Integrates acceptance with change strategies .
2. Focuses on cultivating mindfulness.
3. Provides experiential understanding of mindfulness.
4. Practices and models mindful awareness and acceptance of self and client.
5. Normalizes client experiences and balances the power differential.
6. Conceptualizes and practices with a holistic view.
7. Elicits and monitors commitment to self care.

C1. Integrate acceptance and change strategies

1. Therapist considers client's degree of affect tolerance and capacity for emotion regulation when deciding ratio of balance to change.
    a. Lower affect tolerance → more concrete, structured interventions, less interoceptive exposure (e.g., exercises, metaphor, very short guided meditations).
    b. Higher affect tolerance → more traditional mindfulness interventions (e.g. formal practice, longer guided visualizations may be used).

C2. Focus on cultivating mindfulness

1. Assess:
    a. Cognitive, emotional, and behavioral non-acceptance (i.e. experiences the client has come to therapy to get rid of)
    b. Prior healthy and unhealthy coping strategies (i.e. avoidance strategies).

c. Differentiate short-term from long term strategies.

d. Determine and differentiate primary from secondary experience.

2. Optimize mindfulness and acceptance of primary experiences.

    a. Determine degree of formal practice v. informal and other practices.

        i. Based on degree of affect tolerance and patient preferences.

    b. Integrate strategies that optimize common elements (see table 2).

        i. Begin sessions with short meditation practice.

        ii. Explore client experience in detail and highlight psycho-educational material based on client experience with practice.

Therapist optimizes mindfulness conceptual elements

Element	Description
1. Acting with awareness/Present moment awareness	The ability to maintain attention and awareness in the present moment, without distraction.
2. Observing	The ability to actively and intentionally bring attention to particular aspects of internal (somatic, affective, cognitive) or external (perceptual) experience.
3.Describing/labeling with words	The ability to use language to objectively describe these experiences.
4. Non judging of experience	The ability to assume the position of an impartial witness to experience.
5. Non reactivity to internal experience	The ability to use above skills to impartially observe one's impulses to cling to or reject some aspects of experience.
6. Observer self	The awareness of a continuous, invariant, self who observes and contains experience, yet is not synonymous with these experiences.
7. Direct experience	Bare, objective awareness, which is not embellished or augmented based on other experiences or beliefs.
8. Exposure-avoidance	The ability to maintain increasing amounts of experiential contact (awareness and attention) with difficult internal experience, thereby reducing reactive avoidance of such experience.
9. Meta-cognition-cognitive defusion-ecentering	The ability to maintain an awareness thinking and feeling as impermanent processes and not become identified with them.
10. Acceptance-willingness - letting go	The ability to actively allow experience, without pushing away nor clinging to any particular aspect of it.

Therapist optimizes mindfulness with core practices

Formal Practice Behaviors	Description
Sitting meditation	Engaging in processes of mindful awareness while seated either with crossed legs on a cushion on the floor or in a straight chair.
Body scan	Lying on one's back and moving attention through the different regions of the body.
Proper positioning	During sitting meditation; adopting an erect and dignified posture, with the head, neck, and back aligned.
Designated place and time	Deciding in advance a consistent place and time exclusively reserved for formal practice.
Consistent practice	Emphasizes the importance of practice over conceptual understanding of mindfulness.
Formal practice cognitions	
Body as first point of entry	Bringing attention to the body as the first point of entry into experience of difficult emotions.
Redirecting attention to the present moment	Noticing when the mind has wandered from the present moment and redirecting attention to the here and now.
Anchoring attention on the breath	Bringing attention to the sensations of breathing to anchor attention in the present moment.
Expanding awareness	Systematically moving attention in a step-wise fashion to include observation of the flow of all experience.
Informal Practice	Attention to internal and external stimuli.

C3. Provide experiential understanding of mindfulness

Therapist:

2. Works in the here and now of emotional experience

    a. Brings client experience into the room with experiential exercises

    b. Notices client strategies for experiential avoidance

- *Internal avoidance*: distraction, excessive worry, dissociation, telling self to think differently, daydreaming.
- *Overt emotional control*: drinking, drugs, self injury, thrill seeking, gambling, overreacting, avoiding physical situations or reminders.
- *In session avoidance:* topic changes, argumentativeness, aggressiveness, dropping out of therapy, coming late to sessions, chronic crises, laughing, focusing exclusively on the positive.

