CHAPTER 1

Overview of Transdiagnostic Mechanisms and Treatments for Youth Psychopathology

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Whether in reference to treatment or mechanisms of such, the word *transdiagnostic* seems to evoke a mix of excitement and confusion wherever it is used. Owing to these dueling reactions, we have undertaken this book in an attempt to foster a broader conceptual understanding of potential transdiagnostic mechanisms and treatment approaches for youth and bridge any confusion about what such mechanisms and treatments might look like, why they are relevant at this point in our evolution in clinical child psychology, and what research agenda lies ahead to better understand the long-term implications of transdiagnostic approaches.

Transdiagnostic treatments have certainly been gaining support in the adult literature as efficient and effective approaches to understanding multiple problems within a single conceptual framework (e.g., Barlow, Allen, & Choate, 2004; Fairburn, Cooper, & Shafran, 2003; Harvey, Watkins, Mansell, & Shafran, 2004). A good transdiagnostic approach draws from a unifying theoretical model that explains disparate conditions via common mechanisms. Its treatment strategies are also flexible enough to accommodate diverse problems. Much of the interest in transdiagnostic treatments grows from the vast levels of comorbidity seen in clinical populations, necessitating treatment approaches that reduce redundancies and target the key mechanisms of pathology. In child and adolescent populations, the call for transdiagnostic approaches is even more relevant.
High comorbidity rates, shifting symptom profiles, and complex family contexts all complicate the typical treatment approach.

In many ways, the genesis of the transdiagnostic movement harkens back to the historical argument regarding whether psychopathology should be considered in broader, often dimensional terms or within more discrete, easily definable categories. In other words, decisions about how to classify psychiatric disorders have long been mired in a tension between efforts to either “lump” or “split” clinical problems to best understand them (Mayr, 1982; Taylor & Clark, 2009). As recently reviewed by Taylor and Clark (2009), efforts to lump psychological disorders together call for a small set of broad categories. Such efforts search for universal or common cognitive, emotional, physiological, or interpersonal processes that unify or explain varied clinical phenomena. In many ways, this broader view is also particularly consistent with empirical conceptualizations of youth disorders (e.g., Achenbach, 2005). In contrast, “splitters” prefer a finely sliced taxonomy in which broad concepts such as neurosis are carved into many different disorders. In many ways, endeavors to promote a more transdiagnostic paradigm certainly evolved from a “lumping” mentality, with the fundamental assumption that common processes across disorders imply the possibility of creating broader treatment paradigms.

Such broader treatment paradigms form another primary motivation for the study of transdiagnostic mechanisms and treatments. From the earliest discussions of such an approach, the thought of enhancing the availability of evidence-based treatment principles to the larger community of treatment providers and youth in need of such services has remained a core motivation for this work. Youth treatments have a long tradition of considering broader categories of disorder, although more rarely they cross thresholds between such categories. For instance, in the child anxiety treatment literature, the most common cognitive-behavioral approaches are studied among children with one or any combination of three or four primary anxiety disorders (e.g., separation anxiety disorder, social phobia, generalized anxiety disorder, and sometimes specific phobia), but typically excluded are those with commonly co-occurring conditions such as depressive disorders or pervasive developmental disorders. Admittedly, this is a more advanced state for potential dissemination of evidence-based practices than in the adult treatment literature, in which the norm is to focus more precisely on individual categories of disorder. The dissemination-focused rationale for transdiagnostic approaches in youth suggests that there is yet potential for greater clinician adherence to evidence-based principles should these principles be flexible enough in their application to handle greater variability in caseloads—such as the adolescent with both anxiety and depression, the child with attention-deficit/hyperactivity disorder (ADHD) who has become worried and
anxious about her school performance, and so on. Moreover, such approaches may minimize clinician training burden and family treatment time, especially to the degree to which they are focused on straightforward, common mechanisms of change.

