The Common Infrastructure of Psychotherapy

Jeffery Smith MD

ALSO BY DR. SMITH

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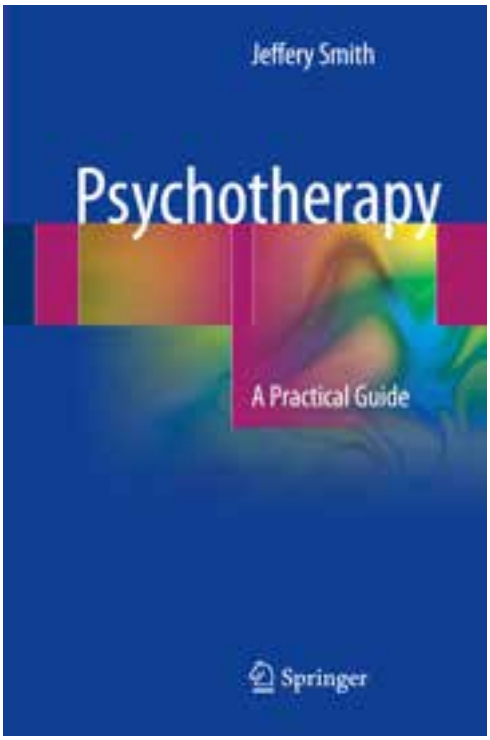
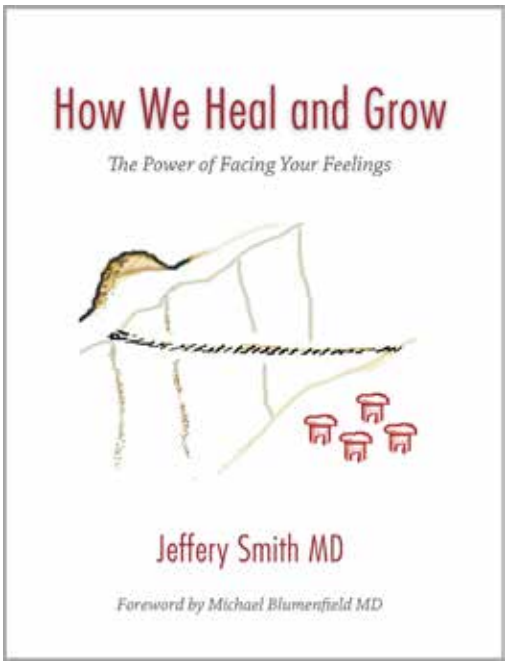


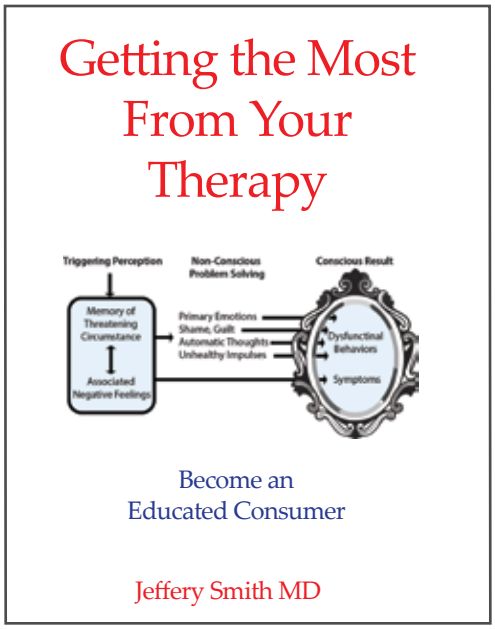
A unifying approach to understanding and conducting psychotherapy

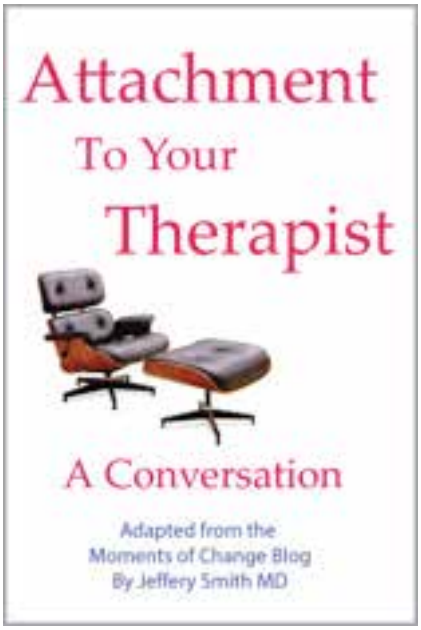
A thoughtful, integrative guide to psychotherapy from a wise and seasoned psychiatrist. Dr. Smith demonstrates charity to all therapies that work and malice only toward the rigid and ineffective. His emphasis on entrenched dysfunctional patterns and affect avoidance will prove useful to practitioners of all professions and persuasions. John C Norcross, PhD, ABPP, Distinguished Professor, University of Scranton & SUNY Upstate Medical University

It is remarkable how much Jeffery Smith packs into a small, readable volume. Covering a wide range of theoretical perspectives and clinical challenges, Smith lays out clearly and in detail how he works and offers a valuable integrative understanding of the essential elements in good clinical work. An important contribution to the field. Paul Wachtel, PhD, Distinguished Professor of Psychology, CCNY

FOR CONSUMERS







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THE COMMON INFRASTRUCTURE OF PSYCHOTHERAPY

By

JEFFERY SMITH MD

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The Common Infrastructure of Psychotherapy
Jeffery Smith MD. -- 1st ed.

TO THE PATIENT-PARTNERS WHO HAVE HELPED ME LEARN

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ACKNOWLEDGMENTS

First, without hesitation, Freud. Early in this book I call him a "Victorian scientist." It's true and he was limited by his time, but he had the courage to explore the unconscious and, in doing so, laid a clear and accurate foundation for all of us. I had no training in trauma in residency but soon after, I encountered the effects of early life abuse. There was little professional literature, so I went to Freud's works. There was an excellent introduction to trauma therapy, still relevant and up to date. It was also Freud, who discovered memory reconsolidation. He called it catharsis, but clinically, it is no different.

My own experience of catharsis, as well as the damaged self-esteem resulting from trauma got me started trying to understand the change mechanisms underlying psychotherapy. I attended a conference of the Boston Change Process Study Group, then, in 2008, participated in my first SEPI (Society for the Exploration of Psychotherapy Integration) conference. The next big step was learning about memory reconsolidation from Bruce Ecker's popular book, *Unlocking the Emotional Brain: Eliminating Symptoms at Their Roots Using Memory Reconsolidation* (2012). That led me to Richard Lane's 2015 article on memory reconsolidation as a general explanation of enduring change. That year on the first day of the SEPI conference in Dublin, there was Richard, whom I count now as a friend. Seeking kindred theory enthusiasts, I met Gregg Henriques, Jack Anchin, and Andre Marquis. Ben Johnson, a grad student, expressed interest in my writings, and agreed to be a co-author of the article on Research Gate as well as a co-conspirator in developing SEPI's first Special Interest Group (SIG) on convergence between new science and more than a century of collective clinical wisdom.

A NEW FOUNDATION FOR LEARNING PSYCHOTHERPY

From the earliest days of psychotherapy, the great mystery in our field has been how therapy really works. Various schools were invented by great thinkers, each of whom found a unique way to make sense of what they saw. Lacking a common scientific understanding they emphasized the uniqueness that made their system superior. Students were, and still are, asked to join a camp before they have any rational basis for such a choice. And even when they make a choice, today's students tend to believe that the various schools simply represent different ways of accomplishing the same underlying tasks.

We can think of our field as a tree, where the branches and foliage represent existing theories and orientations, with the trunk and roots standing for basic low-level mechanisms that are common to all therapies. What happened is that the field developed its branches and foliage before it was possible to complete the trunk and roots. This book is about doing just that, bringing together established wisom and recent discoveries to clarify the *common infrastructure of psychotherapy*.

Many authors and academicians (Goldfried, 2019) have pointed out that psychotherapy remains in what Thomas Kuhn called the "pre-paradigmatic" phase of its development as a science. Unlike the field of biology, where the discoveries of evolution and DNA transmission have provided a generally accepted foundation, our field often operates like the schools of the Middle Ages, competing on differences rather than seeking commonalities.

Fortunately, the fields of evolution and neurobiology have been moving forward and, at last, are converging with what we already know about the mind and psychotherapy. In an explosion of interest, numerous groups are exploring how to integrate the new neurobiology with existing theories of psychotherapy. In 2018, the Executive Committee of the Society for the Exploration of Psychotherapy Integration (SEPI) gave the author and colleagues a mandate to develop the society's first Special Interest Group (SIG) on convergence in psychotherapy. This forum has provided a means of collaboration with some of the best minds and cutting edge science to begin hammering out a clinically useful way to understand, at last, the foundational processes that explain therapeutic action.

What is presented here, is not a replacement for existing theories, but a contemporary expression of the common infrastructure that underlies all schools and orientations of psychotherapy.

Disclaimer

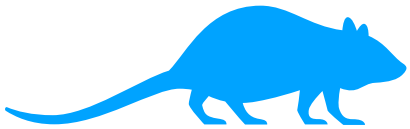
Due to individual differences, the material in this book is not intended as a substitute for treatment by a licensed therapist or therapy supervision by a qualified supervisor.

CHAPTER ONE

A MODERN VIEW OF THE HUMAN MIND

What the Human Mind is not:

A "cauldron of seething excitations" as envisioned by Sigmund Freud, the Victorian scientist (Freud, 1933).



Nor the infinitely trainable blank slate of Pavlov, Watson, and Skinner.

Time to Take a Fresh Look at the Mind

It is helpful to remember that psychotherapy was born in the Victorian era. This was a time of glory for the human intellect. The age of reason had given full bloom to the industrial revolution and there seemed no limit to what man could do. As science developed, it

was in the philosophical tradition of positivism, where the scientist was thought of as an objective observer of truth. Furthermore, even though religion didn't hold quite as firm a grip, aspects of human life that involved emotions and the irrational were considered primitive, to be suppressed and controlled by those who aspired to live more civilized, rational lives.

Among Victorians, Freud dared to conceptualize the unconscious, but, like his contemporaries, he saw it as a baser element of human functioning. Freud also saw the analyst as an objective observer, an outsider who sought not to disturb or shape the phenomena he was analyzing. Watson, the founder of behaviorism, the other major branch from which we inherit the traditions of psychotherapy, was also intent on objectivity, and declared that introspection was subjective and therefore not a proper source of data for science.

Now, in the era of relativity, some of Freud's and Watson's notions are ready for updating. Freud's concept of sexual and aggressive drives, *eros* and *thanatos*, for example, represents a more philosophical approach to understanding what makes us act and need to be revisited with a contemporary understanding of dopamine and motivation (Kirsch & Mertens, 2018). Watson's mechanistic understanding of the mind, made more radical by Skinner as a blank slate, maleable in any direction by reinforcers, has given way to the cognitive revolution, but lingers as a reluctance to look into the past. In the 50s and 60s, a number of trends and big ideas were born that have yet to be fully integrated.

1. Bowlby showed that emotionally sterile orphanages from WWII, did severe damage to the children they were caring for. The idea of attachment took on importance, and

with it, the notion that the way children were raised had important effects on how they related to one another later in life.

2. The cognitive revolution within behaviorism recognized that each individual developed unique ideas of how the world works, and that attending to these is essential to success in psychotherapy.

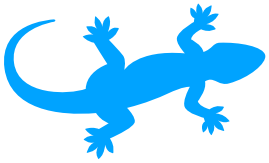
3. Psychodynamic schools began to recognize that the therapist was not an objective observer, but necessarily a participant in the therapeutic relationship, and that the relationship, itself, was part of what helped people to change.

4. The Viet-Nam War and the Womens' movement of the 60s. made the field aware again of trauma and that its effects could mark a person for life unless processed and healed. This further kindled scientific interest in learned fear in animals and humans.

Fundamental to moving beyond the 19th century in how we think of psychotherapy, it is time to embrace a modern view of the mind, a functional unit that is both the source of our problems and the ability to change them (MacLean, Paul D. (1990).