3. Uses a variety of experiential interventions
4. Links client experience with necessary didactic information
    a. Universality of wandering mind, clinging versus pushing away experience, explores bodily sensations, emotions, thoughts, and impulses.
    b. Does not apply techniques in a "cookie cutter" fashion.

C4. Practice and model mindful awareness and acceptance of self and client.

1. Personal practice and mindfulness development
    a. Rule of thumb: need to have experienced what is taught
    b. The more formal practice used, the more therapist practice needed
    c. For informal practice and exercises, experiential workshops

2. Modeling mindfulness and acceptance in session.
    a. Therapist embodies a gentle and invitational approach
    b. Is genuinely curious of the client's moment to moment experience
    c. Refrains from a problem solving approach
    d. Welcomes the occurrence of uncomfortable mood states in clients as teaching opportunities

e. Is willing to hold his or her own uncomfortable or difficult experience, without ducking or avoiding.

Strategies for modeling mindfulness and acceptance stance (from Segal et al., 2002)

Recommendation	Description
Use of the present participle	• When describing actions you would like the client(s) to take, use the present participle. • "For example, "… just noticing whether your mind has wandered…" or ". . . bringing your attention back to the breath…" • Rather than "Notice whether…" or "Bring your attention back…"
Instruction delivery	• Deliver instructions for meditation in a matter of fact way. • Mindfulness meditation is not a relaxation exercise, so there is no need to adopt a special tone or deepen the voice to relax the client. • Do not read instructions.
Giving encouragement	• The clinician should use the phrase "as best you can" rather than using the word "try." • For example, " … as best you can, bringing your awareness to settle on the breath" rather than "try to bring your awareness to the breath…"
Practicing with clients	• Do each practice with the client(s). • In this way, you are guiding out of your own moment to moment experience during the guided meditations.
Allowing space for silence	• Allow for spaces and stretches of silence between instructions. • Give the client(s) the space to "do" the practice for themselves.

C5. Normalize client experiences and balance the power differential

In Style:

- The therapist "uses a vocabulary and idiom which connects with people rather that creates distance and resistance" (MBSR protocol).

- "Therapist speaks to the client from an equal, vulnerable, compassionate, genuine, and sharing point of view and respects the client's inherent ability to move from unworkable to workable responses" (Luoma et al., 2007, p. 285).
- Boundaries are less arbitrarily drawn based on theoretical absolutes. Instead, boundaries are determined by the therapist's unique set of interpersonal limits (Linehan, 1993a).

Content:

- Self-disclosure to normalize the patient's experience or responses by disclosing agreement with the patient's perceptions or interpretations of a situation, understanding of her emotions, or valuing of her decisions."
- "Two Mountains" metaphor an intervention, which conveys the universality of clients' struggles and may be particularly helpful in minimizing the power differential between therapist and client (Roemer and Orsillo, 2008; adapted from Hayes, Batten et al., 1999).

Two mountains metaphor

Two Mountains Metaphor:
"As your therapist, I will sometime offer some observations about your struggle and make some suggestions about possible options in response to those struggles. It may seem as if I am on the top of a mountain, with the mountain representing the barriers you face as you work toward obtaining a life that is fulfilling and satisfying. It may seem that from my perch on the mountain I can more clearly see the things that contribute to your struggle, as I have already succeeded with the climb, but that is not my view of therapy. I believe that the struggles you are experiencing are common to all human beings and that therapists are not immune to those struggles. In fact, therapists are just like other human beings and that therapists are not immune to those struggles. In fact, therapists are just like other human beings in that we all have our own mountain with our own struggles and obstacles. As your therapist, I may at times be able to offer some perspectives on your struggle because I have some distance and a unique perspective from my perch over here on my own mountain" (p. 72).

C6. Conceptualize and practice with a holistic view

Table 5. Conceptual and practice holistic components.

