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INTRODUCTION

Introduction to the Special Issue on Processes of Cognitive Behavioral Therapy: Does "Necessary, But Not Sufficient" Still Capture It?

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Abstract
Research over the last four decades on cognitive behavioral therapy (CBT) is leading to a more comprehensive understanding of the mechanisms that underpin its efficacy. This introduction to the next generation of research on process offers a brief account of the evolution in the scientific foundations of CBT, to our current focus on treatment and in-session processes. It also provides a generic model for linking techniques with their target, uses, and treatment processes. In addition, how each component can be adapted according to CBT-specific elements of the client-therapist relationship (collaboration, empiricism, and Socratic dialogue) in a manner that is guided by the case conceptualization provides a more complex and comprehensive understanding of treatment delivery. The various research studies included within this special issue make important contributions to our understanding of the different ways in which both treatment and in-session processes are important to CBT.

Keywords Cognitive behavioral therapy · Process · Review

Introduction

The processes of Cognitive Behavioral Therapy (CBT; Beck et al. 1979) have historically received far less research attention than its outcomes. This is partly due to the necessary scientific work required in evaluating the efficacy of a psychotherapy and its modifications for various clinical disorders and populations (see reviews of meta-analyses in Butler et al. 2006; Hofmann et al. 2012). However, the client-therapist interaction was also conceived as something that exists as a facilitator of client progress towards treatment goals. Indeed, the facilitative behaviors of the therapist in themselves were deemed "necessary, but not sufficient to produce an optimum therapeutic effect" (Beck et al. 1979, p. 45).

Almost four decades later, there remains an ongoing discussion in the broader psychotherapy literature regarding the factors that account for most of the change in therapy; technique or relationship (Laska et al. 2014; Marcus et al. 2014; Tolin 2010). Both sides of the common factors debate now acknowledge that treatment outcome is determined both by technical and in-session process factors (DeRubeis and Lorenzo-Luaces 2017; Hofmann and Barlow 2014; Wampold et al. 2017). There is a need to move towards testable models that account for the intersection of technique and in-session process in order to fully understand treatment mechanisms.

Treatment Processes

The various treatments within the broad family of CBTs (Kazantzis et al. 2010), each emphasize somewhat different processes (Hayes and Hofmann 2017, 2018; Klepac et al. 2012), and there are suggestions of processes that can occur in the absence of cognition (Mennin et al. 2013, and see review in; Lorenzo-Luaces et al. 2015). The past two decades have witnessed some further advances, whereby core dimensions in psychopathology have been linked to treatment processes that are broadly relevant to the typical case presentation in the consultation office; where either full or partial DSM criteria for multiple disorders are met. Unified protocols that enable the therapist to both (1) develop an individual case formulation, and (2) select techniques that target those treatment processes to address

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the needs of each individual client (e.g., Barlow et al. 2011, 2017) have enhanced the richness and complexity of therapeutic work in clinical trials and brought them closer to practice guidelines for case formulation-driven CBT (Beck 2011; Persons 2012).

In-Session Processes

Ongoing empirical work on the alliance, as a generic (or common) element of the therapeutic interaction, has added sophistication to our understanding of the role of in-session process in CBT. For example, the alliance may be moderated by pre-existing client factors (Lorenzo-Luaces et al. 2014; Zalaznik et al. 2017), and may temporally precede symptoms in predicting subsequent symptomatic levels through treatment (Zilcha-Mano et al. 2014). Most recently, therapists adopting an alliance focused protocol in CBT facilitated changes in interpersonal process, and some of those improvements were linked to outcome (Muran et al. 2017).

However, few studies have sought to examine CBT-specific elements of the therapeutic relationship (i.e., collaborative-empiricism and Socratic dialogue, Kazantzis et al. 2017). The "Cognitive Therapy Scale" (CTS; Young and Beck 1980) that was originally developed to assess clinician skill in CBT delivery, and remains central to accreditation (i.e., Academy of Cognitive Therapy), includes several interpersonally focused items (i.e., feedback, understanding, interpersonal effectiveness, collaboration, and guided discovery). In addition, ratings of "excellent" on other CTS items (i.e., agenda, homework) are reserved for instances where there were optimal levels of client input or collaboration. However, many of these elements of the therapeutic interaction still lack focused assessment and empirical study. For example, while studies have considered the causal benefits of including homework in CBT (Kazantzis et al. 2010), correlational adherence-outcome relations (Kazantzis et al. 2016; Mausbach et al. 2010), and session-by-session benefits associated with homework adherence (Conklin and Strunk 2015), more research is needed on the in-session therapist behaviors that can facilitate engagement (Conklin et al. 2017; Startup and Edmonds 1994; and see; Shaw et al. 1999 for evidence of competence in structuring sessions as a predictor of outcomes). Similarly, existing measures may not fully capture the definition of collaboration in CBT (Kazantzis et al. 2015; Tryon and Winograd 2011), the evidence for Socratic dialogue is just emerging (Braun et al. 2014), and study of feedback processes has centered on symptom assessments (Knaup et al. 2009; Lambert and Shimokawa 2011).