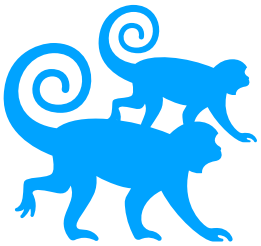
Lately there has been a great deal of empnhasis on the brain, but let's not forget the richness of it's contents, information that we now know is stored in the form of neural networks and pathways. The distinction between biological hardware and data is not as sharp as with computers, but focusing too much on the brain leaves out too much of what we deal with as therapists. We need to value both the brain and its contents.

Mind: A Product of Evolution



Bodily regulation, fight and flight: the "lizard brain"

Many of the symptoms our clients bring to therapy involve functions that depend on regulation in the nervous system via pathways quite similar to those of our prehistoric ancestors and that we hold in common with modern reptiles and birds. Systems for attention, motivation, and arousal bear the stamp of life before the mass extinction of 65 million years ago. Modern brain science can help make sense of some of the ways the human mind is adaptive or maladaptive in regulation and self-centered functions.



Social cohesion and emotion: the "monkey mind"

For mammals, in particular, social instincts are of prime importance in the way we adapt. Not long ago, in human evolution, physical survival was an every-day challenge and staying close to one another was perhaps more important to our success as a species than any other characteristic. This is why relationship is so deeply embedded in our physiology and psychology, and why it plays a giant role in the problems that bring us to therapy.

Central to our functioning as social beings is emotion. Activation of emotions is what triggers patterns of adaptation, our healthy and unhealthy responses to circumstances as we interpret them. Our (limbic) emotional apparatus is largely analogous to that of other

mammals. According to the neurophysiologist, Panksepp (2012), core emotions located deep in the limbic system include RAGE, FEAR, LUST, CARE, PANIC, PLAY, and the motivational system, SEEKING.

Self-awareness and the capacity to self-regulate through pride, shame and guilt.

Did you notice that the above list of emotions associated with the monkey brain, does not include pride, shame, guilt, and embarrassment? The self-conscious emotions are uniquely human and particularly important in psychotherapy. Physiologically, they are distinct as well. Unlike the emotions of the monkey brain, these have no corresponding emotional apparatus in animals. Furthermore, they appear to originate in the cortex, though they do involve the limbic system (Petra et al., 2014). Together, these emotions provide powerful reinforcement, which, under good conditions, keeps our behavior within social norms. On the other hand, inappropriate shame can cause problems like the low self-esteem of abuse survivors and the false value placed on thinness in anorexia nervosa.

Conscious decision making and planning.

Without getting into the territory of philosophers, we all have the experience of free will, making decisions in which we choose one path or another. We also experience choices

which we make without thinking and others that seem to be “compulsive,” that is, actually made against what we believe is best for us, such as procrastination or skipping exercise. Free will and the ability to develop elaborate pictures of the future and use them for decision making are essential to psychotherapy and likely to be uniquely human.

Each of these levels of mental functioning is a product of evolution. The extreme degree of flexibility built into human development and adaptation creates an extraordinary degree of individuality, and with it, uniqueness in each person’s adaptations. This contributes to the daily richness of doing psychotherapy where life’s challenges to individuals may be similar but solutions are unique. Each level of mental functioning has its characteristic ways of introducing trouble into human adaptation and shaping the ways psychotherapy can support change for the better.

CHAPTER TWO

CONSCIOUSNESS

About 95% of thinking is not conscious.

We greatly value our conscious processes, but a common estimate is that 95% of the mind's information processing takes place outside of consciousness. To put consciousness into relief, let's start with a look at it's counterpart, the incredibly gifted unconscious.

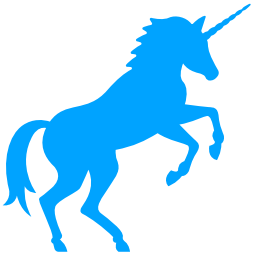
Hunches and "gut instincts" are products of our mind but do not originate in consciousness. Rather, they "pop" into consciousness. Creativity consists of finding associations that haven't been thought of before. The non-conscious mind specializes in doing just that, not to mention correctly applying the rules of grammar and other amazing feats. Unconscious thought is organized around associations, which is why metaphor is so natural to us and so useful in conveying meaning. To think of a metaphor all we have to do is let our mind work on it a moment and it slips into consciousness. How often have we all had the experience of grinding away at a problem without success, then in the morning, finding the solution deposited into our consciousness. All these are examples of the rich operation of our unconscious mind.

Consciousness is Selective:

A substantial body of research (Smith 2016)] is making it clear that consciousness gives us only a small window on our mental processes. What is available to consciousness depends on a number of factors, apparently selected through evolution to give us access to what we most need for adaptation.

Perhaps the enthrallment of the age of reason and the explosion of capabilities in the industrial age led us to overestimate the power of reason. It is time now for a more nuanced and relativistic view. We need to trade the metaphor of operating a machine for one of riding a horse, where good riders seek harmony between the horse's will and their own.

As therapists, it is time for us to be more modest about conscious thought. It is wonderful and extremely useful, but only a small part of what our marvelous brains are able to accomplish. If we couple this new modesty with an appreciation of how little control we have over our non-conscious problem-solving mind, we will have a more realistic sense of what we can and cannot expect from conscious efforts. Yes, we have reason, but it does not always prevail, and that reality is the bread and butter of psychotherapy.



Consciousness is rich and nuanced

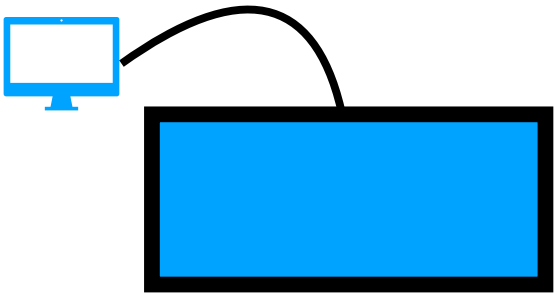
Having described the virtues of non-conscious information processing and the significant limitations of conscious thought, it is time, now, to look on the bright side. Consciousness and the power it conveys to evaluate, plan, and decide, is one of the great gifts of being human.

What is the contribution of conscious thought to poetry, art, science, philosophical thought? What about free will, self determination, ambition and goals? One way to look at the mind's division of labor is that non-conscious thought works as a "metaphor engine," generating free, loosely defined associations, while conscious ideation prunes the results by applying the test of precise logic.

A poet might be conscious of many possible wordings, but selects only certain ones. A scientist tests her ideas by searching out logical inconsistencies. Planning involves testing whether a path of action consistent with one's beliefs and values. Will it produce the results I desire? These are the kinds of questions conscious thought can best answer. Furthermore, as we learn from one another, we can climb on the shoulders of giants who have gone before, expanding on pre-existing possibilities. The best results make use of both parts of the mind. Making full use of both, humans can dare to perform such feats as studying the formation of the universe billions of years before our own existence.

CHAPTER THREE

THE NON-CONSCIOUS MIND



The image here depicts a large information processing box and a small monitor with which to glimpse *some* computational operations. The discussion that follows is a further look at how the non-conscious mind is a problem solver, highly relevant to both healthy functioning and to the unhealthy patterns of adaptation we call psychopathology.

The key point is that the non-conscious functioning of the mind is purposeful. Evolution has gifted us with a powerful mind that permits such pleasures as entertaining ourselves, learning trivia, and seeking the pleasure of understanding. However the apparatus that gives us these fine capabilities did not evolve for fun. Rather, it evolved for selective advantage. Whatever patterns it produces can be regarded as bearing traces of their origins as adaptations to the environment. In some context, at some point in history, each pattern or product conferred

a selective advantage. Furthermore, evolution tends to avoid waste. At rest, the brain uses more energy per gram than any other organ in the body, so we can assume that evolution has paid attention to avoiding unnecessary mental work. We can think of the products of the mind as purposeful, and even efficient.

Some examples highlight these issues. In reacting to immediate danger, the prefrontal cortex, where much of thoughtful judgment is done, tends to shut down. Its blood supply is reduced, and more primitive, but faster survival circuits take over. Reactions are less subtle, but quicker and, historically, at least, more effective. Anyone who takes a new job will likely experience the first day as exhausting. This makes sense because so many decisions have to be made and new patterns formed. After a few days, habits begin to take over and they are more energy efficient. It is far simpler to follow a pre-existing pattern than to invent a new one.

To sum up, the non-conscious part of the mind is constantly monitoring the inner and outer environments for patterns that might signal opportunity or danger. Based on those appraisals, it generates products that gain direct or indirect access to consciousness. For example ideas and impulses pop into consciousness, while a pounding heart might signal indirectly that the mind has regulated the body in anticipation of intense activity. Each can be seen as a goal-directed response. Here is a list of adaptive products of the non-conscious mind, followed below, by a discussion of each one, separately.

Actions

Many actions arise directly from the unconscious without our control. We tend to call these “reflex” actions. If we include speaking as an action, much of how we form sentences is automatic, while consciousness may apply filtering and shaping. Some speech, such as exclamation, may be entirely automatic. Many of the actions that cause us trouble are done without thinking. As we observe our automatic actions, we may gain awareness, but distinctly less conscious ability to control of the reaction that has just happened. Overall, the non-conscious mind has a great deal to do with actions, especially the ones over which we have little control.

Feelings

Conscious feelings are not identical to deep emotions originating outside of consciousness, but often derived from them. Feelings are products of the mind that influence us in multiple ways. To understand their role in psychotherapy, we need to look at the mind’s emotional system, starting with the deep limbic networks we share with other mammals.

Emotions have been shown to exist as activation of neurons in the limbic system. The structures where they originate appear closely analogous, both anatomically and in function, to similar structures in other mammals (Panksepp, 2012). Activation of analogous limbic networks often produce similar reactions in both humans and other mammals, i.e., rats and humans react similarly to electric shock. In the absence of commonly accepted terminology we call these “core emotions.” Let’s look at their characteristics.

1. Core emotions can exist entirely outside of consciousness (Smith, 2016). These core emotions are the triggers of spontaneous or automatic response patterns, both adaptive and maladaptive.

2. When core emotions enter consciousness, they are enriched with associations, adding complexity, and specificity. These are what we call *feelings*.

3. Feelings accompanied by bodily changes are called *affects*. The presence of bodily changes such as tears are the clinician's best indicator that core emotions have been activated, which (As we will see below) is one of the necessary conditions for therapeutic modification of existing maladaptive patterns.

4. Feelings can exist in consciousness without bodily changes. These intellectual feelings do not necessarily involve activation of core emotions and are not directly helpful in the change processes we will explore below.

Having outlined the components of the human emotional system, let's look at feeling from a clinician's point of view. Here we refer to affects, that is, *feelings accompanied by bodily changes* because they, as opposed to the purely intellectual kind, are central to our work as therapists.

When we notice an affect we can picture a complex of core emotion accompanied by associations, and projected into consciousness. These emotional complexes serve two

purposes. First, the core emotion component is responsible for triggering adaptations including spontaneous actions, thoughts, relating, and bodily regulation. Second, conscious feelings often seem to influence of deliberate decision making, which may or may not be in our best interest. For example, depressed feelings may lead to social isolation.

Thoughts

The non-conscious mind produces a great many thoughts. These come in various forms: pictures, associations, words, memories, etc. An additional group of mental products in the category of thoughts are wishes, impulses, yearnings, and needs, all of which relate to a goal. In general, these also make us think of potential actions we might take. Impulses, as opposed to involuntary actions, have some degree of separation between thought and deed, allowing the potential of conscious control. The difference is subtle. Not infrequently in psychotherapy we might help a client to become aware of actions that had previously been habitual or automatic, but, with conscious attention, become matters of choice.

The Cognitive Behavioral tradition focuses a great deal on "automatic thoughts." In doing so they recognize that thoughts are spontaneous products of the mind over which we do not have conscious control. That is to say, they come out of the non-conscious mind. Perhaps still under the influence of Watson's belief that the client's productions could not be the subject of scientific inquiry, some avoid asking *how* and *why* people have automatic thoughts. More recently, there has been considerable interest in the individual origins of "schemas" and "core beliefs" derived from early experience. "Formulation," that is, making an educated guess about the origin and functioning of maladaptive patterns has come of

age. From a modern point of view, there is no reason not to ask the question, though we recognize that answers are based on indirect inference. This is not unlike scientists asking why a particular mutation has persisted. What is its selective advantage? The answer is usually a guess.