Holistic concepts	Recommended formal and informal practices
1. Awareness to the interrelatedness of mind and body	• Body-scan mediation • Therapist inquiry of bodily sensations during affective shift
2. Awareness of intrinsic wholeness	• Mountain meditation • Observer exercise • Chess board metaphor
3. Awareness and sense of interconnectedness	• Loving Kindness meditation • Raisin eating exercise

C7. Elicit and monitor commitment to self care

The therapist:

1. Elicits client commitment,

    a. Assess client commitment

    b. Explore prior change attempts

    c. Elicit awareness that new approach is necessary

2. Discusses personal response-ability for self-care,
    a. Explore the notion of personal responsibility and differentiate responsibility from blame.
    b. Emphasize that the client is not to blame, but has simply been using short term strategies long-term that,
    c. Differentiate responsibility from *response-ability.* In the context of mindfulness-based treatment, the client will learn that he or she is able to respond differently to the experiences with which they are having difficulty.
5. Targets barriers as opportunities to practice.
    a. Practice, practice, practice
    b. Difficulties seen as opportunities for practice

Recommended therapist responses to client difficulties with practice (Segal et al., 2002)

Client Difficulty	Therapist Response
"I couldn't find the time to do the homework"	• Be explicit: inform client that not doing the homework will affect how much they will get out of treatment. • Instruct client in the coming week to bring awareness to thoughts and feelings that might be blocking homework activity, and note what was found.
"Its boring!" or "I got irritated"	• Respond empathetically and accepting way. • Be curious about their experience: Ask, "at what point did this arise/" How long did it last?" etc. • Suggest that the client simply choose to note any irritation or boredom as a state of mind, from which, once noticed, attention may be redirected to the breath.
"I got sleepy/fell asleep" or "It was really relaxing"	• "That's interesting, I hope that eventually this will lead to "falling awake." • "Ok, but keep in mind that the aim of meditation is more to cultivate awareness than relaxation."
"I'm trying my best and I still don't think I get it" or "I need to work harder at it."	• Tell clients: "the emphasis is on allowing things to be held in nonjudgmental awareness, exactly as they are in this moment." • The only goal is to practice, but it is not a striving to achieve some special state.
"I just got too upset."	• The therapist should be vigilant for signs that the client is experiencing difficulties related to past traumas. • Sensitively guide client in how to relate skillfully by not retreating away entirely or being blown away by intense experience.
"My mind wouldn't stay still."	• Explore with client the power of thoughts and feelings to shape behavior (not practicing). • Encourage client to "just do it" and continue to observe the thoughts, feelings, and impulses that arise from their wandering mind.

Appendix J

Sample Conceptualization of Experiential Avoidance Strategies
(From Walser and Westrup, 2005)

<table>
<tr><td colspan="2">Things you have struggled with and tried to make go away:

Feeling sad, pain, anxiety, isolation, nervousness, sadness, fear, thinking “I’m not worthy,” low self esteem, powerlessness, anger, disappointment, lack of confidence, feelings of emptiness, loneliness, memories, thinking “I’m damaged goods,” feeling unliked, feeling confused, not being forgiven, not enough willpower, feeling crazy, thinking “Why me?”</td></tr>
<tr><td>A. Positive efforts to make the above go away:

1. Self help books
2. Positive self talk
3. Self affirmations
4. Therapy
5. Medications
6. AA
7. Religion and spirituality
8. Planning for the future
9. Talking with family and friends
10. Exercise and diet
11. Getting out of bad relationships
12. Getting a better job
13. Learning more about PTSD
14. Understanding my self better
15. Mindfulness
16. Acceptance of the trauma
17. Alternative health approaches
18. Vitamins
19. Acupuncture
20. Taking legal action
21. Inpatient programs</td><td>B. Negative efforts to make the above go away:

1. Substance abuse
2. Isolation
3. Moving from relationship to relationship
4. Changing jobs frequently
5. Moving frequently
6. Running from relationships
7. Avoiding people, places and things
8. Random sex
9. Driving fast
10. Being angry
11. Overeating or not eating enough
12. Throwing up
13. Cutting or other self injury
14. Attempting suicide
15. Never going anywhere
16. Always saying no or always saying yes
17. Pushing away people I care about
18. Staying quiet, never telling anyone about my insides
19. Workaholism
20. Dissociation</td></tr>
</table>

Appendix K

Techniques and Descriptions

Practice	Technique	Description
Formal Meditation	• Sitting meditation	Engaging in processes of mindful awareness while seated either with crossed legs on a cushion on the floor or in a straight chair. Head, back, and neck are aligned. Attention is directed in a step-wise fashion from anchoring on the breath — to the body as a whole — noticing particular bodily sensations — sounds — emotions — thoughts. If the mind wanders, clients are instructed to simply bring attention back to the breath whenever this occurs.
	• Body-Scan meditation	Lying on ones back, or sitting in a chair, with eyes closed. Client is invited to focus attention sequentially on parts of the body, often beginning with the toes of one foot and moving slowly up the leg, then through the other leg, torso, arms, neck, and head. With each body part, client is instructed to notice the sensations that are resent with openness and curiosity, but without trying to change them. If no sensations are noticeable, they simply notice the absence of sensations (Kabat-Zinn, 1990).
	• Mindful Hatha Yoga	Slow, gentle yoga postures cultivate mindful awareness of the body while it is moving, stretching or holding a position.
	• Mindful Walking	Attention focused on the sensations in the body while walking. Gaze is straight ahead. Attention directed to the movements, shifts of weight and balance, and sensations in the feet and legs associated with walking.