Overall, taking a transdiagnostic approach promises benefits to basic science, theory, and clinical practice. Given the decades-long effort to discriminate psychological disorders along observable symptom criteria, a return to basic mechanisms might allow a more refined understanding of the mechanistic commonalities and distinctions among symptom-based syndromes. Psychological treatments that take a transdiagnostic approach have the potential to more efficiently address multiple clinical problems with core techniques and to have more robust, generalizable outcomes by targeting core processes. Together, basic science and treatment will inform theories that focus on the necessary and sufficient components to explain diverse pathologies and their treatments.

In this book, we divide our discussion of youth transdiagnostic theory and research into three broad sections: basic processes, application of transdiagnostic work to broad theoretical orientations, and exemplar treatments. Before delving further into these varied sections, let’s take a step back and consider the terminology used in this book when discussing a transdiagnostic approach.

Transdiagnostic Mechanisms

When considering transdiagnostic mechanisms and treatment, it is critical to consider the level of analysis. In the context of understanding psychopathology, a “transdiagnostic” process can refer to intrapersonal cognitive, behavioral, emotional, and physiological processes. Each of these levels can be divided into smaller levels. Cognitive processes can include attention, memory, and interpretation processes. Emotional processes can include emotional activity, reactivity, and regulation processes. Interpersonally, “transdiagnostic” can refer to peer-to-peer dyad relationships, parent–child relations, and family systems, to name a few. Community processes can involve school climate, neighborhood resources, broader cultural influences, and sociopolitical policies. The unifying theme that underlies each transdiagnostic process is the extent to which any process under investigation can be used to understand a set of related, but distinguishable, phenomena. The target under study can be antisocial behavior, anxiety disorders, academic achievement, or community orientation. If a process can explain some aspect of the onset, development, or maintenance of each target problem, then the process has merit as a transdiagnostic mechanism.
Such discussion raises the question: Can any process be transdiagnostic? Again, the level of analysis is key. If we overgeneralize, we run a risk of being overly inclusive. It might be easy to say that everything is caused by multiple factors, and, indeed, many distinguishable problems have at their root several similar if not common factors. For instance, any investigation that leads to the conclusion that “genetics causes everything” would be undesirable. Although true in some general sense, the lack of precision makes such a global statement of little value. This statement provides little information about what type of genetic coding leads to what kind of pathology under what circumstances. And under what circumstances does pathology A differ from pathology B? Under what circumstances are they similar? For this reason, we define a transdiagnostic process as striking the balance between lumping and splitting and seek results that balance explanatory power with parsimony. As a shorthand, to be transdiagnostic, we would expect (1) that any candidate mechanism provide explanatory power in understanding the onset, development, or maintenance of target condition A and target condition B but also (2) that the candidate mechanism provide some kind of unique explanatory power in target conditions A and B that could not be understood through the study of A and B alone.

Naturally, such criteria only provide a conceptual starting point. We recognize the methodological and statistical challenges in achieving such clarity; the methods may not currently exist to satisfy these criteria completely. Still, others have suggested similar approaches. Compas and colleagues (Chapter 3) illustrate three models that are compatible with our recommendation. Model 1 encourages a research agenda that studies how multiple processes relate to the onset or maintenance of a single disorder. Model 2 examines one of the candidate processes in relation to multiple disorders. In Model 3, multiple processes are examined simultaneously in relation to multiple disorders or problem sets. The first two models provide circumstantial evidence for transdiagnostic mechanisms; the third approach permits one to compare the relative strength among candidate mechanisms in their relation to multiple disorders. Mansell, Harvey, Watkins, and Shafran (2009) succinctly refer to this as a universal, multiple-process approach that can yield comparative evidence for a single or multiple mechanisms that have universal influence across disorders. Such an approach can be used for diagnostic disorders or symptom-based problem sets, and candidates can be derived from a single therapeutic conceptual model (e.g., cognitive-behavioral therapy) or from multiple theoretical reference points. Nevertheless, the goals of each approach are identical: Transdiagnostic science aims to identify the smallest number of key mechanisms that hold the most explanatory power in understanding psychological disorders.
Transdiagnostic Treatments