One of the most striking demonstrations of the purposefulness of thoughts comes from the clinical experience of observing formerly alcohol dependent individuals newly abstinent. It is quite common for them to report thoughts that seem perfectly calculated to lead the individual to a relapse. A typical spontaneous train of thought (in someone who has just suffered serious consequences of out-of-control drinking) is, "I don't really believe that I have an alcohol problem. I think I can be a social drinker like my peers. So I'm going to drink when I feel like it. I'll simply control the quantity." It is hard not to see these thoughts as the mind treating alcohol as a necessity and bringing the most effective arguments into consciousness to help convince the individual to resume drinking. More universally, it is common for the mind to produce rationalizations that influence us to act on impulses that are not always in our best interests.

Here is the surprise. Asking *why* and exploring spontaneous thoughts has a hidden benefit even more important than the knowledge gained. Such exploration activates emotions at a level that fulfills one of the two conditions for change (the other condition is providing corrective information). Thus three common therapeutic activities are linked:

1. Explore to understand better how spontaneous thoughts support avoidance of uncomfortable emotion and support other goals of the non-conscious mind.

2. Explore spontaneous thoughts so as to activate deep emotions required for change.

3. Explore to identify avoindance mechanisms and invite the client to let them go

Relating

Despite there being some overlap between action and relating, we have included patterns of relationship as one of the products of the non-conscious mind because of their special importance in human life and problms. Driven by powerful built-in forces, patterns of relating are largely habitual and automatic, starting at a very early age. Those patterns, when less than satisfactory (relative to other possible ways of relating) are some of the most important maladaptive patterns to be addressed in psychotherapy.

Bodily Regulation

As pointed out above, visible signs of physiological reaction are the therapist's main way of knowing that deep emotions have been activated, a necessary condition for important change processes discussed in Chapter 4.

Biological tendencies or predilections can have a profound influence on the way the mind adapts. Anxiety and panic attacks, for example, are much more prominent in some individuals and usually run in families. Anxious responses can be triggered by psychological factors, but their impact may be determined by genetic predisposition.

Many of the problems people bring to psychotherapy have some aspect directly related to bodily regulation, ranging from sleeplessness to pain, to bowel disturbances, and headaches. These may be helped by psychotherapy, but are often difficult to influence. Other bodily problems may be more purely biological and not direct targets of psychotherapy. These usually require biological approaches to treatment. Even then, where the problem is primarily biological, psychotherapy may nonetheless help improve the individual's response. For example, if the response is denial, the result may be medical neglect. Maladaptive responses to illness can be important opportunities for positive change.

To summarize, products of the non-conscious mind are instrumental in shaping our conscious lives. We react to spontaneous or automatic thoughts feelings, impulses, relational events, and bodily changes. In fact, from the point of view of psychotherapy, one of the most important functions of those products may be to influence our voluntary responses and decision making. CBT, in particular, is specialized in helping when problems arise from conscious reactions to automatic responses.

Can we know what is in the non-conscious mind?

Perhaps we are getting ahead of ourselves in discussing the purposefulness of products of the non-conscious mind. Isn't it presumptuous to think we might know the aims of a mind we can't consciously know? Direct knowledge of the "thinking" of the non-conscious mind is not feasible, but how much of scientific knowledge is obtained directly? Very little. What we can know must come from indirect indicators. There are several.

1. Resonance. To use a metaphor, when unconscious thoughts or concerns are "near the surface," thinking or talking about those thoughts can produce, to use another metaphor, a sense of "resonance." Sometimes conscious thoughts give a different feeling, as if they correspond to something internal and significant. As therapists, we count on clients reporting this feeling to guide our educated guesses about what is present and close but not directly accessible.

2. Affect. Another clue we often use is emotion accompanied by visceral changes, the definition of affect. When a conscious thought or image or idea produces tears or other bodily manifestations, then we can make a strong guess that it corresponds with something important deep in the limbic system. Those emotional reactions are our best indicators that nerve cells in limbic sites have been activated, as needed for change.

3. Dreams. These have long been recognized as a window on our non-conscious mind. Thinking of our clients' dreams as metaphors for whatever is "on their mind" is likely to yield hypotheses. This method is often fruitful because the native information processing mode of the non-conscious mind is association, the basis of all metaphors.

4. Associations. Material that is significant can also trigger spontaneous thoughts and associations that are likely to shed light on the mind's concerns. Assuming that every mental product is an association can be useful at the beginning of sessions. It is safe to assume that the first words out of the client's mouth are in some way related to what is most on their mind. Further into the session the same principle says that what follows an unanswered question somehow embodies the answer.

5. Behavior. Working backward from an action or impulse, we can ask what problem that action might have been aimed at solving. An impulse to get up and leave the room might lead to a hypothesis that certain material threatens to bring traumatic memories to consciousness. Such hypotheses then lead to tests.

5. Predictions. We therapists are constantly doing "experiments." We develop hypotheses, try them out, and observe the results. For example, we might predict that verbal exploration of a certain circumstance would bring up certain affects. When predictions are correct, they tell us we are on the right track, and usually lead to more testable predictions.

6. Results. Finally, therapeutic results are among the most powerful indicators that our understanding is accurate. The more specific the change, the more likely it is due to a particular therapeutic process as opposed to some more general effect.

Using these indirect indicators, it is possible to develop quite precise models of non-conscious thought and logic. Perhaps the best way to think of this is that every session consists of a series of predictions, trials, and outcomes. Approaching the process in a scientific spirit, we don't necessarily need statistics, but a healthy skepticism and openness to alternative explanations. When predictions are not correct, we have a valuable opportunity to learn and to modify our models, both in general and for that client in particular. In this way, it is possible to build quite substantial notions about how the non-conscious mind functions.

Can we take advantage of the power of the non-conscious mind?

We can effectively put our non-conscious mind to work solving problems, which is precisely what it is designed to do. We do this all the time, but being aware of its power and characteristics, we can get the most from this awesome organ.

We all know that stories have a particularly compelling effect on the mind. Once begun, we want to know how it comes out in the end. In a very similar way, asking a question sets the non-conscious mind on a quest. This likely involves what Panksepp (2012) calls the SEEKING or motivational system. In any case, we can make deliberate use of this property. Whether it's a new and creative solution to a problem or the answer to a knotty question, the non-conscious mind is ready to use its vast library of associations to sift thought innumerable possibilities. The only limitation is that the process may take time and sleep.

To use a metaphor, we can think of this technique as "seeding" the non-conscious mind, then "harvesting" its products. The best way to do it is, last thing in the evening, to analyze the problem in detail, develop one's best ideas, then go to sleep. The next morning, leave room for unstructured activities such as showering, driving, or performing some very routine activity. As if by magic, fresh ideas and solutions will pop into consciousness.

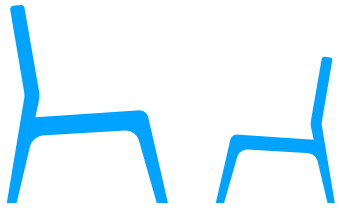
Some of the mind's responses are not optimally adaptive

In the next chapter, we turn to those responses that we might want to eliminate or trade for healthier ones.

CHAPTER FOUR

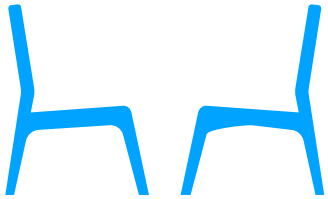
ENTRENCHED MALADAPTIVE PATTERNS

Counseling vs. Psychotherapy



Counseling teaches clients improved ways of handling situations and assumes the ability to change at will.

Psychotherapy helps clients trade in "entrenched maladaptive patterns" for healthier ones when change is not trivial.



"Entrenched"

The essential difference between counseling and therapy is whether the client is capable of following the professional's good advice. When people experience maladaptive patterns, they don't turn first to psychotherapy, rather, they try to change on their own. If that doesn't work, they speak to family members, friends, or perhaps self-help solutions. When these fail and when the client is unable to follow good advice, we can say the prob-

lem is *entrenched*, a fine English word, meaning "stuck." Since the human mind is fundamentally aimed at making life successful, then responses that are both dysfunctional and entrenched are indications that something is seriously wrong. Patterns that are significantly entrenched belong to an entirely different category. While being incredibly varied, they have important characteristics in common. Here we call them Entrenched Maladaptive Patterns, EMPs.

EMPs include:

Common characteristics of EMPs

1. They are Patterns: A pattern is something identifiable and likely to be repeated. When the mind first develops a response to some circumstance, the pattern is retained and is likely to be used again in the same or a similar situation.

2. Maladaptive: Of course, psychotherapy is concerned with patterns that might be replaced by a healthier or more satisfactory ones. The key part of the word, though, is *adaptive*. What that implies is that the non-conscious mind is always trying to adapt. It's function is to adapt, so we can assume that every maladaptive pattern started out in some way as a means of adaptation. There are several pathways by which patterns

can start out as adaptations, then go awry. For example the adaptive function might go back before humans existed or it might be a way of coping with dysfunctional childhood family dynamics that are no longer relevant to adult life.

3. Neural Networks: Patterns retained in the non-conscious mind, like all memories, are held in the form of neural pathways or networks. These are groups of nerve cells that tend to fire together, and are the primary way information is held in the brain. This is important because adding new patterns requires storing them in memory, and modifying old ones requires changing existing neural networks or blocking a response. Psychotherapy must ultimately utilize one of those three pathways.

4. Response to threat: Entrenched maladaptive patterns are almost always responses to circumstances appraised as threats. The origin of our natural bias towards attending to threats goes far back in evolution. "The relentless pressure to outwit predators while balancing homeostatic threats, such as resource depletion, has produced a nervous system that optimizes survival actions" (Mobbs et al. 2015). As a matter of clinical observation, this principle holds true for entrenched maladaptive patterns . In a few cases, maladaptive patterns such as addictive behaviors may start out as sources of pleasure. Even if an addiction does start out as a source of pleasure, it later becomes a way to cope with negative emotions and further spawns patterns of denial.

5. Entrenchment, why the mind resists change: One near-universal reason for holding tightly to unhealthy behaviors is that *the mind treats EMPs as if they were necessary defenses* against some threat or danger. Thus, when the client or therapist

sets a goal of modifying a pattern, the non-conscious mind treats the potential loss of a "protective" mechanism as a threat, in itself. The non-conscious problem solver mobilizes new patterns to block the therapy from bringing about change. Interestingly, these patterns, what therapists call "resistance," can be seen as EMPs, as well. As such, they, too, may require therapeutic efforts and resources to overcome.

6. Avoided emotions: A final common feature of EMPs, related to resistance to change, is our instinctive *reluctance to approach memories or experiences associated with painful emotion*. Avoidance of difficult emotions can prevent those emotions from healing. Avoidance of experiences can also block the individual from trying out new behaviors and experiencing positive results. Avoidance of exposure to painful or unfamiliar emotion or experience can also prevent growth or change.

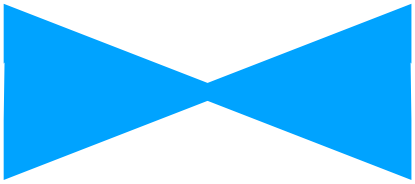
If it weren't for these common characteristics, psychotherapy would be even more complex and unfathomable than it is. In developing the common infrastructure, we take advantage of the commonalities to identify broad principles to simplify the therapist's work.

From complexity to simplicity to complexity again

Theoretical physicist Michio Kaku (2014) said the human brain "is the most complicated object in the known universe." Besides the complexity of the physical brain, there is every bit as much complexity in the way the mind appraises circumstances and produces adaptive responses. The range of circumstances under constant evaluation by the non-conscious mind is enormous. Similarly the variety and complexity of problem solving

strategies that come out the other end is hard to fathom. However, in between, at the point where appraisal initiates a response, there is a nexus of simplicity.

We can picture this system in the shape of an hour glass going from large on the left where the situation is appraised, to a small and narrow place of simplicity in the middle, and back to almost infinite complexity in the variety of possible responses.



The simplicity in the middle is because the mind seems to boil circumstances down to just two categories, *opportunities* and *threats*. How the mind makes this determination is quite intriguing.

As indicated in Chapter 1, Jaak Panksepp (2012), identifies six basic emotions represented neurologically within the limbic system, RAGE, FEAR, LUST, CARE, PANIC/GRIEF, and PLAY. Each is associated with analogous brain structures across species, which produce similar responses when activated. As you can easily intuit, three are positive and three are negative, FEAR, RAGE, and PANIC/GRIEF. Neurophysiologists can demonstrate their "valence" by testing whether a stimulus that activates the brain region associated with a particular emotion is "reinforcing" or "punishing," that is, whether the stimulus causes approach or avoidance.

