Honoring the Past and Looking to the Future: Updates on Seminal Behavior Therapy Publications on Etiology and Mechanisms of Change

Michelle G. Newman
The Pennsylvania State University

This is the introduction to the first of two special issues in honor of the 50th anniversary of the Association for Behavioral and Cognitive Therapies. The goal of this issue is to pay tribute to prior seminal Behavior Therapy publications on etiology and mechanisms of change, to provide an updated review of important topics covered by these papers, and to make recommendations for the future. Each invited paper highlights a particular Behavior Therapy publication’s contribution to our understanding and also provides an updated review or meta-analysis on the topic of the original paper. The topics covered here include mechanisms of etiology such as preparedness, reinforcement, and control. In terms of papers on mechanisms of change, we cover mechanisms related to extinction including fear activation, within- and between-session extinction, safety behaviors, and variables related to imagery. In addition, we examine principles related to generalization of learning and optimizing the impact of homework. With the two special issues of Behavior Therapy, we hope to inspire additional research and discussion.

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The Association for the Advancement of Behavioral Therapies (AABT) began in 1966 and was founded by 10 behaviorally oriented researchers who were dissatisfied with the dominant Freudian or psychoanalytic tradition. Its founding members were John Paul Brady, Joseph Cautela, Edward Dengrove, Cyril Franks, Martin Gittelman, Leonard Krasner, Arnold Lazarus, Andrew Salter, Dorothy Susskind, and Joseph Wolpe. The name of the organization was changed to Association for the Advancement of Behavior Therapy in 1967 and was changed again in 2005 to Association for Behavioral and Cognitive Therapies (ABCT), given the viewpoint that the older name was too restrictive. This year ABCT celebrates its 50th anniversary and we are using this moment to take a look back at and to celebrate ABCT’s first journal, Behavior Therapy (BT).

BT was founded in March of 1970 as the empirical journal associated with AABT. Cyril Franks, one of the founding members of AABT/ABCT and its first president, was also the founder and first editor of BT. The goal of the journal then was to highlight clinical research that used direct observation and/or assessments of patient behavior and studies that were replicable. Franks served at the helm of BT until 1978. Since the time of its original founding, BT has had 11 additional editors including Alan Kazdin, David Barlow, Edward Blanchard, W. Edward Craighead, Lizette Peterson, Frank Andrasik, J. Gayle Beck, David Haaga, Richard Heimberg, Thomas Ollendick, and myself. Over the years the goals of BT and the organization have expanded to include studies that examined cognitive and affective variables, and to be open to other methods as well. However, the tradition of the journal to be focused on strongly evidence-based research has continued today.

A number of highly cited seminal studies and papers have been published in BT over the years on very important topics. We have decided to celebrate
the 50th anniversary of ABCT via two special issues in BT that highlight some of these seminal works. In particular, we selected a small subset of important past papers that were both highly cited and covered topics that remain very relevant today. Myself and the five associate editors—Evelyn Behar, Bryce McLeod, Reginald Nixon, Thomas Ritz, and Denise Sloan—each nominated a subset of papers for consideration for the special series. I then selected the final subset to be included based on the papers that received the most nominations, as well as the papers that focused on the most timely topics. Following this, I invited researchers who have expertise in the areas covered by one of these papers to provide either a review paper or a meta-analysis that not only highlights the importance of the original paper but also updates the field with respect to the topic area covered by the paper. The papers are clustered within several important topics. Within this issue the papers focus on theories of etiology and mechanisms of change in psychotherapy. Each original paper has been republished as part of this special issue and appears immediately before the updated review paper. Thus with this series, we hope to both honor the past and look to the future. Below I speak briefly to each of the older and newer papers and the authors who pay tribute to them in the current issue.

Theories of Etiology
The first set of papers in our series focuses on theories of etiology related to the development and/or maintenance of anxiety or depression. For the first new paper in this group, McNally (2016; this issue) focuses on an updated understanding of Seligman’s (1971) article on phobias and the concept of preparedness. Seligman’s article was important as it marked a departure from theories of conditioning that were predominating at the time and instead suggested a model in which both diathesis and learning theory contributed to the development of anxiety disorders. McNally’s review paper provides an understanding of the historical context of Seligman’s paper, reviews studies that have been conducted since its publication to test it, and the theories and research resulting from it. Studies that have evolved from Seligman’s work have suggested additional mechanisms and some refutation of aspects of Seligman’s original theory, but his ideas have nonetheless inspired considerable ongoing investigation.

The next etiologically focused paper to which we pay tribute in this series is by Costello (1972). In the original paper, Costello highlights the importance of reinforcement loss and loss of the effectiveness of reinforcers in the development of depression. Alloy, Olino, Freed, and Nusslock (2016; this issue) have provided an update on this topic, in a review paper that focuses on reward hyposensitivity in depression and hypersensitivity in bipolar disorder. These authors review behavioral, self-report, physiological, and neural findings and conclude that reward sensitivity is a trait-like characteristic that is associated with both bipolar disorder and depression, but that more research is needed to determine if such sensitivity is a risk factor for depression or bipolar disorder.