Science and theory come together to inform transdiagnostic treatment. The original unifying treatment for anxiety and mood disorders originated in attempts to reconcile the converging evidence linking anxiety and mood disorders (Barlow et al., 2004). The original transdiagnostic treatment for eating disorders (Fairburn et al., 2003) sought to develop a more potent treatment package that addressed “core pathology” across eating disorders. Each treatment approach made use of basic science to inform theory and develop a flexible but robust set of interventions that targeted core mechanisms. In Barlow and colleagues’ (2004) unified treatment, poor emotion regulation, behavioral and emotional avoidance, and maladaptive cognitive appraisal processes were targeted for treatment. Over time, Barlow and colleagues (2010) broadened their discussion of unifying core processes to include increasing flexibility in one’s thinking and facilitating emotion awareness, particularly awareness of emotions in context. Fairburn and colleagues (2003) identified clinical perfectionism, core low self-esteem, mood intolerance, and interpersonal difficulties as core maintaining mechanisms across bulimia and anorexia nervosa. What should be evident is that, to date, transdiagnostic treatment still focuses on a relatively narrow band of disorders (anxiety/mood and eating disorders), but the focus on core maintaining mechanisms is believed to enhance therapeutic flexibility and effectiveness. At the same time, there are some similarities in the core processes targeted in each (e.g., emotional avoidance, mood intolerance) that have the potential to universally apply across disorders and treatments.

When evaluating transdiagnostic treatments, one should be mindful that multiple levels of analysis exist, too. Transdiagnostic treatment processes can refer to the dysfunctional mechanisms targeted by a treatment, the core therapeutic strategies that are used to intervene, or therapeutic process strategies that underlie the therapeutic endeavor. As discussed earlier, targeted mechanisms can be intra- or interpersonal processes, and therapeutic strategies can be at the level of individual (e.g., cognitive, behavioral), dyad (e.g., communication analysis), family, or community (e.g., multisystemic therapy). The therapeutic process adds an additional level of analysis—therapy-specific interpersonal processes. When a child, adolescent, or family initiates therapy, yet another set of processes is added to consider. These include processes specific to the client: child and family insight, motivation, and expectations for treatment; processes specific to the therapist (background, skill level, education, therapist flexibility and responsiveness); processes specific to the therapy (recommended therapeutic posture, level of structure, goal directedness); and processes specific to client-therapist interactions (therapeutic relationship and
alliance). Thus transdiagnostic therapies may be based on the common set of interventions used across disorders (e.g., problem solving, exposure) or to the intratherapy processes that are espoused (e.g., structured goal setting, working alliance). Some examples of universal therapy process are described in Chapter 8 by Kendall and colleagues.

Has DSM-5 Spoiled Everything?

As we write, the American Psychiatric Association (APA) has just completed its decade-long mission of revising and releasing the fifth edition of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-5; APA, 2013a). Although a number of radical ideas were considered along the way, diagnostic categories remain largely intact and the criteria required for diagnosis remain relatively identical for most disorders (APA, 2013b; Kupfer, Kuhl, & Regier, 2013). There was some reshuffling, such that all autism spectrum disorders were combined under a single diagnosis; post-traumatic stress disorder and other trauma-related disorders received their own chapter instead of falling under the category of anxiety disorders; and obsessive–compulsive disorder has been grouped with other compulsive behaviors instead of with anxiety. However, radical proposals to incorporate a substantial dimensional diagnostic component were not realized (Kraemer, 2007). Instead, each diagnostic category provides indicators or examples of dimensional severity for certain symptoms (Kupfer et al., 2013). These may be common “cross-cutting” features that appear across disorders, such as suicide risk and anxiety, or they may describe dimensional severity of particular symptoms within a disorder, such as the frequency of panic attacks in panic disorder. In so doing, DSM-5 appears to embrace many of the same principles that distinguish transdiagnostic research. It retains a value in conceptualizing distinct disorders while also promoting the research and treatment of symptoms that cross diagnostic boundaries. Likewise, DSM-5 eliminated the DSM-IV-TR (APA, 2000) chapter, “Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence,” and, instead, incorporated aspects of early-onset and developmental factors to each disorder.