The core emotions are associated with regions within the amygdala. When a region associated with negative valence is activated, it means the mind has identified a threat. Activi-

ation of these regions is synonymous with a negative core emotion. It is activation of core emotion that labels or identifies the stimulus as a threat. Furthermore, it is core emotion that triggers a response. It appears that up to the moment core emotion is activated, the mind has no way of "knowing" that a threat is present. Only then, can a response be formulated. Thus activation of those regions is the brain's "operational definition" of threat.

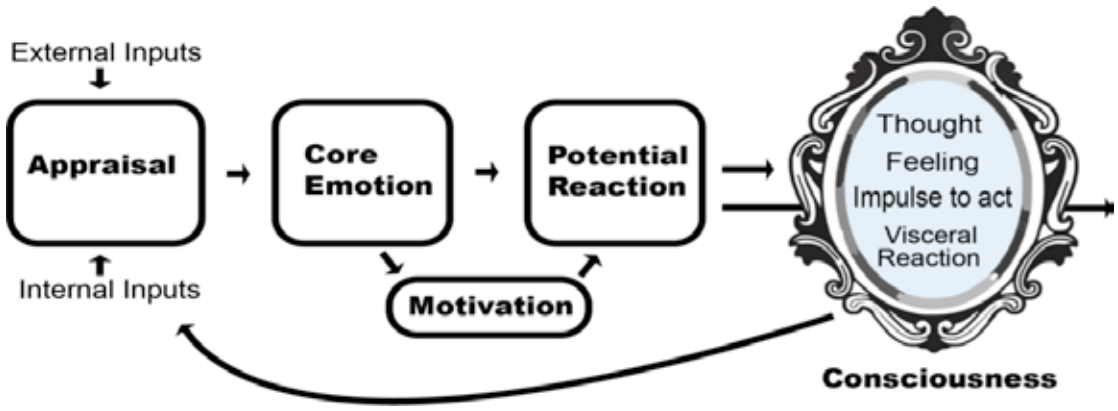
This relative simplicity is at the center of the system. From there, in the case of threats, the mind returns to complexity in calculating what response will protect the individual. It is temptingly elegant to picture a feedback loop where the response is designed to suppress precisely the core emotion that triggered it. That would mean that the mind's system of adaptation works by decreasing the emotion that signaled a danger.

Adaptation: from appraisal to reaction

In a continuous process, the mind, mostly outside of consciousness, is constantly monitoring conditions both external and internal to be prepared to react. It is important to realize that the mind is heavily oriented towards prediction, that is anticipating in advance what to expect, so as to be ready. This information processing is "nonlinear," meaning that results are fed back and compared to inputs so as to further refine the predictions, rather than a straight line from inputs to results.

As mentioned in Chapter 1, self-conscious emotions like shame and guilt are not in the list of core emotions because they originate in the cortex. They are potent triggers for response, but by pathways that are not clearly understood at present (see Chapter 11).

Motivation is an additional and very interesting element in how the mind responds. Once again, as described by Panksepp (2012), motivation, which he calls SEEKING, is an extraordinarily flexible system, based primarily on dopamine, and able to attach to virtually any goal and drive it until it is achieved. Without motivation, it appears unlikely that the individual would continuously expend the emotional and physical energy needed to carry out the response. Below is a simplified diagram to illustrate how responses are produced.



When a fully developed response begins to seek outward expression, it finally enters consciousness. Note that automatic actions may bypass consciousness until they are manifest (arrow behind the mirror). The non-conscious mind's products, action feeling thought, relating (a kind of action), and visceral reactions, are depicted in the diagram where the mirror represents our ability to look at our own mental processes.

"Influencer products"

With the exception of automatic actions, each of the non-conscious mind's products can influence deliberate choices and free will. As mentioned in Chapter 3, one can specu-

late that one function of the non-conscious mind, as with addicted individuals abstaining from a substance, is to generate products whose purpose is, at least partially, to influence voluntary behavior. Spontaneous thoughts that come up in psychotherapy can often be seen as the mind's attempts to defend against experiencing some painful or uncomfortable emotion or experience. This has been extensively researched in the field of Experiential Avoidance, (Hayes, S. et al, 2004).

CHAPTER FIVE

HOW PATTERNS CHANGE

We turn now to the low-level mechanisms by which change in EMPs can take place. At this level, only three pathways are known. By "mechanism," we mean the concrete chains of cause and effect that result in alteration of the stored patterns that determine the individual's response to a circumstance. To avoid confusion we recognize that the term "change mechanism" has sometimes been confused with *mediators* (Kasdin, 2007). These are not strictly mechanisms, but common factors correlated statistically with therapeutic success. Underlying such mediators are the three mechanisms described here.

1. New Learning

Clients learn new patterns of coping that are healthy and satisfactory. Sometimes adoption and practicing of new ideas or behaviors is sufficient for maladaptive patterns to be set aside and replaced.

New learning involves establishing new neural networks and pathways. The details of learning and memory are beyond the scope of this book, but do involve establishment of new synaptic connections, which lead to new ways of responding.

Behaviorally trained therapists, especially, focus on helping clients learn new patterns of coping. In every therapy, clients learn and practice. They learn in both a cognitive mode and in a more experiential or implicit mode. Both kinds of learning can be enhanced by exercises and repetition. We are all familiar from school with the tools and techniques of cognitive learning. We can turn to sports and uniformed services for techniques helpful in absorbing implicit learning and making it available under conditions of stress.

In some cases, new learning is so helpful and positive that it can become usable without significant resistance. Not all problems are entrenched, and this is where counseling can be a part of psychotherapy, a useful and valid way to help clients adopt new patterns where resistance and entrenchment are not evident. Where entrenchment is present, maladaptive patterns will need to be blocked or modified by the two remaining mechanisms.

2. Extinction by Cortical Inhibition

New patterns established in the cortex can send inhibitory signals to the limbic areas where maladaptive patterns originate. In this way, a dysfunctional response can be prevented from being put into action. Called *extinction*, this is the purported mechanism of exposure therapy (LeDoux, 2014). Unfortunately, it is not permanent, and requires ongoing maintenance.

The concept of extinction goes back to Pavlov, who observed that when a natural stimulus such as food, was paired with a "conditioned" stimulus such as a bell, animals would

respond to the new, conditioned stimulus with the same response as to the natural (unconditioned) stimulus. On the other hand, when the natural stimulus was removed, eventually, the animal would revert to its original condition, no longer reacting to the bell with the expected response. He called this form of unlearning *extinction*.

Behaviorists make use of extinction to block maladaptive patterns. For extinction to work, the conditioned stimulus must be evoked with some intensity. This is the basis of exposure therapy, where clients are reminded of the trigger for their maladaptive response. Exposure Therapy is one of the techniques accepted by the US Veterans Administration for helping veterans suffering from PTSD. Let's look more closely at the paradigm.

In war, the natural stimulus is the experience of being in the midst of real dangers such as flying bullets or wounded, and dying people. The conditioned stimulus might be sounds and sights of war, re-evoked through audio or video recording. The ex-soldier is now "exposed" to the conditioned stimulus, the sights and sounds, while the reality of death and harm remain notably absent. Clinical experience has shown that without fully evoking the vividness of the war sounds and sights, change will not take place (Kaczkurkin & Foa, 2015). The conditional stimulus must be strong enough that neural networks representing war, the ones that trigger a maladaptive startle response, must be vivid enough to activate relevant neural networks. Sessions are repeated until the response is consistently inhibited. After that, the old fear may return unless extinction is periodically reinforced.

Neurophysiologists have now elucidated the neurophysiology of Exposure Therapy. Learning takes place in the cortex, causing inhibitory signals to be sent to the limbic areas

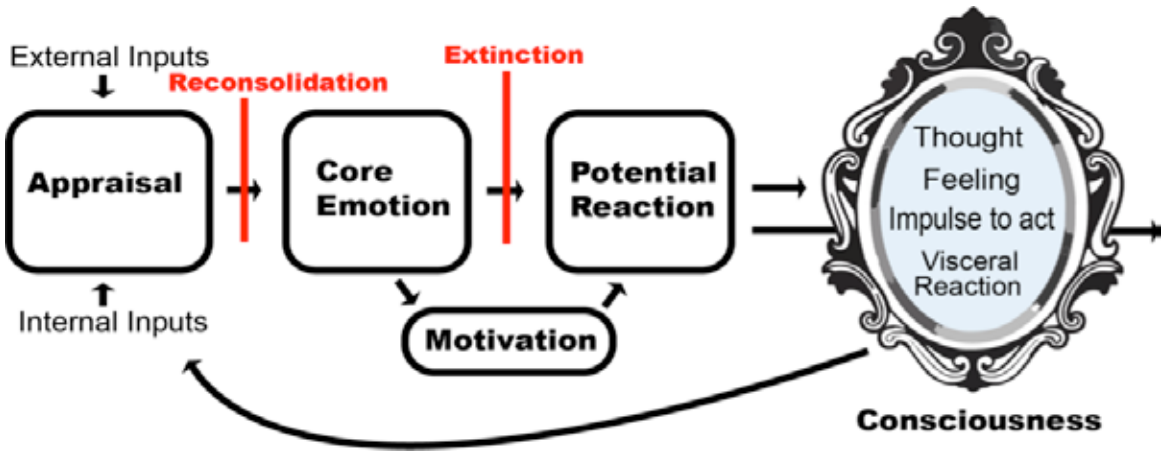
where the response originates. The response is then, neurologically inhibited. However the appraisal part of the reaction is not affected. Furthermore, the inhibition does not affect the neural networks that embody the original response. It remains latent, and, without reinforcement of the inhibitory pathways, will tend to return.

This is why, clinically, exposure therapy does not endure, and requires effort to maintain. The old response tends to come back, and requires ongoing reinforcement. Nader (2103) gives an explanation. Functional scans show that when an animal is presented with a stimulus that evokes a response of fear, an area in the amygdala can be seen to "light up" with neural activation. When the exposure protocol succeeds in extinguishing the original response, the relevant area in the amygdala is still sensitized. The implication is that appraisal is unchanged, but the response has been blocked.

3. Memory Reconsolidation

Nader et al. (2000) elucidated memory reconsolidation, a means of modifying already formed neural pathways. When pre-existing pathways such as learned fear are activated and, simultaneously, the information they represent is contradicted (prediction error), then, for a period of a few hours, synapses can be reprogrammed with the new information. Unlike extinction, the change is permanent, requiring no effort to maintain.

Memory reconsolidation and extinction are currently the only known mechanisms allowing modification of existing patterns of adaptation. Unlike extinction, memory reconsolidation changes the information stored in neural networks so that core emotion is no longer activated and the mind does not detect danger. This "reprogramming" is permanent and eliminates maladaptive responses without further expenditure of effort. Below is the earlier diagram, now showing the locations of extinction and memory reconsolidation.



For memory reconsolidation to allow change, two conditions must be met. First, the relevant neural networks must be activated. In therapy this means that the information needing to be changed must be activated with some intensity. Second, corrective information must be detected as a "prediction error." The latter is what triggers synapses becoming volatile and subjectg to reprogramming over a period of a few hours (Junjiao 2019).

In the case of trauma, for example, experiencing vivid recall (causing activation of relevant neurons), in a context of safety, such as the therapeutic relationship fulfills both conditions. The expectation of danger is contradicted by a perception of safety. This leads to prediction error, which leads to reprogramming according to the new information. What

is most exciting about memory reconsolidation is the fact that, once reprogramming takes place, it is permanent and does not require effort or reinforcement to maintain.

It is worth noting that the conditions required for memory reconsolidation are very similar to those needed for extinction: Activation of memory in the presence of corrective information. Not surprisingly, it is beginning to appear that Exposure Therapy may actually involve some of both extinction and memory reconsolidation (An, 2017).

While memory reconsolidation is currently being intensely investigated, the biochemical pathways have already been mapped out in detail, as is the fact that these pathways are clearly distinct from those involved in the mechanism of extinction (Emiliano, 2014).

