# Clinical Behavior Analysis, ACT and Case Formulation. A Commentary on Chapter "Case Formulation in Process-Based Therapies"


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## Behavior Analysis and Psychological Flexibility

Acceptance and Commitment Therapy (ACT) is deeply rooted in Behavior Analysis (Anchisi, Moderato and Pergolizzi 2017), though ACT therapists are not necessarily knowledgeable about behavior analytical principles or even aware of what those principles might be. There are some basic points of Behavior Analysis on that are worth highlighting.

The core of ACT is psychological flexibility. Twentieth-century psychologists coined the term "construct" to provide substance and consistency to the incorporeality of human behavior in order to measure it. Even the best constructs, like the Big Five Personality Model have problems, however: they work pretty well explaining and predicting behavior, but fail to offer a framework to influence it. By definition, these constructs are stable and reliable, and not readily modifiable, if at all. Prediction and influence are basic tenets of clinical Behavior Analysis (and should be of any psychotherapy).

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G. M. Ruggiero et al. (eds.), *CBT Case Formulation as Therapeutic Process*,
https://doi.org/10.1007/978-3-030-63587-9_13

Psychological flexibility is not a construct in the usual sense. It is an overarching (high order) repertoire. In the contextual behavioral tradition, we talk about repertoires of skills rather than constructs. The term repertoire makes the dynamics that characterize our lives clearer. If we look at the repertoire of a famous concert performer, for example a pianist, we can see that in it there are rather stable nuclei of compositions that he or she presents to the audience in rotation: for example, Beethoven's, Rachmaninoff's, and some of Mozart's concertos. Then there are the pieces for piano solo, and here the list is endless (but not infinite, here too there is stability). Then, for some, there is curiosity, openness, and moves into experimental, innovative repertoires. In any case, if you follow an artist over the years you can see the consistency that characterizes his or her repertoire: those who have specialized in Chopin and Schumann etudes are unlikely to perform Bach's Well-Tempered Clavier or his Goldberg Variations, or vice versa. In short, the repertoire is a pattern that can be modified with learning and practice—new pieces come in, old pieces get out—and, nevertheless, some stability remains.

Psychological flexibility is a complex repertoire of skills that allow clients to better live their lives, to improve their state of living, without trying to escape what they cannot escape. It is the ability to be willing to feel and think, to open themselves, with awareness, to the experience of the present moment and to direct their lives in ways that are important to them (Wilson and Dufrene 2008).

There is no need to teach or explain to clients how thinking, feeling and acting interconnect functionally. They do need to make experiential contact with the relevant contingencies, but being able to describe those contingencies may not be necessary at all. We do think that some agreement needs to be made at the outset of therapy, but it is not a technical agreement. They do not need to become behaviorists. Rather, it is a practical agreement: This is going to hurt. But we will only do things that hurt with your permission, at your pace, and for the pursuit of directions that matter to you.

## Behavior Analysis and Mentalism

Another basic aspect of Behavior Analysis is its non-mentalistic assumption. We live in a mentalist world. It is so difficult to break the habit of mentalism. Thus, when talking about the six behavioral repertoires that ACT is organized into (*Acceptance/experiential avoidance; Cognitive defusion/fusion; Contact with the present moment/conceptualized past and feared future; Self as context/attachment to conceptualized self; Values/lack of values clarity; Committed action/inaction, impulsivity, or avoidance*) it is worth clarifying that commitment is not in any sense **in** the patient. All ACT processes are behavioral patterns in context and should not be cognitivized. Patients do not possess commitment or contain commitment, rather they bring behavior into alignment with values. That is, they **do** commitment, rather than feeling commitment or "having" a commitment. The same is true with acceptance. As ACT therapists, we do not worry much about thoughts or feelings of

acceptance and commitment. We focus on the behavioral patterns inherent in acceptance and commitment.

In chapter "Case Formulation in Process-Based Therapies," the editors write that basic principle of case formulation in process therapies is that the goal is not to ascertain the structural basis of the emotional disorder in terms of whether, for example, a negative belief underlies and fuels anxiety. Rather, it is to examine the function of the symptom and share it with the patient. Here again, the suggestion seems to be that teaching **about** contingencies is somehow central. It is simply not true that one must know about contingencies in order for them to have an impact. Consciously knowing the contingencies might be useful, but is not necessarily so. It is just as possible that a person would weaponize that knowledge against themselves: "I know how this works and I keep doing it! I must be an idiot!" Knowing about contingencies might be persuasive, but there are lots of methods of persuasion that do not require us to turn our clients into behavioral engineers or even to sell them on that idea.

## Case Formulation and Functional Analysis

Another aspect that has a strong impact on case formulation is functional analysis. The term analysis is one of the pillars of science. Analysis means breaking a complex thing down into simpler units. The natural world is too complex to be studied as a whole, it must be reduced, both in the material physical world and in the immaterial psychological one. Reductionism is an old issue in psychology, mostly in behavioristic psychology. The main question is: where should we stop on the endless road of reduction? In other words, which is the right level of analysis? Behavior analysis has its own history of arguments between molar and molecular accounts of behavior. The answers for ACT are the same as the answers in Behavior Analysis. We analyze context in a molecular way as is necessary to allow for the influence of behavior.