The reader of the current volume will notice that many of the dimensional and developmental features championed by transdiagnostic researchers are reflected in, and supported by, the new DSM-5. Still, it is important to note that a transdiagnostic approach to research and treatment transcends individual classification systems. The term transdiagnosis implies a grounding in the study of diagnoses, but we cannot emphasize enough the primary focus on the underlying mechanisms and processes. Even without specific diagnoses (certainly as they are currently defined),
the study of those underlying processes and mechanisms would still per-
severe.

**Overview of Chapters in This Book**

This volume presents current knowledge across the three aforementioned dimensions of transdiagnostic research: transdiagnostic mecha-
nisms, theory, and treatment. Following this overview chapter, Harvey
(Chapter 2) provides an overview of the impetus, benefits, and challenges
confronting transdiagnostic research and treatment. In particular, she
presents the case for the unique challenges and opportunities for transdi-
agnostic research in child and adolescent populations. Taking a develop-
mental framework, Harvey suggests that a transdiagnostic approach may
be uniquely suited to account for developmental differences in typical
and atypical development (which may be easier to achieve by consider-
ing dimensional constructs), the presence of multiple reporters, and the
high rate of comorbidity. She points to a number of general advantages of
taking a transdiagnostic approach, including rapid transfer of treatment
breakthroughs, an increased attention to basic science in developing our
treatments, and an integration of our disciplines.

Part II highlights research on basic intra- and interpersonal processes
that influence the development and maintenance of psycho-emotional-
behavioral problems across disorder classes. Authors took care to explain
how basic mechanisms account for problem development within a trans-
diagnostic framework. Authors were asked to (1) define their basic pro-
cess of interest, (2) describe what makes this process transdiagnostic, (3)
review the empirical literature describing the relation of the process to
multiple diagnostic classes, problem sets, or clinical profiles in youth, and
(4) outline future directions for continued research within a transdiag-
nostic framework.

Compas, Watson, Reising, and Dunbar (Chapter 3) use a develop-
mental framework to explore how stress, coping, and emotion regulations
serve as transdiagnostic risk factors to explain diagnostic co-occurrence.
They present research on exposure to stressful events and chronic adver-
sity as transdiagnostic sources of risk and the ways that children and ado-
lescents regulate their emotions and cope with stress as transdiagnostic
protective factors. Using terms familiar to the developmental psychopa-
thology literature (e.g., *multifinality, equifinality*), they encourage a new
way of envisioning transdiagnostic work, including an emphasis on devel-
opmental trajectories and multiple causality.

Arditte and Joormann (Chapter 4) review the literature on cognitive
processes and the critical roles they play in the experience and regulation
of emotion. They distinguish between the multiple levels of cognition (attention, memory, interpretation) and illustrate how each level of cognitive process may universally or distinctively contribute to the onset and maintenance of mood and anxiety disorders.

Chu, Skriner, and Staples (Chapter 5) review evidence for the mechanistic role of behavioral avoidance in promoting and maintaining psychological distress across four major youth diagnostic classes (anxiety, depression, conduct, and impulse disorders). Although research on avoidance predominantly centers on anxiety and mood disorders, the authors make the case that avoidance may play a critical role in maintaining disruptive disorders (e.g., ADHD, oppositional defiant disorder [ODD]), too. Their model proposes that avoidance serves different functions depending on when it manifests itself in the sequence of pathological events.

La Greca and Lai (Chapter 6) provide a comprehensive review of peer relations and interpersonal stressors as transdiagnostic processes. Peer rejection and victimization can serve as universal risk factors for multiple forms of future disorders, and peer acceptance and close friendships can serve as protective factors. This developmental perspective on risk and protective factors creates a road map for examining initial development of problem behavior and also provides direct targets for treatment intervention.