In the final paper on etiology, we pay tribute to a seminal paper by Chorpita, Brown, and Barlow (1998). Chorpita and colleagues apply Barlow’s (1988) theoretical framework of the development of anxiety in adults to examine parental and child factors of control and perceived control, respectively, to the development of anxiety disorders in children and adolescents. Ollendick and Grills (2016; this issue) critically review the research that has followed from the original paper, focusing on design and measurement of control and its refinement. They conclude by offering suggestions about directions for future research on this important topic. Among their recommendations, they suggest that future studies should measure separately the constructs of behavioral control, psychological control, and perceived situational control, as well as trait-perceived control. They also recommend the use of reports from informants and observation and coding of behaviors. Furthermore, they advocate that such measurement should be conducted in the context of longitudinal studies.

Mechanisms of Change
The next set of papers in this issue focuses on mechanisms of change from cognitive-behavioral therapy (CBT). Along these lines, Asnaani, McLean, and Foa (2016; this issue) provide an updated review based on Watson and Marks’s (1971) original paper examining the influence of relevant and unrelated fear on the efficacy of flooding. The importance of the Watson and Marks paper is that it raised important questions that triggered a whole line of research focused on understanding the mechanisms of change inherent to exposure therapy and extinction more broadly. Assani and colleagues describe the viewpoint at the time of the Watson and Marks paper, as well as the developments and research that followed. They review the evidence to date on this topic and conclude with an overview of the current viewpoint regarding the most examined potential mechanisms. For example, these authors note that there has not been much additional pursuit of the question of whether relevant or irrelevant fear
is important. In addition, they suggest that it will be important to examine the mechanism of initial fear activation more systematically than has been done in the past. They further suggest that although within-session extinction may not be important, between-session extinction does appear to be. Moreover, they recommend avenues for further exploration.

In the next important paper on mechanisms of extinction, we pay tribute to Wells and colleagues’ (1995) paper on situational safety behaviors in those with social anxiety disorder. In this clever case series, Wells et al. engaged eight participants in one session of exposure alone and one session of exposure and response prevention of safety behaviors administered in a counterbalanced fashion. These authors found that reduced safety behaviors increased the efficacy of exposure. This important paper was the first one to examine safety behaviors in social anxiety disorder and it triggered much additional research on this topic. To update this research, Piccirillo, Dryman, and Heimberg (2016; this issue) provide a systematic review paper on safety behaviors in adults with social anxiety disorder. This paper covers safety behaviors related to social interactions, imagery, and postevent processing. The paper concludes that safety behaviors do hinder the efficacy of exposure therapy and that reductions in safety behaviors have been shown to be a mechanism of change during exposure therapy. Thus, exposure instructions should focus on reducing and ultimately eliminating safety behaviors in those with social anxiety disorder.

Another paper on treatment mechanisms is a tribute to Lang (1977) on the use of emotional imagery in psychotherapy. Lang’s original theory was used to explain how such imagery could be applied to target extinction of fear. The importance of Lang’s paper is that he proposed a bioinformational theory of emotional imagery that could be tested. Ji, Heyes, MacLeod, and Holmes (2016; this issue) provide an updated review of developments with respect to theory, research, and clinical understanding of emotional mental imagery that followed from this paper. These authors also describe the development of many additional applications of imagery use in psychotherapy. Moreover, they contextualize the current relevance of Lang’s insights and suggest that these provide fruitful avenues for future research.

Another important paper on mechanisms to which we pay tribute is authored by Stokes and Osnes (1989), whose seminal paper provided a series of guidelines to facilitate one of the most important and foundational principles with respect to learning (i.e., generalization). In particular, these authors recommended employing contingencies based on functional analysis, using variety in instruction, and making use of functional mechanisms of change. In their updated review paper, Swan, Carper, and Kendall (2016; this issue) conclude that Stokes and Osnes’s guidelines do facilitate generalization. In addition, they identify additional important factors, as well as potential future factors such as technology that may also improve such generalization.

The final older paper on mechanisms focuses on homework and was authored by Neimeyer and Feixas (1990). In 1990, there had been little research on the role of homework in psychotherapy. Neimeyer and Feixas randomly assigned depressed clients to cognitive therapy with and without homework. Those in the homework condition improved significantly more than those in the cognitive therapy alone condition when quality of homework was taken into account, substantiating the value of homework in psychotherapy. Since the time of the publication of their study, however, additional research has suggested that quantity and quality (i.e., degree to which it leads to skill acquisition and learning) of compliance to homework assignments, as well as the source of homework data (e.g., report of client, therapist, or objective measures), may also play a critical role in its efficacy (Kazantzis, Whittington, Zelencich, Kyrios, Norton, and Hofmann, 2016; this issue). To examine which of these factors contribute to homework as a mechanism of CBT, Kazantzis et al. conducted a systematic review and meta-analysis. These authors found that both quality and quantity of compliance were important predictors of therapy efficacy.

Thus, with this first set of papers we provide updated perspectives on etiology of psychopathology and mechanisms of change with respect to CBT. In terms of etiology, we examine seminal papers on preparedness, reinforcement, and control. We also examine mechanisms related to extinction including fear activation, within- and between-session extinction, safety behaviors, and variables related to imagery. In addition, we examine principles related to generalization of learning and optimizing the impact of homework. Although we were able to target only a small handful of seminal works published in BT, they speak to the importance of this journal in laying the foundation for important directions in subsequent research. In addition, by providing updated review papers and meta-analyses we illustrate the important directions this research has taken. Each paper in this series also provides suggestions for future research on these important topics.

Conflict of Interest Statement
The author declares that there is no conflict of interest.
References


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