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Investigating the Similarities and Differences between Practitioners of Second and Third Wave Cognitive-Behavioral Therapies

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Abstract

There has been much discussion in the literature recently regarding the conceptual and techniual differences between so-called second (e.g., Beckian cognitive therapy) and third "wave" (e.g., acceptance and commitment therapy) behavior therapies. Previous research has not addressed the potential similarities and differences among the practitioners of these types of approaches. The current study examined possible differences in the characteristics of second wave (n=55) and third wave cognitive-behavioral therapists (n=33) using an internet-based survey. There were differences found at the technique level between the two groups. As expected, third wave therapists reported greater use of mindfulness/acceptance techniques. Also, third wave therapists reported greater use of exposure techniques and second wave therapists reported greater use of cognitive restructuring and relaxation techniques. In general, third wave clinicians were more eclectic at the technique level, and demonstrated significantly greater use of family systems techniques, existential/humanistic techniques, and the total number of techniques used. No significant differences were found on the attitudinal measures administered, including reliance on an intuitive thinking style, acceptance of complementary and alternative therapies and related health beliefs, or most attitudes toward evidence-based practices. We did not identify many differences between second wave and third wave therapists other than in terms of the techniques they employ. The clinical and research implications for these findings are discussed.

Keywords

cognitive behavioral therapy; mindfulness and acceptance therapies; therapist characteristics

Hayes (2004) proposed that there are three successive waves, or "dominant assumptions, methods, and goals," of behavior therapy that have surfaced thus far (p. 640). Each has been conceptualized as evolving out of the previous "wave," therefore resulting in many shared features between the waves. The focus of the first wave was on observing, predicting and modifying behavior in an effort to promote mental health (Skinner, 1953; Watson, 1925). This wave of therapy shifted when researchers reexamined a link between dyfunctional cognitions and maladaptive behaviors and sought to help individuals reappraise distorted thinking patterns using strategies like guided discovery and direct refutation, spawning the second wave therapies such as cognitive therapy (CT; Beck, 1976) and Rational Emotive Behavior Therapy (REBT; Ellis, 1957). These treatments gained widespread popularity due to randomized clinical trials which showed their efficacy for a wide range of psychiatric disorders (Butler, Chapman, Forman, & Beck, 2006). However, critics of second wave therapies argue that research generally has not demonstrated the benefit of adding cognitive

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change strategies to traditional behavior therapy (Longmore & Worrell, 2007). This prompted the rise of a new crop of therapies promoting novel methods for dealing with problematic internal experiences.

The third wave of behavior therapies represents a diverse collection of interventions that includes Dialectical Behavior Therapy (DBT; Linehan, 1993), Mindfulness-Based Cognitive Therapy (MBCT; Segal, Williams, & Teasdale, 2002), Acceptance and Commitment Therapy (ACT; Hayes, Strosahl, & Wilson, 1999), and others. These therapies encourage mindfulness of internal experiences and emphasize acceptance instead of change of negative internal sensations and thoughts (Herbert, Forman, & England, 2009). A meta-analysis by Öst (2008) found that the overall effect sizes was moderately strong for ACT and DBT, which is comparable to effect sizes for second wave therapies (e.g., see Butler et al., 2006).

Recently there has been much discussion regarding the differences between traditional CBT and acceptance-based CBT, with most of the discussion focusing on ACT and CT. Forman and Herbert (2009) noted that although both focus on behavioral principles, second wave therapies use behavioral strategies to correct dysfunctional beliefs and reduce symptoms whereas third wave therapies use behavioral strategies to target more meta-cognitive processes. Both approaches are goal-oriented, but second wave therapies focus more on presenting symptoms whereas third wave therapies focus more on working toward broader life goals. Other researchers believe that the two waves of therapy are not distinct from one another, and that acceptance-based CBT simply has add techniques or offer subtle differences in theory. Arch and Craske (2008) warn that distinguishing between these treatments may veil the common mechanisms of change in the therapies, and they propose that cognitive restructuring can be viewed as an exposure exercise that serves a similar purpose as cognitive defusion in ACT. Hoffman and Asmundson (2008) argue that although ACT and other third wave therapies offer new treatment ideas, there is not enough evidence to suggest an entirely new treatment approach. Others have disputed this contention (Gaudiano, 2010; Herbert & Forman, in press).