Practice	Technique	Description
Formal Meditation (continued)	• Loving Kindness Meditation	This practice directs the client to use silent mental phrases of the wished for well being (e.g. "May I be happy, May I be free from suffering"). These phrases also focus on the inherent connectedness in the world and the universality of the desire to be happy and free from suffering. They are intended to cultivate attitudes, intentions, and feelings of love, kindness, and compassion. Intentions are set, first for oneself, and then for a sequence of other recipients that typically includes a loved one, a friend, a neutral person, one's community, a person with whom one has difficulties, all people, or all beings.
	• Leaves on a stream exercise	Guided visualization meditation, where client is instructed to notice thoughts as they arise and gently place them on a leaf as it floats away on the stream.
	• Observing your breath exercises	Very brief closed focus meditation exercises **Example instruction:** "Focus your attention on your breath, coming in and out. Observe your breathing as a way to center yourself in your wise mind. Observe your breathing as a way to take hold of your mind, dropping off non-acceptance and fighting reality.
	• Counting your breath	As you inhale, be aware "I am inhaling, 1." When you exhale be aware "I am exhaling, 1". "I am inhaling, 2." And slowly exhaling, "I am exhaling, 2." Continue until 10. After you have reached 10, return to 1. Whenever you lose count, return to 1.

Practice	Technique	Description
Informal Practice Exercises	• Raisin eating exercise	Client is given a few raisins and asked to explore them with interest and curiosity, as if they have never seen them before, noticing all the sentient aspects as well as its "belly button" and considering where the raisin comes from.
	• Awareness of daily activities	Client encouraged to apply mindful awareness learned in session to routine activities, such as washing dishes, cleaning the house, eating, etc.
	• Awareness of pleasant and unpleasant events	Together with pleasant/unpleasant events calendar, in which client notes one pleasant event per day, along with associated thoughts, emotions, and sensations. Intended to promote increased understanding of habitual reactions to pleasant/unpleasant experience.
	• 3-Minute breathing space	1. What is my experience right now: Attention brought to range of internal experience currently happening 2. Focus full attention on the movement and sensations of breathing, noticing each in breath and out breath as it occurs 3. Expand awareness to the body as a whole, including posture and facial expression, and notice the sensations that are present, with acceptance and non-judgment.
	• Awareness exercises	Informal mindfulness exercises in Distress Tolerance module.

Practice	Technique	Description
Experiential Exercises	• 9 dots exercise	Vivid and easily grasped example of how the way we perceive a problem tends to limit our ability to see solutions to it. The solution lies in extending the lines drawn beyond the imaginary square that the dots make.
	• Thoughts and feelings exercise	Client is asked to close their eyes and imagine that they are walking down the street and seeing someone they know on the other side. The client smiles and waves, but the other person walks by without seeming to notice. The client is invited to describe the thoughts, feelings, and sensations they experience when imagining this scene. Clt experience is used to illustrate the ABC model of behavior and the idea that "thoughts are not facts."
	• Chocolate cake exercise	Demonstrates the paradox of control. Therapist instructs client to not think about warm chocolate cake (Particularly effective with clients struggling to control obsessive thoughts/ruminations), (Hayes et al., 1999, p. 124).
	• Rules of the game exercise	Therapist instructs client to remember the numbers 1,2, 3 because someday in the future, he will be asked what are the numbers and given 1 million dollars. (Demonstrates the arbitrary and additive nature of learned personal history).
	• Milk, milk, milk	Therapist chooses a particular phrase or word to which the client has become attached to as literal truth. Client is asked to say the phrase over and over again (can do fast, then slow, in a funny voice) to help client defuse from meaning.

