

Introduction to the Special Issue: Mechanisms of Action in Cognitive-Behavior Therapy

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Research into mechanisms of treatment outcome in cognitive-behavior therapy (CBT), as work evaluating potential mechanisms through mediator and moderator analyses, has been increasing. In recognition of this growth in more refined analyses of functional components of treatment, this special issue highlights a diverse range of research-evaluating mechanisms, as well as mediators and moderators, of outcome. It is anticipated that the research described in these articles will stimulate additional investigations as well as provide important insights for clinicians in refining treatment programs.

Keywords: mechanisms; mediators; moderators; cognitive-behavior therapy

EMPIRICALLY SUPPORTED TREATMENTS (ESTs) are dominated by cognitive-behavior therapy (CBT) protocols. Perusal of the research literature documents the efficacy of CBT for a wide range of diagnoses through multiple methods of delivery and for a wide range of client populations. Further examination of the evidence in support of CBT shows that while many clients have benefited from intervention and the resultant evidence-based practice associated with the development of protocols, a significant minority of clients do not fully benefit from treatment or fail to respond at all.

The sign of maturity of CBT is that investigators have moved to examine putative mechanisms of action. Rather than simply identify whether a

treatment works, mechanism research isolates how it works. As additional research accumulates showing the mechanisms of action, it is possible to then circle back to evaluate ways treatment may be tailored to better meet the needs of individuals who might otherwise respond partially or fail to respond at all to our interventions. The aim of this special issue is to highlight recent advances in the identification of mechanisms of CBT. A criterion for mechanism tests is that the potential mechanism is first identified as a mediator (Kazdin, 2007; Tryon, 2018). As a brief reminder, mediators are variables that systematically change with the intervention, but have been evaluated at the beginning and end of treatment. In contrast, mechanisms would change over the course of an intervention, and thus are not solely evaluated at pretest and posttreatment. Further, potential mediators and mechanisms may serve as moderators, or intervening variables, between the intervention and outcome. As a result, several papers in this special issue depict promising potential mechanisms through mediation and moderator paths. These mediators and moderators may not necessarily be revealed as mechanisms (see Tryon, 2018, for a discussion) but each represents promising next steps in better understanding how and why CBT works.

Theoretical Versus Empirical Mechanisms

MECHANISMS ARE NOT NEW in the therapeutic enterprise. Indeed, theories of psychotherapeutic action describe hypothesized mechanisms of action. For example, cognitive therapy for depression was originally formulated based on targeting the depressive triad (Beck, Rush, Shaw, & Emery, 1979). Tracking progress in treatment would mean changes in the depressive triad should drive reductions in depression symptoms. Models of CBT efficacy have

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also emphasized biopsychosocial mechanisms. To illustrate, the classic fear reduction model of exposure therapy stressed engagement of neural fear structures and the associated corrective process that would follow when systematically presented with anxiety-evoking stimuli (Foa & Kozak, 1986). Accordingly, it was predicted that changes in these fear structures should result in decreased pathological fear reactions.

The aforementioned theoretical mechanisms are ones that form the basis of empirically supported treatment protocols. In the realm of CBT, these mechanisms have typically been examined in laboratory experiments, where the hypothesized mechanistic variable has a demonstrated effect on the target symptom. Accordingly, implicit in the semiregular themes of the annual Association for Behavioral and Cognitive Therapies conference emphasizing the transition of findings “from lab to clinic” is an emphasis on mechanisms and their associated impact on treatment formulation and outcome.

ON THE OTHER HAND, there are also empirical mechanisms. For the purposes here, these could be defined as mechanisms of action that are identified in the course of an intervention study and were not formulated in the original theory. There are many such mechanisms, often identified in randomized controlled trials or experimental psychopathology research. To illustrate, a classic example is the identification of expressed emotion as a mechanism underlying relapse in schizophrenia and depression. The original research identifying this constellation of variables was culled from a far larger set of measures, from which only this group was predictive of relapse (Brown, 1959). This set of variables was later found to again predict relapse in a replication investigation (Brown, Birley, & Wing, 1972), and since then has been identified as a mechanism of outcome (see Claxton, Onwumere, & Fornells-Ambrojo, 2017, for a review). Empirical mechanisms are valuable in highlighting processes that can have substantial impact on treatment, and advance and refine the theory that underlies the theoretical model of therapy.

THIS SPECIAL ISSUE, THEREFORE, focuses on mechanism tests as well as evaluations of promising potential mechanisms through mediation analyses. Some of these analyses involve mechanisms or potential ones identified from theoretical analyses, while others were derived from prior empirical analyses. The 10 papers in this special issue cover a diverse range of conditions, such as substance use (Hallgren, Epstein, & McCrady, this issue), eating disorders (Farrell et al., this issue), trauma (McLean et al., this issue), and anxiety disorders (Morrison et al., this issue; Stewart et al., this issue). The research

presented in this special issue also addresses a range of interventions, such as family therapy (Lavner, Barton, & Beach, this issue), acceptance and commitment therapy (Stewart et al., this issue), behavioral activation (Santos et al., this issue), and emotion regulation therapy (O’Toole, Renna, Mennin, & Fresco, this issue), as well as more general CBT (Hayes-Skelton & Marando-Blanck, this issue; Penedo et al., this issue, in a comparison to motivational interviewing). It is anticipated that the research described in this special issue will be of considerable value to clinicians in refining their interventions, and will also stimulate significant additional research that will facilitate better understanding of why treatments work.

Conflict of Interest Statement

The author declares that there are no conflicts of interest.

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