Although there has been a great deal of debate about the relative efficacy of each therapy (Gaudiano, 2009; Öst, 2008), as well as the technical and conceptual similarities and differences between the therapies, we were unable to find previously published studies on the characteristics of the therapists who practice these approaches. As part of a larger study, we conducted a survey of the practices and attitudes of psychotherapists. In the current article, we primarily were interested in examining in second (e.g., traditional cognitive-behavioral) versus third wave (e.g., acceptance-based cognitive-behavioral) therapists' self-reported use of psychotherapy techniques from various orientations. Furthermore, some authors have expressed concerns that third wave therapists are "getting ahead of the data" or may be using newer approaches that are not empirically supported (Corrigan, 2001; Öst, 2008). Therefore, we also measured factors that could be related to clinical practice judgments, including attitudes toward evidence-based mental health practices, beliefs about other alternative and nontraditional therapies, and reliance on intuition in decision making. Are third wave therapists really different in their practices and attitudes as some have suggested? Or are they largely similar to their more traditional CBT counterparts? Hayes' "wave" conceptualization would suggest more similarities in background and attitudes than differences. However, the groups would be predicted to differ in the techniques and strategies they use, as behavior therapy continues to evolve and newer practices are integrated as the processes underlying treatment are reconceptualized based on emerging data.

Method

Participants

Participants were recruited from an advertisement that was posted to psychotherapy-oriented listservs, including the Association for Behavioral and Cognitive Therapies, Acceptance and Commitment Therapy, and the Society for a Science of Clinical Psychology (American Psychological Association). The participants were required to be a licensed, practicing therapists, over the age of 21, with the ability to read and write in English. A total of 288 participants initially consented to participate. Of those people who consented to participate, 176 completed enough questions to be included in data analysis. The mean age of these participants was 44.4 (*SD* =11.43), and the majority was female (61.5%) and white (91.2%). Regarding practice characteristics, the mean time since completing their degree was 15.0 years (SD = 10.7). A total of 38.6% were psychologists and 37.6% were in private practice.

Participants were asked to identify a primary therapeutic orientation, which was determined by a response to the question "Which one best describes your primary theoretical orientation?" with the options of: Behavioral Analytic/Radical Behavioral, Traditional Behavioral, Traditional Cognitive, Traditional Cognitive-Behavioral, Acceptance-Based Behavioral/Cognitive, Mindfulness/Buddhist/Eastern Psychology, Eclectic, Energy Psychology, Existential/Phenomenological, Psychoanalytic, Psychodynamic/Neo-Freudian, Systems/Family Systems, Humanistic/Client-centered. The current study only considered the data from participants who self-identified as either practitioners of Traditional Cognitive or Cognitive-Behavioral (n=55) versus Acceptance-Based Behavioral/Cognitive (n=33). We did not include the Mindfulness/Buddhist/Eastern Psychology therapists in our analyses because there were only 7 available and they do not necessarily come from a self-identified cognitive-behavioral orientation. Similarly there were too few "first wave" therapists identified (e.g., radical behavioral; n=4) to examine in separate analyses so this group also was excluded.

Measures

Treatment Approaches and Techniques Questionnaire (TATQ)—The TATQ is a 36-item self-report questionnaire assessing psychotherapists' use of different techniques (Sharp, Herbert, & Redding, 2008). Responses range from 0 = "Never use/would not use" to 3 = "Almost always use/would definitely use." The techniques listed correspond with 6 primary theoretical orientations in psychotherapy: systems-family systems; cognitive-behavioral, psychoanalytic-psychodynamic; power-energy therapies (e.g., thought field therapy); existential-humanistic-phenomenological; radical behavioral-applied behavior analysis. Six items were added to the TATQ for this study to also assess mindfulness/ acceptance-based techniques: meditation practices, logical paradoxes, "defusion" techniques, values clarification, metaphors, experiential exercises. Factor analysis supports the overall content validity of the questionnaire (Sharp et al., 2008).

Evidence-Based Practice Attitude Scale (EBPAS)—The EBPAS is designed to measure four types of practitioner attitudes toward evidence-based practices: 1) intuitive appeal of the treatment (EBPAS-Appeal), 2) requirements for using a treatment (EBPAS-Requirements), 3) openness to change and innovation (EBPAS-Openness), and 4) perceived divergence between clinical and research practices (EBPAS-Divergence) (Aarons, 2004). The measure contains 15 items and Aarons (2004) reported good internal consistency reliability and validity. The internal consistencies for the scales in this sample were: divergence scale α = .68, requirements scale α = .92, appeal scale α = .78, openness scale α = .84.

Rational-Experiential Inventory (REI)—The REI is a measure that is designed to capture rational versus intuitive thinking (Pacini & Epstein, 1999). In the current study, only the 20-item experiential/intuitive scale was administered. A higher score on the REI indicates greater reliance on intuition. An example item for this scale is "I can usually feel when a person is right or wrong, even if I can't explain how I know." Internal consistency with the current sample was .93 according to Cronbach's α.