The "right" level of analysis can be only defined pragmatically: does the analysis work? The pragmatic criterion to establish at which level analysis works comes from the case formulation. Case formulation and therapeutic intervention are closely interwoven with each other: the six-point formulation is so interconnected with the intervention that it is indistinguishable in clinical practice, the editors suggest. Actually, the six-point formulation is a six + six, because every repertoire of skills lacking in the hexaflex has its positive, and vice versa.

The six-point case formulation is a mid-level analysis. A more molecular level can be helpful (or necessary) to better understand the process. For example, the process of experiential avoidance can be analyzed more in depth with a more molecular functional analysis. It is important to keep in mind that in ACT (and Contextualistic Clinical Behavior Analysis), the term "behavior" includes any and all of the activities of a whole organism. If an organism can do it, it is behavior. Behavior can only be defined by referring to the organism that is behaving. Thus,

actions such as walking and talking are behaviors, but so is wishing, wanting, imagining, thinking, dreaming, loving, grieving, fearing, hating, despairing and finding meaning, and on. These are all things we humans can do in and with a context and are all the proper dependent variables of ACT (Presti and Moderato 2019).

The same is true for working on the lack of contact with the present moment, which involves turning off the autopilot, using the experience of the five senses, and staying tuned with what happens from moment to moment. Much cognitive experimental research (Tversky and Kahneman 1974; Kahneman 2011) has shown that many of our daily actions are in form of routines and automatic behaviors that were useful and functional on many occasions in our ontogenetic and or phylogenetic history, and therefore are maintained by strong contingencies of reinforcement, but that unfortunately can be very harmful and dysfunctional in different contexts. Functional analysis could be very helpful to assess the patient's patterns of behavior that are out of touch with his present moment.

In other words, functional analysis plays, in behavioral psychology, the same role that cell analysis plays in medicine in understanding and diagnosing the pathological process, which is a different way to define case formulation. In addition to sometimes being quite automatic, behavior is often determined in a complex manner. That is, it often does not have a single function. And, at times, formally similar behavior might have different functions at different moments. Consider, for example, a very capable graduate student who feels a bit of imposter in class discussions. Such a student might become disengaged. The functional analysis might be quite simple and result in the student becoming more generally engaged in discussions. But more analysis might be needed. They might raise a hand to answer at times in order to advance the class conversation. And, other times, that same raising of the hand might function as a way of avoiding looking stupid. One function of hand-raising is the pursuit of better intellectual understanding, the other is functionally related to fitting in socially. A careful, more molecular, moment-by-moment examination of such interactions may help the student to read their own behavior and to make choices about what sort of student they want to be.

## Values

There is another critical point that should be discussed—the definition of value. In ACT, the term *values* refers to patterns of activities that give our lives meaning. Values are not goals. Goals can be accomplished. Instead, values are like a compass, they help us to make choices based on the directions in which we want our lives to go but have no endpoint. Values are very individual and define who we want to be, even if/when we face difficult or painful experiences. Values are not consequences, but they establish predominant reinforcements for those activities that are intrinsic to the implementation of the same behavioral pattern: it is important that values should not be confused with consequences. Rather, they make patterns of action consequential.

## Process-Based Therapy

Finally, a few words about Process-Based Therapy (PBT, Hayes and Hofmann 2018). We would argue that all, or very nearly all, therapies began as process models. Consider Beck's book *Cognitive Therapy and the Emotional Disorders*. That book is a strategy document and Beck says that explicitly: "Before starting to evaluate the psychotherapies, we should distinguish between a system of psychotherapy and a simple cluster of techniques. A system of psychotherapy provides both a format for understanding the psychological disorders it purports to treat and a clear blueprint of the general principles and specific procedures of treatment." (Beck 1976, p. 278).

The behavioral folks were always process-based—beginning with operant and respondent interactions. Likewise, the psychodynamic folks were always process-based. The humanistic, existential and family systems folks all proposed processes that they conceived as responsible for suffering and thriving.

The shift to a focus on procedures and outcomes was, in our view, an artifact of the era of Randomized Clinical Trials (RCT) within which relatively fixed protocols were tested against diagnostic syndromes. Creating a fixed protocol allowed researchers to mimic pharmaceutical trials, with the DSM diagnosis playing the part of the disease and the protocol playing the part of the stable molecule to be tested. The therapies that thrived in that funding environment were the ones who could best fit their treatments into the procrustean bed of rigid manuals. RCTs were focused on outcomes and the top scientists of the time would say things like "First we should figure out **IF** something works before we waste time figuring out how it works" (i.e., validating processes). PBT, as an idea, returns us to our original focus — what processes produce change and stability.

ACT has always been a process-based therapy. However, the rise of PBT brings new and heightened focus on process as the central issue for research and training. Hayes and Hofmann (2019) have recently suggested that "PBT is not a new form of therapy—rather, it's a more Contextual Behavior Science (CBS) coherent vision of what we even mean by 'evidence-based intervention.'" Really this is a new version of the functional analytic dreams of early behavior therapists, but now integrated within multi-level, multi-dimensional evolutionary science, and with new analytical tools that can stand on top of the mountain of evidence we have accumulated as a field (and as a CBS community) on processes of change.

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