Practice	Technique	Description
Experiential Exercises (continued)	• Taking your mind for a walk	Clients are paired up (or therapist and client), one is the person, one is the person's mind. The "person" walks around wherever they wish to go. The "mind" follows with a constant stream of consciousness. The "person" is to continue with their own intentional actions, regardless of what the mind tells him/her to do. Demonstrates defusion.
	• Cubby holing	Client is asked to compartmentalize individual aspects of experience and defuse from meaning by preceding each experience with the phrase "I am noticing"….the sensation, emotion, thoughts, memory, impulse etc.
	• Tin can monster exercise	Systematically explore response dimensions of a difficult overall event; teaches client to let go of struggle and instead just accept a difficult private experience.
	• Physicalizing exercise	Client is asked to visualize the size, texture, shape, color, etc of the difficult emotion with which he is struggling.
	• Contents on cards exercise	All of the client's unwanted thoughts and emotions are written on index cards and tossed at the client as he bats them away or allows them to land on his lap. Physical metaphor for how avoidance increases effort without delivering on the promise reducing contact.
	• Mental polarity exercise	Any positive identity statement can automatically draw its opposite, and vice versa. Peace of mind is not possible at the level of content, and thus an attachment to private evaluative thought content will always produce a sense of unease and threat.

Practice	Technique	Description
Experiential Exercises (continued)	• Observer self exercise	Guided visualization in which client is guided to remember various benign moments in time with the awareness that, despite numerous events and changes, there is a continuous self who has been present, and unchanged thru all of those experiences. Establishes a sense of self that exists in the present and provides a context for cognitive defusion.
	• DBT "Observe" exercises	• "Experience your fanny on the chair." • "Watch in your mind the first two thoughts that come in." • "Imagine that your mind is a conveyor belt, and that thoughts an/or feelings are coming down the belt. Put each thought and /or feeling in a box near the belt." • "If you find yourself distracted, observe that; observe yourself as you become aware that you were distracted."
Metaphor and Analogies	Mindfulness as: • Trying to fall asleep: • Tuning the instrument: • Skilled athlete:	 Illustrates acceptance, non striving. To optimize awareness Mindful participation: responding flexibly but smoothly to the demands of the task with alertness and awareness.
	• Upstream/Downstream story	Demonstrates Interconnectedness of events and how mindfulness opens up possibilities for better solutions.
	• Monkey metaphor	<u>Illustrative story:</u> Illustrates letting go and how attachment to pleasurable experience keeps one stuck.

Practice	Technique	Description
Metaphor and Analogies (continued)	• Thoughts as "clouds in the sky"	Demonstrates impermanent nature of experience; Coming and going.
	• Be like a mountain	Beyond verbal descriptions, impervious to the weather of experience.
	• Acceptance: Emotions as a rain storm	No matter how much one tries to cover up, you still get wet. Might as well accept and even embrace the rain.
	• Chinese handcuffs	Paradox of control: No matter how hard the client pulls to get out of them, pushing in is what it takes.
	• Feedback screech	Its not the noise that is the problem, it's the amplification caused by control strategies.
	• Box full of stuff	Describes metaphorically the additive nature of history and that avoiding or denying painful past life experiences is futile.
	• Tug of war with a monster	The goal is to drop the rope, not win the war.
	• Jelly doughnut/ Falling in love	Illusion of control; shows that even positive emotions or thoughts can't be controlled.
	• Polygraph	Attempting to master control of experience is like trying to control a polygraph machine. Shows that the higher the "stakes" for establishing control, the more uncontrollable the results (Hayes et al., p. 123).

Practice	Technique	Description
	• Stuck in quicksand	Difficult thoughts, feelings, and sensations are like quicksand, the more you struggle, the more you suffer.
	• Person in a whole with a shovel	Illustrates that the client is doing something and it is not working, but nothing else can work until the client stops digging.
	• Joe the bum metaphor	Practicing acceptance of even the least wanted guests in one's experience.
	• Passengers on the bus	Unwanted thoughts and emotions as scary passengers on the bus of your life. Time spent attempting to assuage or control the passengers derails one from their path.
	• Chessboard metaphor	Pieces are all the good and bad internal experiences battling each other. Being at the board level allows one to hold all the pieces.
	• Learning Acceptance	Like learning to be a blanket spread on the ground on a fall day, letting leaves fall as they may without fighting them off.
	• Life led willingly	Like a gardener's learning to love the dandelions that come into the garden year after year, no matter what the gardener does to get rid of them.
	• Like hitting baseballs or tennis balls thrown by a ball throwing machine	The person can't stop or even slow down the balls coming, so she just swings as well as she can and then focuses on the next ball.