Complementary and Alternative Medicine Health Belief Questionnaire (CHBQ)—The CHBQ was designed to measure beliefs in complementary and alternative medicine (CAM) and attitudes toward a holistic approach toward health (Lie & Boker, 2004). An example item is "A patient's symptoms should be regarded as a manifestation of a general imbalance or dysfunction affecting the whole body." The measure includes a total of 10 items and is reported to have good internal consistency and convergent validity with other measures of CAM attitudes (Lie & Boker, 2004). The internal consistency for the current sample according to Cronbach's α was .87.

Magical Beliefs about Food and Health Scale (MFH)—The MFH is a measure that was designed to measure erroneous health beliefs that are not supported by scientific evidence (Lindeman, Keskivaara, & Roschier, 2000). The measure typically includes 18 items, but only the 10-item general health beliefs subscale was administered in the current study. A sample item from this subscale is "It is good to detoxify one's body every now and then with a fast." Lindeman et al. (2000) found the measure to be both reliable and valid. Internal consistency for this sample according to Cronbach's α was .89.

Procedure

The study was approved by the Institutional Review Board of Butler Hospital. The listserv advertisement included a request to forward the message to eligible colleagues who might be interested in completing the survey in a strategy known as "snowball sampling" (Browne, 2005). In addition to demographics, we collected information on the practice characteristics of the sample, including the number of years since completing the highest degree, the number of years since attaining licensure, type of profession, and primary work setting. The survey was anonymous; however, participants could provide person information to be entered into a lottery for a $50 gift card. IP addresses were examined to identify multiple responses from the same computer and demographic information was cross-checked to look for identical patterns of data entry. In addition, the time taken to complete the survey was examined to identify potentially invalid entries. We did not have to exclude any participants based on this review.

Results

Demographics

Preliminary analyses examined the demographic variables between the two groups (see Table 1). The only demographic variable that showed a statistically significant difference was gender ($\chi^2 = 5.67$, $p < .05$), with the third wave CBT group consisting of fewer females compared to the second wave CBT group. Therefore, gender was used as a covariate in subsequent analyses.

Treatment Techniques

Results for the other study measures are reported in Table 2. When specific cognitive-behavioral techniques were analyzed, there were differences in cognitive restructuring techniques ($F(1,88)=21.27$, $p<.001$) and relaxation ($F(1,88)=5.09$, $p<.05$), with the second wave CBT group reporting higher frequencies of use of these strategies. In contrast, the third

wave CBT group reported a significantly higher use of exposure techniques (F(1,87)=7.739, p<.01). Furthermore, the third wave CBT group used more Mindfulness/Acceptance techniques (F(1,85)=40.75, *p*<.001), Family Systems techniques (F(1,81)=7.197, *p*<.01), Existential/Humanistic techniques (F(1,82)=11.634, *p*<.01), and total techniques (representing technical eclecticism) (F(1,79)=15.024, *p*<.001).

Dispositional Factors

Univariate ANCOVAs were used to examine differences in attitudinal/dispositional measures between the two groups with gender used as a covariate. The EBPAS-Requirements measure only approached significance (F(1,88)=3.584, p=.06), with the second wave therapists reporting somewhat greater willingness to use an evidence based practice if required to do so (e.g. by insurance companies, supervisors, etc.). Effect size differences between the groups on other outcome measures were mostly small in magnitude and non-significant (See Table 2).

Discussion

Our results do not support the premise that there are major differences in the backgrounds or attitudes of second wave and third wave cognitive-behavioral therapists. Although we did not have sufficient statistical power to formally test the equivalence of groups, effect size differences on nonsignificant findings were mostly small in magnitude and thus unlikely to be theoretically meaningful even if found to be statistically different with a much larger sample. Differences that were identified mainly focused on the actually strategies and techniques therapists endorsed using.

It was not surprising that the third wave CBT therapists used more mindfulness/acceptance techniques given that these techniques define the salient differences between the two approaches. This does, however, also serve as a validity check for the orientation responses. Some of the third wave therapies such as ACT place more emphasis on values clarification, which could explain the greater reported use of existential/humanistic techniques (Sharp, Schulenberg, Wilson, & Murrell, 2004). In addition, third wave therapists tend to rely on a more contextual approach to behavior change (Hayes, 2004), which could account for their greater endorsement of Family Systems techniques. In general, third wave CBT practitioners tend to be more inclusive at the technique level than second wave therapies, which could explain the difference in the total numbers of techniques used between the two groups. Hayes et al. (2004) note that techniques in third wave therapies such as ACT are more functionally defined, rather than topographically distinguished. Thus, there is a greater emphasis on the way a particular technique is used rather than the tradition from which the techniques come. However, it should be noted that we did not find significant differences in the use of certain approaches, such as psychodynamic or power-energy therapy techniques.