The Nested Nature of Treatment and In-Session Processes

If, as researchers, our intention is to accurately define and measure all the processes that occur within the consultation room, so that we might understand their true relations in order to ultimately provide an empirical basis for informing their ideal configuration for *a particular client* at that *particular point in therapy*, then to begin, we need a means of describing the nested nature of techniques within processes, nested within therapy goals. While our techniques do not define our therapy (Petrik et al. 2013), the specific treatment processes within those techniques do. For example, a therapist elected to support a client through their emotional distress with the use of a thought record, which was *targeted* towards a specific automatic thought, and was *used* in four ways: (1) to link the thought with the predominant emotion in the situation; (2) understand the role of her beliefs in maintaining her mood state; (3) encourage an active approach in situations; and (4) identify the consequence of withdrawing from the situation. However, it would have also been possible for the same technique to be used to *target* situational antecedents and consequences in the client's behavior, or the processes of thinking (or distortions). Furthermore, a therapist may have decided to *use* the technique to support different change processes, such as linking the client's interpretation in the situation to their values, evaluate alternative behaviors/coping strategies, or encourage non-judgmental contact with cognition.

A further complexity is that the clinician will explain the rationale for the technique in different ways depending on the client, and indeed, collaborate with a client to a different extent in selecting and using the intervention. For example, at least initially, a more client-lead process may be indicated for an individual who has a history of being subject to control and other forms of abuse (i.e., a reduction in "team-work" or collaboration as defined in CBT, Dattilio and Hanna 2012). On the other hand, a client who has a strong sense of entitlement may benefit more from greater limit setting and a 50:50 balance in contributions, decision making, and responsibility for providing feedback, along with other behavioral expressions of collaboration (Kazantzis et al. 2017). Indeed, other CBT elements of in-session process, such as empiricism and use of Socratic dialogue also require adaptation based on the client's relational history and belief system.

Figure 1 presents "the matrioshka process" (Kazantzis et al. 2017), which is a testable model of the use of techniques within CBT, while taking into account both treatment and in-session processes. The term "matrioshka process" originates from matryoshka dolls, which are Russian