There has been some controversy about memory reconsolidation. Neuroscientists found that the re-activation of memories must be quite intense for it to take place, especially when, as in psychotherapy, the process takes place long after the original learning. On the other hand, Ecker (2012) approaches the argument from a logical point of view. He argues that if change in maladaptive patterns can be demonstrated to be enduring and sustained without effort, then, by elimination, the mechanism must be memory reconsolidation, since there is no other known change process with those characteristics. In the author's experience, the most dramatic and convincing examples of memory reconsolidation have been in relation to childhood traumatic memories shielded from recall since they first took place by dissociation. When these experiences come to consciousness in a context of safety, it is with full detail and emotion, as if the events were in the here and now. Processing of intense emotion takes place permanently and without further effort being required.

For the clinician, it is useful to realize that memory reconsolidation takes two somewhat distinct forms. In some instances the EMP to be resolved is avoidance of a dreaded emotion. There, the emotion must be activated, along with corrective information showing that the situation is no longer dangerous. In others, it may be an erroneouos idea that must change. Here we look at the differences

a. Memory reconsolidation for dreaded emotions

Where the trouble is emotion or emotion-laden experience that is too frightening to face, memory reconsolidation allows the link between memories of events and the painful emotion itself, to be erased. The corrective information is primarily the safe context of the therapeutic relationship. Since core emotion is the mind's way of identifying danger, then the non-activation of core emotion means there is no further need for a protective response. Thus, to put it in simple language, when memory reconsolidation disconnects the output of appraisal from the fear detector in the amygdala, fear neurons are not activated, and the memory is no longer treated as a threat.

This appears to be how frightening events are "detoxified," that is, the intense dread they formerly caused is no longer experienced. Along with the healing of dread, symptoms of PTSD such as avoidance of reminders, flashbacks, and hyper-vigilance tend to disappear. Once again, the change is permanent and effortless.

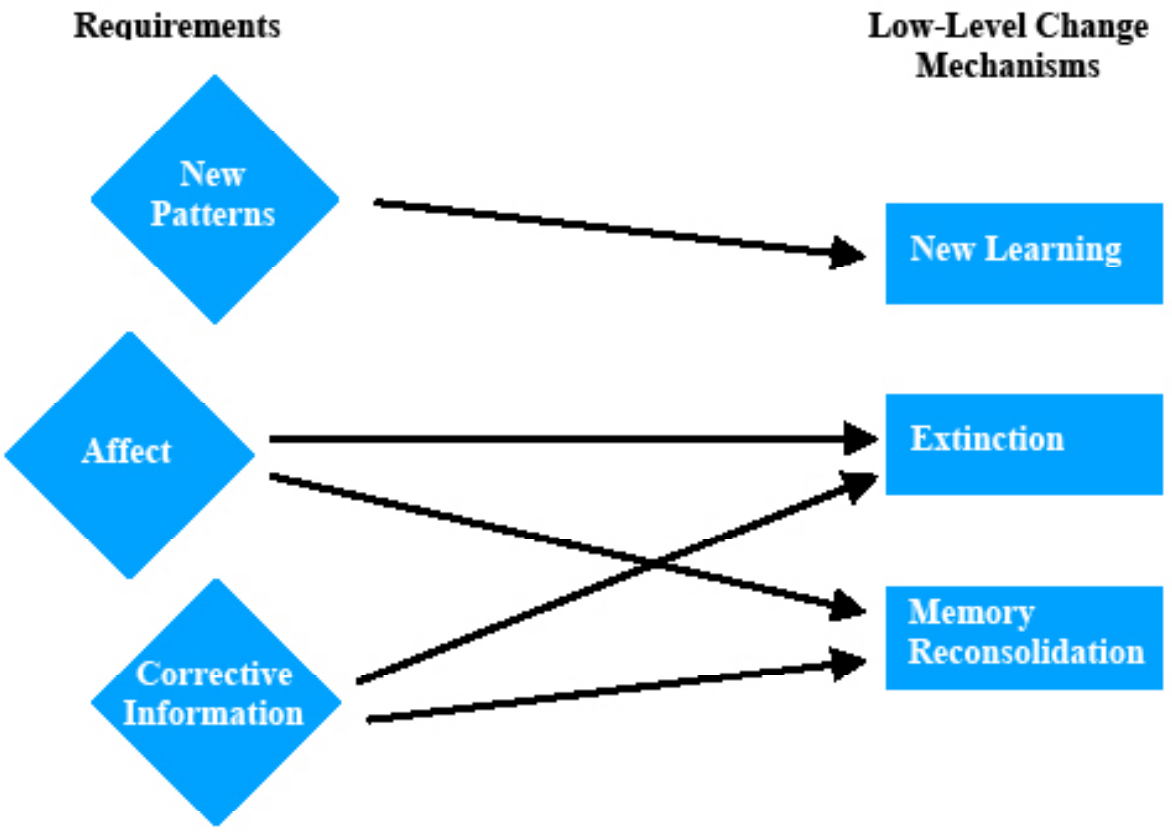
b. Memory reconsolidation affecting cognition

Not all maladaptive patterns are focused on avoiding painful memories. Ecker (2012) has written extensively on patterns based on instinctive but incorrect understanding of how life works. Some are implicit, while some appear to have a cognitive (or semantic) basis. For example, an adult might behave in such a way as to avoid success. Careful inquiry might reveal that at some point earlier in life, the individual came to an understanding that success would result in rejection by a valued person. The procedure Ecker has refined is to help the client express that belief in words such that the cognition is experienced as an unshakable, fundamental truth. Strong affect signals the presence of a deep conviction. The client is then invited to focus on realities that contradict the deep belief. This generates a prediction error. The client often feels rather silly to have held such an irrational belief so deeply. In a matter of minutes, with a few repetitions of bringing the deep belief to mind along with obvious contradictory evidence, the grip of the deep belief evaporates. Once again, this modification of a deeply held cognition is permanent, and is retained without effort or reinforcement. As stated above, Ecker proposes that the only currently known explanation for such a phenomenon is memory reconsolidation.

In summary, this leaves us with three known paths by which maladaptive patterns can be changed. The first is when new patterns are learned. The second is extinction, where the triggering emotion remains activated but the maladaptive pattern is suppressed. And the third mechanism is memory reconsolidation where the neural networks that connect appraisal to response are no longer activated. We will see in coming chapters, that these three mechanisms represent the most fundamental common infrastructure of psychotherapy and are the keys to the final steps of every school of treatment.

CHAPTER SIX

HOW THERAPY SUPPORTS CHANGE: 3+4



Three requirements for three low-level change mechanisms

In the previous chapter, we described three low-level change mechanisms which, as far as is known today, underly the types of change sought in psychotherapy. From the point

of view of the therapist, what is more important is what we can do to create the conditions required for change to happen. To simplify matters for the therapist, there are just three requirements. In this chapter, we show how therapy can help meet each of them.

Three Requirements for Three Change Mechanisms

1. New patterns of response

The first low-level change mechanism, new learning, has only one requirement, awareness of healthier ways of responding (Gibbons 2009). This learning can be explicit, that is, in words and concepts, and it can be implicit, or experiential, where the client observes, incorporates and practices new patterns of response. New patterns of response can be suggested by the therapist, or invented or learned by the client. Sometimes these changes are welcomed by the non-conscious mind as they bring positive new experiences and satisfaction. On the other hand, if the change involves letting go of patterns that, to the non-conscious mind, represent necessary defenses, then the mind may generate strategies aimed at resisting change. Where new learning meets resistance, the new avoidance strategy, itself, will need to be dealt with using the same tools as for other maladaptive patterns.

2. Affect (feeling + visceral response)

As indicated in the diagram, both extinction and memory reconsolidation have a requirement of affect. Affect is the general indicator that relevant material has been activated at a deep enough level for change to take place. This is familiar to clinicians, who

instinctively recognize that something important is happening when the client's words are accompanied by some bodily response or deep sense of resonance. Exposure therapy is a good example of the importance of affect, where memories of trauma must be recalled with enough vividness to bring out a visceral reaction in order to be effective (Abramowitz, 2010). The same requirement is needed for memory reconsolidation, where research shows that core emotions need to be activated for the process to be effective (Lee, 2017).

Fortunately for the therapist, it may not matter too much whether the mechanism is extinction or memory reconsolidation. Both are capable of suppressing EMPs. For both, a range of techniques are available to awaken responses on an affective level. Imagery, psychodrama, use of the couch, transference, two-chair exercises, EMDR, body oriented techniques, and traditional verbal exploration are all capable of eliciting affective recall. Which one to use depends on training, experience, personal, and client preferences.

3. Corrective information, implicit and/or explicit

Once again, the two low-level change mechanisms capable of bringing about modification of existing maladaptive patterns have the same requirement of corrective information. This means helping bring to awareness observations, experience, or insights that contradict the expectations of the instinctive mind. For Pavlov, extinction required stopping the shock or food reward that accompanied a bell. Under those conditions, the animal's expectation was contradicted. For memory reconsolidation, the corrective information is any data that surprises the instinctive mind and generates prediction error at a level where maladaptive responses are triggered (Junjiao, 2019).

From the point of view of the clinician, there are two somewhat different circumstances where corrective information is generated. In the case of trauma, what triggers maladaptive patterns of avoidance is generally the anticipation of painful, uncomfortable or overwhelming affect. In those cases, whether the mechanism is extinction (with cortical inhibition of a response) or memory reconsolidation (where the trigger for the response is edited), the corrective information is the sense of safety and the absence of indicators of real danger. Here the therapeutic environment helps but even more important is the empathic connection with a therapist who is not overwhelmed.

The second type of corrective information is more specific to the client and requires contradiction of various instinctive models that are inaccurate. CBT focuses on erroneous automatic thoughts and the therapist may point out the inaccuracy. “That sounds like catastrophization,” for example. Much of the time, the change mechanism is probably extinction, where the cortex recognizes the error and sends inhibitory signals deep, where maladaptive thoughts are generated. Cognitive correction also applies to insights gained in psychodynamic therapy. Transference (reaction to the therapist), emphasized in psychoanalytic therapy and similar intense reactions in Dialectical Behavior Therapy (DBT), bring out implicit expectations and their contradiction to initiate memory reconsolidation. Here intense emotional reactions to the therapist arise from client models that are not appropriate to the here-and-now situation. Bruce Ecker’s writing is especially clear in showing how client and therapist can work together to elicit those “truths,” then discover the corrective antidote that makes it obvious to the client how wrong the expectations were. Lane, et al, (2015) distinguish between “implicit” (nonverbal) expectations, and “semantic,” (verbal) ideation, both capable of triggering memory reconsolidation.

Example: The Corrective Emotional Experience (CEE)

The Corrective Emotional Experience (CEE), first described by Alexander and French (1946), has often been thought of as a central process is psychotherapy. It forms a link between multiple traditions in psychotherapy and the three change mechanisms described above. To be more precise, the CEE embodies precisely the two elements required for memory reconsolidation. As the client engages in the therapeutic relationship, expectations are generated and experienced consciously with affect. These relational expectations arise from the past. The client is then surprised that therapist does not behave as expected. This juxtaposition of expectation and corrective experience completes the two requirements, affectively laden expectations and prediction error. Alexander and French then describe a transformative change that is permanent. In this way, the CEE matches the mechanism of memory reconsolidation both in the conditions that allow it to take place and in the permanence of the changes that result. Thus, the CEE is strongly suggestive of a clinical embodiment of memory reconsolidation.

Four Support Strategies

While just three low-level change mechanisms allow change in EMPs regardless of the type of psychotherapy, there remain several essential supporting factors that, if not attended to, can prevent change from taking place. Reducing the list to the smallest number, we propose four essential support strategies relevant to every school of therapy.

1. Empathic connection

Empathic connection is an important supporting factor in psychotherapy (Norcross, 2011). It maps not only to the three fundmental change mechanisms, but also to the four other supporting factors to be described below. Specifically, empathic connection helps new learning by example, opens channels to affect, provides corrective information, supports motivation, helps management of arousal, and promotes a sense of safety.

2. Support for motivation to do the work of change

Psychotherapy, and change in general, is often stressful and demanding of tolerance and effort. Every therapy has ways of supporting the client's inherent motivation when progress is discouraging or hard. This might be in the form of direct comments such as remarking on progress, or supporting anticipation of success. It might also be implicit, demonstrated by the therapist's willingness and readiness to keep going in spite of difficulty.