When we examined specific cognitive-behavioral techniques used, we found that the groups differed in most of the expected areas. There were no differences in use of social skills training or prescription of homework (both of which can be viewed as classic behavioral techniques), but there was a difference in the use of exposure techniques with the third wave group reporting a greater use of exposure techniques. This is consistent with the proposal that third wave approaches tend to emphasize the importance of traditional behavior therapy strategies. In many ways, acceptance strategies can be conceptualized as exposure exercises for internally distressing experiences. Also not surprisingly, there were differences in use of cognitive restructuring techniques and relaxation skills which are included in the second wave therapies but are typically deemphasized in the third wave therapies. Although mindfulness meditation practices may produce relaxation, it is generally understood that relaxation is not the goal of these exercises in third wave therapies. Our results suggest that

the third wave therapists are not completely abandoning the techniques of the first and second waves, but are instead continuing to use the behavioral strategies while not using the traditional cognitive strategies as much.

Overall, there appeared to be very few differences between second and third wave groups in terms of their attitudes toward the use of evidence-based practices. Although not statistically significant, the second wave therapists reported a trend toward a greater willingness to use a particular treatment if it is required, which may be related to the current insurance reimbursement climate. Many traditional CBT approaches are dominant in the mental health system (and thus, more likely to be required). Therefore, it would logically follow that a second wave therapist would be more willing to use a required therapy, because he/she is already likely using such an approach. Third wave CBT practitioners may resist the use of certain second wave techniques, such as explicit cognitive restructuring strategies, as these techniques generally have not been found to be necessary or efficacious in dismantling studies (Illardi & Craighead, 1994; Longmore & Worrell, 2007).

In general, results indicated that there are more similarities than differences in the backgrounds and attitudes between the two groups that were surveyed. This could potentially be explained by similar training received among the members of these approaches. Other than gender, no significant background differences were identified. Many current third wave therapists are likely to have been initially trained under the second wave tradition given the greater popularity of the second wave approach compared to the third wave approach and the relatively new emergence of acceptance-based therapies. It also is possible that individuals who have similar training may hold similar beliefs, worldviews, and values in a therapeutic context. It will be interesting to study whether this trend continues as new cohorts of therapists are trained perhaps without a background in traditional CBT. It also is important to note that not all relevant therapist characteristics were measured in the study. In the future it would be interesting to collect further information on their education and training, the initial therapeutic orientation at time of training, and actual therapy practices rather than self-reported use of techniques alone, in order to determine if these variables could better differentiate the two groups of therapists.

There are a few limitations that temper conclusions that may be drawn from this research. This study needs to be replicated with a larger sample and it would be helpful to recruit therapists from multiple sources (e.g., traditional mail). However, the small effect size differences between most of the variables indicated that even with a larger sample size, significant differences may still not be theoretically important. In the future it would be important to recruit more female third wave therapists as gender could play an important role in the beliefs and behavior of therapists. It is unclear based on our sampling strategy whether there are in fact more men who hold acceptance-based CBT orientations. However, it is important to note that we controlled for gender in our analyses so this cannot explain the differences or lack thereof as reported. A further limitation is that theoretical orientation is partially determined by factors other than the person's choice, such as exposure to particular orientations and the influence of a mentor's theoretical orientation. Therefore, it is unclear how much therapists are predisposed due to individual factors to choose one orientation over another and how much is simply the result of training and exposure. In addition, we do not have specific information on the actual third wave therapies practiced by survey respondents. Given our sampling of certain listservs, it is likely that many of these therapists were practicing an ACT approach. It is unclear if results would have differed if the sample was comprised of therapists from other third wave therapies (e.g., MBCT). Finally, future research should compare second and third wave therapists to a third group (e.g., psychodynamic therapists) in order to investigate whether these similarities hold and also

differ from other orientations. Unfortunately, we did not collect a large enough group of these other non-CBT orientations for valid comparison purposes in the current study.

Given that this area of research on the differences between second and third wave therapists is just beginning, it is not clear what the clinical conclusions can be drawn from the results. However, results do suggest that second and third wave therapists are using somewhat different techniques (e.g., a greater emphasis on exposure-based techniques) and this could lead to different clinical outcomes. Future research should examine the relationship between therapists' beliefs and their actual behavior in clinical practice. Despite the preliminary nature of the current study, we believe that it provides relevant insights into the increasingly popular use of third wave therapies by clinicians.