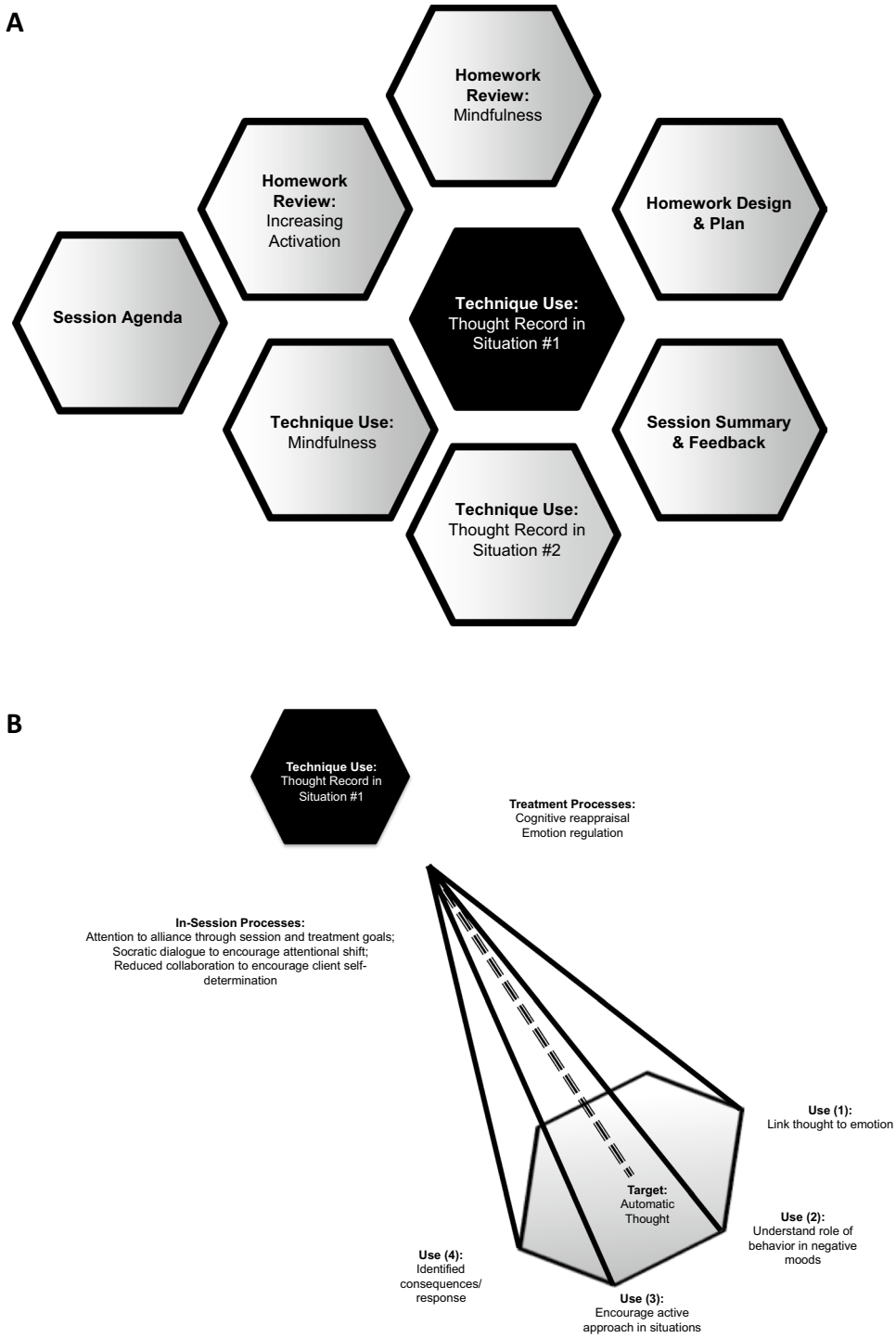

Fig. 1 **a** Standard CBT session elements. **b** The Matrioshka process—an integrated process model of cognitive behavior therapy (Kazantzis et al. 2017)

nesting dolls. The matrioshka process is composed of several observable in-session therapist behaviors in how techniques are used, in the same way that the matryoshka dolls are nested inside one another. The center of the technique would be the target (in the above example the patient's automatic thought) which should be clearly linked to all the uses in the technique. The outermost context includes the clarity with which the therapist provides an overt rationale for the technique (treatment process) and their attention to alliance and CBT specific elements of the relationship. This level of clarity in the components that make up a technique's mechanism for action is not only useful for the practicing clinician, it can enable more detailed assessments of treatment integrity.

Introducing the Articles in This Special Issue

The articles in this Special Issue of *Cognitive Therapy and Research* reflect the latest scientific work on treatment and in-session processes in CBT. The paper by Renna et al. (2018) presents two studies on attention shifting among those with generalized anxiety disorder, with implications for attention training in treatment. Then, a series of three papers are included that examine the alliance: (1) relationship between expectancies and outcome within unified and single diagnosis treatment protocols, and role of the working alliance as a mediator (Sauer-Zavala et al. 2018); (2) pretreatment client interpersonal problems as moderators of alliance-outcome relations (Zilcha-Mano et al. 2018); and (3) an examination of the state like nature of the alliance (Zilcha-Mano et al. 2018).

Two articles then examine the process of facilitating engagement with therapeutic tasks, also referred to as homework in CBT. The paper by Crawford et al. (2018) reviews homework compliance and the processes involved in maximizing compliance in CBT for anxious youth, including the alliance and therapist behaviors. The paper by Hoet et al. (2018) utilizes experience sampling in a study of skill use in relation to depressed individuals' emotional state and treatment type.

Turning to other in-session processes, the paper by Westra and Norouzian (2018) presents a review of the research on resistance and ambivalence, particularly with reference to the role of motivational strategies in CBT. Then, the paper by Hooke et al. (2018) examines a collaborative approach to collecting symptom information as feedback in CBT. Finally, an in-depth discussion of the issue's contributions is provided by Lorenzo-Luaces and DeRubeis (2018).

Concluding Comments

While many CBT processes are yet to have been studied extensively, or at all, it is clear that a significant evidence base has been gained for those processes that have been studied. Given the compelling evidence for the overall efficacy of CBT across a range of disorder contexts, it is surprising that more research has not been undertaken to better examine time-varying and intersecting processes within CBT. Notable exceptions are the research programs represented in this special issue. We believe that we are only at the beginning of adequately studying the processes in CBT.

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