3. Managing the level of arousal

A great deal of emphasis has been placed recently on the importance of keeping client's level of arousal within a moderate range. This is one of the primary goals of DBT because learning stops when arousal is too high or low. Techniques such as controlled breathing anf meditation have been imported from Eastern practices, along with mindfulness and other empirically supported techniques. More traditional therapies have always made use of the therapeutic relationship as a calming influence. In providing this support, the therapist repeats a pattern derived from the earliest mother-child relationship in which the mother's calm gives the anxious child confidence and a sense of safety.

4. Maintenance of safety

Safety is essential to protect the delicate operation of change. Boundaries need to be maintained and consistent. Exactly were boundaries are created depends on culture, local standards, and both therapist and client preferences. Furthermore, boundaries may shift subtly over time, as the patient requires less support. In addition, a helpful principle is: *Never make or imply promises that can't be kept*. The author's blog (2020) contains many instances of well-meaning therapists who have promised "forever" to be available, and then for one unforseen reason or another, have abandoned their devastated clients.

Three Change Mechanisms + Four Supporting Factors

Remarkably, it appears that these three change mechanisms and four supporting factors represent the minimum number of necessary elements for the action of psychotherapy, regardless of school or orientation. Together, they form a common core, equally necessary and relevant to any form of effective psychotherapy. For the therapist, along with the work of making sense of what is happening, focusing on these seven elements is what is fundamentally required for successful therapy.

The great debate over insight vs. empathy

The common infrastructure of psychotherapy should make it clear now that psychotherapy, at its core, requires both insight and empathy, and, more precisely, often requires that they be juxtaposed at the same time. Empathy is what brings affect into the room and

insight is what allows the client to experience prediction error and corrective information, allowing both extinction and memory reconsolidation can do their important work.

The role of existing theories

For the therapist, there should not be conflict between traditional teaching about technique or theory and the common infrastructure as presented here. The reason is that most therapies have evolved and developed in the absence of knowledge about fundamental change processes. Convergence with basic science has begun to make it possible to fill in what was missing without altering or challenging concepts and constructs based on clinical observation and experience. For those newer therapies built on the same discoveries as the approach presented here, we share a common understanding. This common infrastructure, then, is fully supportive of the important and remarkable knowledge that has been gathered over many years and honed by the reality of helping people find their way to better lives.

The author encourages all therapists to become as knowledgeable as possible about existing theories, conceptualizations, and correlations with common factors. In clinical work, pattern recognition brings up a host of different points of view for any one case. Gregg Henriques (2000) expresses in a compact way the universe of existing thought: "Maladaptive patterns are best understood through multiple perspectives, including different levels of analysis (i.e., biological, psychological and social), various domains of human psychology (i.e., affective, cognitive, developmental and relational), and major paradigms (i.e., humanistic, psychodynamic, cognitive and behavioral)."

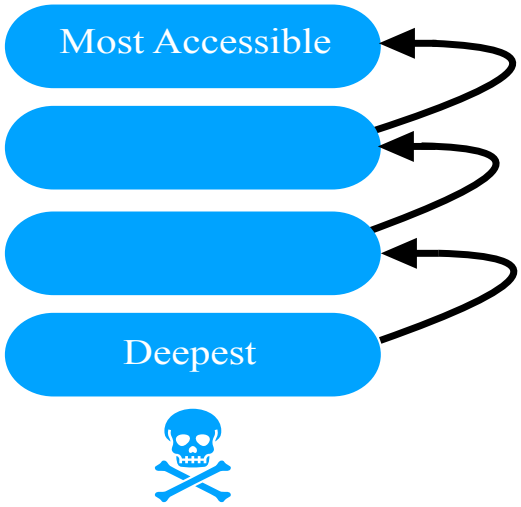
CHAPTER SEVEN

UNITS OF PATHOLOGY

Unlike DSM diagnoses, entrenched maladaptive patterns relate to one another as a series of solutions, first to an original threat and then to the anticipated or actual failure of earlier layers of protection.

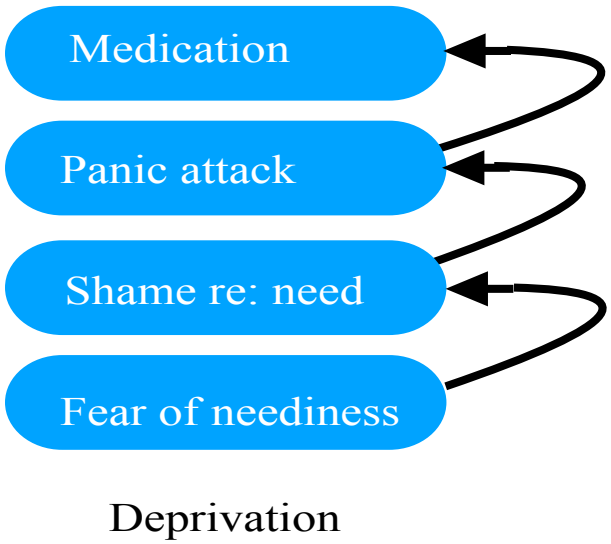
Modular views of psychotherapy are not new. Chorpita, (2009) introduced a modular approach to treatment elements for anxiety and depression in children. In this case, we are taking a modular approach to units of psychopathology.

The instinctive mind develops patterns to mitigate painful emotions. These patterns are set in memory and remain ready to be deployed. But when they are stretched thin and the mind anticipates failure, then a new layer of protection is created to protect against the painful emotions that would result from failure of the "layer below." In this way, the mind's protective strategies naturally form layers or modules.



This way of formulating cases is particularly useful in clinical psychotherapy. While DSM diagnoses are developed as lists of symptoms or abnormalities, with no indication of how they are related, the present modular approach views modules as a discrete avoidance mechanisms organized as layers of defense like the sequential defenses of a medieval castle . Knowledge of this layering helps in clinical practice, where we generally approach the most recent and accessible modules at any given time. As therapy progresses, and as superficial layers are resolved, deeper layers become accessible and relevant to therapy.

A clinical example



Jack's parents had little to give so, early in life, expressing neediness led to painful disappointment. The bottom layer was avoidance of experiencing neediness or seeking attention. When that fails, he develops a core value against neediness and feels shame when needs threaten to break into consciousness. As an adult, he gets a promotion and his wife is pregnant. New demands trigger a strong but prohibited need for support. His layers of defense are near failing. A panic attack is the next "protective" response. Finally he seeks professional help to prevent further panic.

Case analysis

Jack's efforts early in life to avoid being scolded for seeking attention were, not surprisingly, ineffective. A child has basic emotional needs and any attempt to hold back from expressing neediness can not succeed. By age three, children begin to be capable of internalizing the second layer, a value system that makes Jack feel proud of being able to fend for himself and ashamed of asking for help. This second layer of protection is much more effective. It works so well that it becomes part of Jack's personality. In childhood, his bias towards self-sufficiency is positively adaptive.

Only in adulthood, as he develops a relationship with a wife who has much love and support to give him, does his self sufficiency become a problem. Now, in an environment more bountiful than that of his early life, Jack is unable to receive or accept the support his wife would dearly like to provide and that Jack desperately needs.

Then his wife becomes pregnant and Jack gets a promotion. Both of these positive events lead naturally to an internal increase in emotional neediness. Outside of awareness he craves attention and warmth, but is unable to accept the support that is freely available.

His instinctive mind senses that his house of cards might fail. Without support, he may collapse in the face of the added stresses of a new baby and a higher level of responsibility at work. Failure to cope, would be accompanied by intensely painful emotion. His instinctive mind generates the highest level of alarm, a state of panic.

A massive outpouring of adrenaline overwhelms him as his primitive mind prepares for fight or flight. In a curious way, the panic attack actually rescues him. Without his asking for help, his co-workers transport him to the hospital emergency room, where he is relieved of immediate responsibility, and ordered to accept help.

Fortunately, he has learned to follow orders. This adaptive pattern allows him to keep his appointment for mental health care without feeling excessively ashamed. Suggesting a course of therapy will be a challenge. Open ended exploration would feel shameful and raise the specter of dependency. A more concrete therapy might be easier for him to accept. Perhaps he would do best with a structured therapy with homework. A more open-ended approach might arouse feelings of shame and fear of dependency.

Treatment

As therapists, we first tackle the most superficial layers. Easing Jack's fear of the next panic attack might be the first priority. Under the guise of following medical procedures, Jack may be able to overcome his insistence on self sufficiency and accept professional support. One approach might be to give him coping strategies and possibly medication. Those might seal a positive alliance and make it possible to teach him mindfulness techniques and cognitive-behavioral tools for coping with panic. Not only are these concrete techniques helpful, but an un-acknowledged need for support is being fulfilled. Going deeper, we are faced with his unhealthy self-suffiiency, a much more challenging layer of pathology, one that will take more time and be harder to approach.

These are among the real-world challenges of clinical psychotherapy. Thoughtful and delicate handling of the early sessions in a way that supports self-esteem will lay groundwork to make it possible later to bring into question the deeper layer of his need for self-sufficiency and his pattern of doing without.

Clinical work goes from most accessible to the deepest.

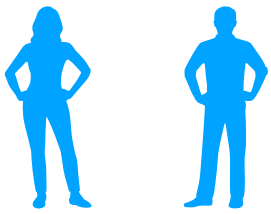
For the clinician, the advantage of a modular approach to psychopathology is that instead of the confusion of multiple diagnoses, we are presented with a hierarchy of entrenched maladaptive patterns. In general, we approach the most accessible pattern first. Occasionally, one, such as Jack's shame about neediness and dependency, may block progress, while being too deep and entrenched to challenge at the outset. In such a case, we must find a strategy for going around it. Here, the strategy is to use his healthy pattern of accepting orders from those in authority along with the reassuring quality of a more structured treatment approach. Together the use of authority and reassurance will support his self-esteem, while allowing him to accept the help he needs.

CHAPTER EIGHT

THE SIX THINGS THERAPISTS DO

In Chapter 5, we explored how therapy can fulfill the three conditions required by the three low-level change mechanisms while provideing the four supporting strategies that make change possible. Here we present a compact but sufficient list of things therapists do which, taken together, provide for those three conditions to be met, along with the four supporting strategies. Remarkably, six tasks are all that are needed to conduct psychotherapy. Each of the six tasks can be accomplished using techniques drawn from one or more schools, orientations or compilations of common factors.

1. Establish and maintain a positive and safe working alliance



The therapeutic relationship or alliance can be thought of as a kind of Swiss army knife for personal change. When well established and maintained, it performs multiple functions. Let's look at how it contributes to the three change processes and several[1] of the adjunctive support factors described in Chapter 5.

[1]

a. New Learning: The relationship can provide a new source of experiential learning about how healthy relating looks and feels. Clients often learn from this and may adopt new patterns of behavior in relation to others.

b. Extinction by Cortical Inhibition: The relationship provides corrective information which becomes the starting point for extinction using the inhibitory signals to block maladaptive response patterns. The experience of being in a therapeutic relationship may also provide the other requirement for extinction, activation of relevant core emotions such as fear. An example might be a client who has trouble with trust, where anticipation of betrayal by the therapist might be activated.

c. Memory Reconsolidation: Here again, the twin requirements of activation of relevant deep neural networks, and corrective information or experience can both arise from the therapeutic relationship when it is more intense or prolonged.

d. Regulation of arousal: The therapeutic relationship is an important tool allowing the therapist to keep arousal within an effective window. The relationship can be used to calm excessive arousal, and can also be used to engage a client who is excessively defended with too low a level of arousal.

e. Motivation: The therapeutic relationship is a powerful source of motivation, where the therapist's commitment to results and expectation of success supports motivation in the client.

f. Safety: Safe and reliable boundaries and avoidance of unfulfillable expectations are

not only necessary in themselves, but also convey a mature caring that reassures and supports clients' willingness to be vulnerable and to engage in serious therapy.

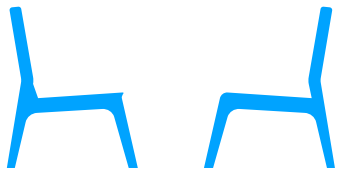
2. Therapists bring maladaptive patterns to awareness

This second task for the therapist helps raise awareness of problem patterns and prioritize efforts to change them starting with the most accessible. When done with warmth and compassion, examination of functioning can be reassuring and promote a positive therapeutic relationship, as well as ensuring informed consent. Research has shown that failure to fully align client and therapist goals is correlated with poor results.