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Biographies

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Table 1

Background Differences between Second and Third Wave Cognitive-Behavioral Therapists

	2nd Wave	3rd Wave		
	M(SD)	**M(SD)**	**t**	***p***
Age (Years)	43.7(11.8)	45.7(10.8)	−0.73	0.466
Years since completing degree	12.2(9.9)	14.5(11.2)	−0.97	0.334
Years since license	11.2(9.1)	13.4(11.1)	−0.99	0.327
	%(n)	%(n)	χ^2	*p*
Gender			5.66	0.017
Male	29.3(17)	54.5(18)		
Female	70.7(41)	45.5(15)		
Race/Ethnicity			4.87	0.301
White	91.4(53)	90.9(30)		
Hispanic	0(0)	6.1(2)		
Black	1.7(1)	0(0)		
Asian	1.7(1)	0(0)		
Other	5.2(3)	3.0(1)		
Religion			0.74	0.388
No religious affiliation	33.3(19)	42.4(14)		
Religious affiliation	66.7(38)	57.6(19)		
Degree			0.03	0.861
Non-doctoral	52.6(30)	54.5(18)		
Doctoral	47.4(27)	45.5(15)		
Profession			0.21	0.649
Psychologist	46.6(27)	51.5(17)		
Other	53.4(31)	48.5(16)		
Primary work setting			0.97	0.325
Private practice	29.3(17)	39.4(13)		
Other	70.7(41)	60.6(20)		

Table 2

Attitudinal and Technique Differences between Second and Third Wave Cognitive-Behavioral Therapists

	2nd Wave	3rd Wave				
	M(SD)	M(SD)	F	dfs	Cohen's d	*p*
EBPAS-Required	6.8(2.9)	5.3(3.6)	3.58	1,88	0.47	0.062
EBPAS-Appeal	11.1(2.9)	10.3(2.8)	0.62	1,88	0.18	0.432
EBPAS-Openness	9.8(2.8)	9.9(2.3)	0.10	1,88	0.07	0.751
EBPAS-Divergence	13.2(2.0)	12.8(2.4)	1.21	1,88	0.24	0.275
CBHQ	43.4(11.0)	40.0(11.4)	0.53	1,85	0.17	0.467
MFH	18.7(6.6)	17.4(6.6)	0.18	1,86	0.11	0.672
REI-Intuition	3.2(0.7)	3.3(0.7)	1.01	1,87	0.14	0.319
Power/energy techniques	1.5(2.2)	2.2(2.0)	2.60	1,84	0.36	0.111
Radical Behavioral techniques	6.2(3.4)	7.3(3.2)	1.81	1,80	0.29	0.183
Analytic/dynamic techniques	3.4(3.0)	3.8(3.1)	0.50	1,84	0.16	0.483
Family systems techniques *	3.6(3.2)	5.1(3.1)	7.20	1,81	0.61	0.009
Mindfulness/acceptance techniques *	8.7(3.2)	13.5(3.5)	40.75	1,85	1.43	0.000
Existential/humanistic techniques *	7.5(3.1)	9.8(3.1)	11.63	1,82	0.79	0.001
Total techniques *	80.0(13.0)	90.9(12.5)	15.02	1,79	0.90	0.000
Cognitive-behavioral techniques	12.2(3.0)	11.7(2.8)	0.74	1,86	0.20	0.393
Cognitive restructuring techniques *	2.6(0.6)	1.8(1.0)	21.27	1,88	1.02	0.000
Homework	2.6(0.6)	2.5(0.6)	0.05	1,88	0.05	0.821
Exposure techniques *	1.6(1.1)	2.3(0.7)	7.74	1,87	0.62	0.007
Breathing retraining	1.4(1.0)	1.3(0.8)	0.03	1,87	0.04	0.863
Relaxation *	2.0(0.8)	1.5(0.8)	5.09	1,88	0.50	0.027
Social skills work	2.0(0.7)	2.1(0.8)	0.21	1,88	0.10	0.648

Note: The analyses were conducted using ANCOVAs with gender as a covariate.

* $p<.05$

EBPAS = Evidence-Based Practice Attitudes Scale; CBHQ = Complementary and Alternative Medicine Health Beliefs Questionnaire; MFH = Magical Beliefs about Food and Health Scale; REI = Rational-Experiential Inventory; Treatment Approaches and Techniques Questionnaire