3. We foster new learning of positively adaptive patterns

A recent trend is to emphasize the positive in psychotherapy. Sometimes, as pointed out earlier, new learning is immediately taken in and utilized without resistance. Even when patterns are entrenched and behavior is hard to change, clarity about what is healthy helps establish goals and gives therapy a focus and direction. For many clients, this is reassuring and more comfortable than open ended, or unfocused exploration.

4. Therapists explore and interact.



Exploration may seem at first to be aimed at building understanding, however, its main, or at least a co-equal benefit is to engage the client in relating in a way that activates deep emotions and assumptions, so as to fulfill one of the two required conditions for both extinction and memory reconsolidation. Not only that, but exploration also highlights contrasts between the instinctive mind's assumptions about life and adult reality. In doing so, of course, it generates prediction error, needed for both extinction and memory reconsolidation.

When exploration arrives at an important feeling, schema, or inner "truth," affect is awakened telling us the material is now accessible to change processes that modify already established maladaptive patterns. Tears, bodily changes and physical sensations indicate that something deep has been activated. Building on the idea expressed earlier that insignt and emotion are basic building blocks for change, exploration is one of the most powerful ways to bring both into view at the same time.

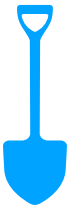
An additional, and equally important, function of exploration is the development of empathic connection. Empathy *happens* when clients share their inner experience with the therapist. The art of exploration is to elicit just this kind of deep revelation. Indications that we understand lead to a greater sense of safety and more new material. We may give this inidication by facial expression, or tone of voice. At other times, the therapist's statement of what he or she understands can give not only a chance to check for resonance, but

a way of making the experience "real" to the client and verifying that the empathy is indeed "accurate."

5. Therapists help clients regulate their arousal

As described above, regulation of arousal is an important adjunctive function of psychotherapy. Recently, mindfulness and eastern practices have been brought to bear, but from the beginning, psychotherapy of all kinds has incorporated relationship-based techniques for regulating arousal.

6. We support motivation to do the work of change



Once again, every therapy includes ways to support motivation, especially when change is particularly painful or difficult. This may be conveyed by example, by painting a picture of the future, by noticing progress, by explaining how therapy works, or simply by a readiness to keep going, even when there are setbacks.

Conclusion

Performing these six tasks fulfills the requirements for the three change mechanisms, *new learning*, *extinction* of maladaptive patterns, and modification of existing patterns by *memory reconsolidation*. Together, they also embody the four support functions: *empathic connection, safety, motivation, and modulation of arousal.*

CHAPTER NINE

NAVIGATING THE THERAPEUTIC SPACE

Now it is time to attend to the work of making sense of what is going on. The cycle of four questions below is one way to approach both the navigation and therapeutic action of psychotherapy. Asking yourself the four questions below (repeatedly in the same order) will go a long way to pinpointing where you are and what to do next. With each cycle of the questions, not every one will be relevant. When that happens, go to the next question, and after the last one, start over. The explanations given below amount to a summary of all what has been said above, so please don't be troubled by some repetition. The questions are presented briefly and explained after that.

1. What maladaptive patterns of acting, feeling, thinking, relating, and bodily responses are degrading my client's life. (Note: absence of effective coping is a pattern and so, as well, is active resistance to change.)
2. How are (or were) these patterns shielding the client from painful, uncomfortable, or overwhelming emotions, conscious or implicit?
3. Right now, what are the emotions being avoided that need to be "faced?"
4. How can I help my client move towards willingly and safely making changes and experiencing difficult feelings?

Questions are powerful. They are like a story when you don't yet know how it ends. The whole mind, conscious and unconscious, goes on a quest to find the answer. So asking will orient your mind in the right direction, even when you are not sure of the answer. These are not questions to ask your client, but for you to ponder a bit first. When it is appropriate to engage your client in the quest, your work together will be even more helpful. Let's look at the questions:

Question 1. What maladaptive patterns of acting, feeling, thinking, relating, and bodily responses are degrading my client's life. (Note: absence of effective coping is a pattern and so, as well, is active resistance to change.)

First, let's be crystal clear about what psychotherapy aims to do. Without that clarity, our work loses focus and direction. Psychotherapy does not cure "disorders." The disorders in the diagnostic manual assemble somewhat arbitrary clusters of symptoms, slanted towards genetic predispositions and biology. Psychotherapy does not directly aim to change those. We don't need to be defensive about limits to what psychotherapy can do because EMPs (entrenched maladaptive patterns) are directly relevant to most human psychological problems including how we respond to aspects of our genetics and biology. Therefore we can put our energy into what we can accomplish: helping people adopt healthier ways of responding to circumstances.

Identifying current maladaptive patterns and contrasting them with how things might be helps to bring a sense of focus of our efforts. Clearly identifying our client's less than healthy patterns and how to help change them builds a positive therapeutic alliance. Fur-

thermore, in doing so, we tap into the energy that brought the client to seek help.

The identification of maladaptive patterns naturally leads to efforts to practice healthier ways of responding. When this behavioral approach works, client and therapist can rejoice. However, as we will see below, attempts to change many of the most troublesome patterns brings out automatic avoidance of change. When avoidance of positive change is active but not consciously willful, we call it "resistance." As we will see below, when the mind treats a maladaptive pattern as a protection against harm, a new response pattern may be generated to guard against the loss of that protection. Avoidance of healthy change can also be treated as a maladaptive pattern of response because it stands in the way of therapeutic progress.

Question 2. How are (or were) these patterns shielding the client from painful, uncomfortable, or overwhelming emotions, conscious or implicit?

Here we make the connection between maladaptive patterns and emotion. By locating the emotion being avoided, not only can we better understand the problem, but when clients overcome dread of the feeling, they no longer need or cling to their maladaptive response. Let's see, step by step, how maladaptive patterns relate to emotion.

To recap, people don't come to therapy for trivial reasons. They come to us because a problem is causing real suffering and they have not been able to solve it. These problems are "entrenched," meaning they are not easy to root out. Here's why. We know that throughout evolution, avoiding danger is given higher priority than seeking pleasure

and procreation. It turns out that almost all entrenched problems originate as protection against circumstances tagged as danger. This narrows our quest.

Next, evolution has shaped the architecture and functioning of the mind in an interesting way. The mind is constantly scanning inner and outer circumstances in search of opportunities and dangers. When the mind's appraisal spots a potential danger, what does it do? It activates emotions. In fact, activation of emotions of "negative valance" is the brain's way of flagging danger. Without emotion, there is no perceived danger and no response. Negative emotion functions as a "proxy" for danger. By avoiding painful, uncomfortable and overwhelming feelings, our mind is doing its best to avoid danger. The problem is that there are many circumstances where facing difficult feelings is actually healthier than avoiding them, especially in relationships.

One more caveat. The emotions that signal danger are not necessarily conscious. These are core emotions, the deep "implicit" ones we have in common with other mammals. Often, but not always, these emotions are transmitted into consciousness as "feelings." When conscious feelings are experienced along with bodily responses such as tears or a pounding heart, they are *affects* and we, as therapists, know instinctively, to pay close attention. The reason is that affect is our best clinical indicator that a core emotion has been activated.

In order to gain a complete picture of the problem, we need to ask how the maladaptive pattern operates to avoid a feeling. For example, thinking badly of oneself might once have been a way to avoid the scary feeling of anger at a parent. Alcohol or drug use might have started as a means of avoiding the terror associated with a traumatic experience. As we

understand how an unhealthy pattern works we will begin to gain a fuller appreciation of the consequences the mind might associate with giving up an entrenched pattern. With the next question, we move closer to inviting the client to re-experience the dreaded emotion, not because we want to inflict pain, but in the hope of helping the client process the feeling so as to remove the pain associated with it.

Question 3: Right now, what are the emotions being avoided that need to be "faced?"

Exposure therapy is perhaps the clearest demonstration of the healing power of facing feelings. Identifying precisely what those feelings are is one of the best ways to activate them and bring them to the surface. The basic premise is that facing painful feelings alloww processing emotions and causes less harm than avoidiong them. In exposure therapy, the understanding is that the client's mind generated a maladaptive pattern of avoidance in response to a feeling that was once experienced as intolerable. The strategy is to help the client understand experientially that the feeling is really not so terrible. As the emotion is thus "detoxified," the maladaptive avoidance pattern will no longer serve a purpose and can be let go.

Some therapists question the need to ask "why." Now we can see that exploration of the emotions being avoided is not only satisfying to our curiosity, but even more helpful in bringing feelings into client's consciousness so that resolution can take place. Exposure is far more effective when the detailed and exact nature of the circumstances and associated emotions become conscious. That is when we begin to see those bodily responses that signal activation of the deepest implicit emotions.

Not only has recent science elucidated the precise mechanisms behind emotional healing (through the mechanisms of extinction and memory reconsolidation), but the well known concept of the "corrective emotional experience" describes a similar process. Alexander and French showed how, within the therapeutic relationship, vividly experiencing negative expectations, juxtaposed with the positive reality, leads to enduring change.

Exploration of emotions being avoided is one pathway to change, but there is another, the behavioral route. As mentioned with the first question, when maladaptive patterns that cover up emotions are traded in for healthy ones, the result is likely to be experiencing the problematic feeling that has been avoided. Resolution of these feelings may happen without being noticed or it may become the main focus of the therapy. Whichever pathway the therapy takes, processing difficult feelings or changing maladaptive patterns that cover them up, progress is being made. One can see how the process as circular. Positive behavior change leads to uncovering emotions, and exposure of emotions leads to positive behavior change

Question 4: How can I help my client move towards willingly and safely making changes and experiencing difficult feelings?

Here is where the art and science of all schools of therapy provide a rich trove of strategies and techniques for supporting clients while inviting them to change. Note that for emotions to be processed and healed, they must be experienced fully. The mind is very skilled at anticipating painful experiences, whether in life or in therapy. It is the therapist's job to be aware of the client's sensitivities and to partner with the client to create a context

of safety and free choice so as to encounter together the uncomfortable experiences caused either by letting go of maladaptive patterns or by exploring painful emotions. In working with clients' conscious reluctance and anxiety, we are treating more superficial (and accessible) layers of defense against problematic emotions. These may be of minor or major importance in allowing the process of therapy to proceed.

Not every maladaptive pattern is associated with dramatic emotions. There are instances where clients may not have been exposed to healthy ways of thinking or responding to life problems. In cases where the negative feeling that triggers a less than satisfactory pattern is relatively minor and there is significant reward to adopting a healthier response, the emotional processing at the center of these four questions may not be prominent. Nonetheless, for patterns entrenched enough to require professional help, understanding how emotions are avoided and helping clients to face them will prove to be an important key to successful results.

Conclusion

In practice, cycling repeatedly through these four questions as therapy progresses will constitute an interesting exercise in navigating the therapeutic space. It should always be done with the tact and support needed to give clients the confidence and courage to embark on a personal process of change. The questions may be shared directly with clients, but it is best for the therapist to ask him or herself first. Once hypotheses have been considered, there may be more personal and tactful ways to engage clients' curiosity and willingness.

CHAPTER TEN

MALADAPTIVE PATTERNS SEEN IN PRACTICE

The range and variety of problems seen in clinical practice is truly daunting. Among EMPs, some are responses to circumstances of life as interpreted by the individual and some are responses to biological tendencies such as anxiety. Having proposed a novel way to organize problems into modules, here we give a glimpse in list form, of one way to categorize entrenched maladaptive patterns. In general this list of seven broad categories goes developmentally, starting with those that presumably form earliest and ending with those that come the last in development.

1. **Implicit patterns of relating:** By implicit, we mean patterns that are embedded in implicit memory where knowledge does not depend on words, but on automatic patterns of appraisal and response. The development of these patterns starts in the earliest eras of life and is highly responsive to the way primary caregivers have related. In particular, these include attachment styles and personality disorders where relationships and interaction with others fall into maladaptive patterns (Bowlby, 1968). Sometimes these reactions appear more like loss of functioning rather than adaptation. When clients lose control of intense emotions, this can be seen as a failure of adaptation, but we may do better to describe the apparent loss of control as a primitive reaction whose functionality is lost

in the mists of evolution. In this category are patterns such as paranoia and excessively intense reactions to the threat of loss of an important relationship. When basic emotional needs have not been met in childhood, a pattern often develops, consistent with the goal of influencing the caregiver to change so as to be able to fulfill the need. Such patterns often re-appear in the therapeutic relationship in the form of attempts to influence the therapist to act like a parent. Another group of patterns might seek alternatives to the missing need in the form of compulsive behaviors such as promiscuity or eating disorders.

2. **Maladaptive emotional responses:** This group of response patterns including anxiety, depression, and obsessive-compulsive symptoms have a major biological component and tend to run in families. They can arguably be seen as adaptations that have gone awry in that they are not appropriate for the circumstances. Dissociation is included in this group because it has a genetic component, however, rather than being manifested by strong emotion, it usually involves loss of contact with emotion.

Psychotherapy does not seek directly to alter the pattern itself, but how the client responds to the symptom. With anxiety symptoms, obsessive symptoms and dissociation, clients tend to focus on eliminating the symptom. One of the important findings of research in this area (Bystritsky, 2017) is that attempts to eliminate involuntary symptoms makes them worse. Instead, psychotherapy seeks to help clients accept the symptom and use mindfulness to view it as a manifestation of their instinctive mind that can be observed but should not determine decisions or actions. With depression, rather than trying to eliminate the symptom, clients experience impulses to isolate and self-punish. The therapist may encourage behavioral activation (Martell, et al. 2013) to counteract these impulses.

Dissociation, when based on trauma, may also be rendered unnecessary by helping the client to re-experience and process feelings related to known aspects of the trauma.

3. **Maladaptive core values:** The role of values (and their cousins, *attitudes, ideals, and prohibitions*) will be discussed further in Chapter 10. The indicators of maladaptive values are the self-conscious emotinos of shame, guilt, and pride. When these specialized emotions are encountered, it is always in relation to a judgment and those judgments are invariably based on some principle or value that has been internalized. The quintessential example of inappropriate values is early life abuse, in which the mechanism of identification with the aggressor is employed as a survival defense. The internalized attitudes of the perpetrator towards the self are the source of the damaged self-esteem that most abuse survivors experience. In addition, values can be, and often are, contradictory. Self-esteem, for example can be very positive then switch abruptly to being negative.

Values are inherently resistant to change. The likelihood of relapse to old attitudes suggests that, even when overcome, they are maintained and tend to return under circumstances that resemble those under which they were first internalized. As a result, they are clinically challenging. The strategy for psychotherapy is usually internalization of new, healthy values which will hopefully override the unhealthy ones.

4. **Maladaptive semantic patterns:** Later in development, starting, perhaps at age three or four, children become capable of learning ideas and principles that come to govern their responses. An example would be the idea that one must be perfect in order to be loved. The individual then may pass a lifetime seeking an impossible degree of perfec-

tion. Learned semantic theories about how the world works lead to maladaptive goals and responses (Persons, 2012). These are on a higher cognitive level than implicit relational patterns. Ecker has pioneered the use of memory reconsolidation to eliminate this type of mental content. The technique is first to access the belief in a way that engages a deep feeling of conviction and realness juxtaposed with simultaneouos awareness that the idea is patently incorrect. By helping the client experience the deep belief simultaneously with it's obvious antidote, memory reconsolidation is activated and the erroneous conviction is erased rapidly and permanently.

5. **Guilty quests:** Intense shame often covers up the classic Oedipus complex and related pathologies in which the individual seeks to overcome childhood problems by achievement placed somewhere in the distant future. The ability to feel better by putting hope in the future is characteristic of children around age five, when they become able to conceptualize the arc of life extending into the future. When future goals are compromised by guilt, the problem is manifested by inhibition or self-sabotage in relation to the person's most cherished goals. Guilt does not eliminate the quest. Rather, the goal is maintained without awareness, waiting for some time in the future when it may be put into action.

Long term psychotherapy is an ideal situation for this kind of guilty or shameful yearning to come to the surface where it begins to influence the transference and to be apparent as entrenched maladaptive patterns. Insight is the start of a healing process by which inhibited goals and ambitions are re-examined and updated to be appropriate in the context of adult life.

6. Delayed development: A very significant proportion of problems seen in practice stem from delayed development. Adolescent failure to launch is a common example in which the maladaptive strategy is to suspend development when exploratory behaviors are experienced as too painful, not adequately supported by parents, or unlikely to succeed. What makes development happen is simply engaging in new activities and experiences and processing emotional accompaniments such as anxiety until the new skill becomes part of the individual's regular repertoire.

Development is not monolithic. Individuals may be highly developed in certain areas while development in another area is lacking. An example might be an individual who has become skilled at manipulating others, but who is unable to share control in a mutual relationship. In general, when young adults avoid challenges and prefer to blame outsiders instead of taking frightening and painful steps into adult responsibility, then major components of development stop and are delayed until the reluctance to engage is overcome.

Another common form of developmental arrest is when a parent dies or some other trauma happens at a critical moment in development. Usually when the clinician thinks of this possibility, it becomes obvious how development in certain areas has ceased at the moment of trauma. Fortunately, development can be restarted at any chronological age.

7. Addictions and compulsive behaviors: Making up an increasingly large proportion of the problems psychotherapy deals with, compulsive behaviors represent layers of problem-solving that cover up or eliminate uncomfortable feelings. Developing mostly in the teens, they sacrifice successful life adaptations for temporary comfort.

Unfortunately, the medical model of treatment often sees reduction of discomfort as the appropriate route for treatment. Helping the client eliminate discomfort tends to be counterproductive, since it reinforces the client's incorrect strategy of avoiding pain instead of learning to cope better. More effective long-term recovery emphasizes developing strategies, especially involving interpersonal skills, for coping effectively with discomfort and developing resilience.

Conclusion

It is hoped that this categorization of the pathologies seen in practice will help the therapist build confidence in being able to work with whatever layer of pathology the client presents. Furthermore, by having a finite matrix of possibilities, it will be easier to identify what EMPs are present, which are most accessible, and where to start the work.

CHAPTER ELEVEN

FOR FUTURE RESEARCH

The chapters so far are intended to be relatively uncontroversial regardless of orientation or point of view. In this chapter, the author presents material based on opinions and clinical observation, but not yet grounded in modern research. These areas are not well covered by the principles outlined so far and stand in need of further elucidation. It is hoped that this material will soon be subjected to more rigorous examination and testing as time goes on.

Pride, Shame, Guilt, and Values

For many years, perhaps following the permissiveness of the sixties, the concept of the superego was relatively neglected in the literature. The cognitive revolution recognized core values as an important mental content that could be subject to pathology, but did not go far beyond that in exploring their acquisition and functioning. More recently, there has been some interest in revisiting the concept.

Building on the work of Schore, Panksepp, and others, Frans Schalkwijk (2019) proposes that Freud's concept of the superego should be transformed conceptually into the conscience, a self-regulatory system that allows humans to govern their own behavior

so as to preserve social cohesion. Panksepp points out the important distinction that the self-conscious emotions of the conscience, pride, shame, and guilt, do not have the same source as the basic emotions localized in the limbic system and which we share with other mammals. Rather, they arise out of a complex system requiring activity in the prefrontal cortex. Schalkwijk focuses on the relationship between empathy and feelings of shame or regret. The author's own experience comes more from work with trauma survivors, where the idea of internalized values takes on great importance.

What follows is a clinically-based description of the functioning of the human conscience. As Schore describes, starting with myelination of the prefrontal cortex, the conscience begins to function in the latter part of the second year of life. By age three, children are quite capable of wanting to be "good." They become capable of feeling pride and shame depending on their self-evaluation. In humans, this system goes on to function for the rest of life, providing moderately strong self-generated reinforcement of behavior that is generally relevant to social cohesion. Interestingly, if we compare this to dogs, for example, they may exhibit some anxiety about deviating from training, but continue periodically to challenge the pack leader's dominance. As a result, the dog owner or leader of the pack must constantly be on the lookout for challenges and spend a good deal of energy maintaining dominance. Perhaps it is due to the prolonged development of humans, that a self-contained regulatory system is highly advantageous, removing some of the burden of enforcement from adult caregivers.

The author's own interest came from observing the low self-esteem that is almost universal in survivors of childhood trauma. While these clients resist revisiting and processing

traumatic memories, once they do, the healing is rapid and often complete, following the characteristics of memory reconsolidation. On the other hand, helping them regain self-esteem turns out to be a much greater clinical challenge. Furthermore, where the healing of traumatic memories is permanent, regained self-esteem remains subject to relapse under adverse conditions. Clients who encounter setbacks that remind them of the trauma may easily revert to their former self-deprecation. The implication is that, unlike painful emotions coming from trauma experiences, their low self-esteem is permanently maintained somewhere in memory in the form of attitudes and values.

The impressive resistance to change of negative attitudes towards the self led the author to consider the process of internalization. Listening to trauma clients, it is striking that they have often internalized negative attitudes towards the self that closely mimic the attitudes of their perpetrators. Freud's concept of "identification with the lost object," along with the clinical phenomenon of the Stockholm syndrome, led to the hypothesis that internalization of attitudes in trauma cases is triggered by an intense sense of aloneness accompanying abuse, and an instinctive need to establish connection by identification with the aggressor. Pursuing this hypothesis led to the observation that not only attitudes towards the self, but generally values, ideals, and prohibitions, share the same characteristics of resistance to change and likely permanence. For example, the value of bowel control is internalized by young children desiring to be good citizens in their family. Until death, we remain susceptible to shame over loss of bowel control, even if it is entirely involuntary.

Seeing the conscience in this way as a control function, utilizing pride, shame, and guilt as reinforcers, it becomes clear that the generation of those self-conscious emotions always

involves a judgment according to some standard. Even in the case of shame related to empathic awareness of having hurt another, there is still an intervening value that hurting others is not something one "should" do. On further observing client's "core values" it becomes clear that internalization of values follows several principles:

1. Values (used here as shorthand for values, attitudes, ideals, and prohibitions) once internalized are essentially permanent. They can be defined as internalized principles capable of eliciting self-conscious emotions. (Note that likes, dislikes, and beliefs about cause and effect, for example, do not have this property.)

2. Values can be internalized at any point in life, especially when triggered by "connection anxiety," but also when strongly desired. Cult induction ceremonies and "brain washing technique" are also relevant to the internalization of new values (see further, *Taming of the Shrew,* by Shakespeare).

3. Values can be contradictory. For example negative self-esteem can be internalized in contradiction to earlier positive self-esteem.

4. Repair of maladaptive values probably involves internalizing positive values so that functionally, they override the unhealthy value, that nonetheless, remains latent.

Understanding these principles can be of great value for clinical work, particularly in making it clear and predictable that change in values will not be an easy process and will require a combination of all available resources and approaches.

A number of recent therapies, such as EMDR, (Eye Movement Desensitization and Reprocessing), do recognize that values are different from other mental contents. EMDR, in particular, claims to be able to reprogram values through a simple procedure of "installation" of new values (Shapiro, 1998). So far, there does not appear to be research on the effectiveness of this procedure or others aimed at changing values. For the most part, the research literature does not differentiate values adequately from beliefs or other mental contents. It may be that the field of cult indoctrination and "deprogramming" may be a richer source of insight until more research is done.

Mourning & Grief

Mourning and grief are familiar phenomena that can be the focus of psychotherapeutic effort. Where new learning, extinction, and memory reconsolidation are relatively short term processes, it is clear that grieving has its own time course. Perhaps related, acceptance of loss or disappointment can be rapid or prolonged. Research on this apparently distinct healing process is limited (Bryant, 2020). It may depend on the three foundational mechanisms emphasized in this book, or may be entirely distinct.

Conclusion

It has been the author's experience, that doing psychotherapy with an understanding of the common infrastructure has gradually brought a subtle but important transformation to practice. Where my initial teaching, as is prevalent even today, was to follow a method. The change was that I began to guide my actions and choices according to processes being

observed and a knowledge of what is needed to support a clearly identified mechanism towards a sharply defined goal of change. In other words, I came to follow "process" rather than applying a method.

Despite the possible exceptions described in this chapter, it is hoped that this presentation of the common infrastructure of psychotherapy will be of use to students, therapists, and researchers in observing and supporting the processes of psychotherapy as they unfold.

For more information about the point of view and approach presented here, the textbook, *Psychotherapy: A Practical Guide* (Springer, 2017) provides a more formal and complete view along with chapters on psychotherapy technique.

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