Smith and Dishion (Chapter 7) focus their review on how parent-child interactions might interact with youth problem behavior. The authors make a specific case for mindful parenting as an antidote to the coercive cycle that often builds conflict in the home. They review the evidence for mindful parenting factors, such as positive behavior support, healthy limit setting, and family relationship building, as a universal mechanism for supporting healthy family functioning.

Part III offers a reexamination of traditional therapy models and theories within a transdiagnostic framework. In each chapter, the authors describe how a focus on common processes that underlie disparate diagnostic classes can offer unique insight into client problems and contribute to innovative treatment applications. Authors were asked (1) to describe the “traditional” version of the treatment model, (2) to discuss whether the treatment model was initially designed to be transdiagnostic, and if not, (3) to say what aspects of the treatment merit consideration as a transdiagnostic approach, (4) to review effectiveness data for the treatment model across multiple disorders, and (5) to describe the limits and future directions of the treatment model in transdiagnostic use. Four groups of experts across four major treatment modalities weighed in on this topic.

Kendall, O’Neil, Villabø, Martinsen, Stark, and Banneyer (Chapter 8) review the history and evidence for cognitive-behavioral therapy (CBT) as an integrative treatment model that has broad applicability across numerous disorders. Despite the fact that most evaluations of CBT have been
applied to specific identified disorders, the authors make the case that CBT is designed to have broad applicability: the basis of the model is a diathesis–stress model, intervention packages for specific disorders share many common interventions, and aspects of the therapeutic structure are transdiagnostic (therapeutic posture, directiveness, goal orientation).

Young, Mufson, and Benas (Chapter 9) build the case that interpersonal therapy for adolescents (IPT-A) has great promise as a transdiagnostic treatment because the treatment focuses on the universal process of interpersonal relationships. Problems arise and are perpetuated by problematic patterns in interpersonal interactions, whereas quality relations can buffer against problems such as depression and anxiety. The authors review the basic relational mechanisms that explain the onset of mood and anxiety disorders, the critical therapeutic techniques that could be effective across disorder sets, and the outcomes that one would expect to see change.

Dialectical behavior therapy (DBT) was a trendsetter in multiproblem treatments. Ritschel, Miller, and Taylor (Chapter 10) describe how DBT was developed as a principles-based treatment to address the severe and complex presenting problems associated with suicidal behavior and borderline personality disorder. Since its initial development, DBT has been adapted and used for other clinical populations, but because DBT simultaneously drew from multiple theories and implemented diverse therapeutic strategies, it set itself up uniquely as a potential transdiagnostic intervention. In particular, DBT addresses several core mechanisms common to many disorders, including emotion dysregulation, distress tolerance, mindful awareness, social effectiveness, and balanced family interactions.

Coyne, Birtwell, McHugh, and Wilson (Chapter 11) make the case that acceptance and commitment therapy (ACT) is also uniquely suited as a transdiagnostic therapy because it is concerned not with the elimination of syndromes but rather with building broad, flexible behavioral repertoires. Rather than focusing on symptom reduction, ACT promotes acceptance of aversive private experiences in the service of commitment to freely chosen values. Their mechanism of choice is the broader “functional context” of language and behaviors in human experience. To the extent that one can change how one relates to his or her own thoughts, feelings, and actions (i.e., change the relational frame), one can learn to tolerate emotional barriers that interfere with quality living. To the extent that this process is universal to any kind of suffering, this treatment model is inherently transdiagnostic.

Part IV spotlights exemplar treatment protocols that have applied transdiagnostic therapy across diverse clinical settings and client populations. Authors describe the theory underlying their respective approaches, highlight the universal processes that are targeted in the treatment
protocol, and report empirical evidence supporting the therapy. Authors were asked to (1) describe the targeted clinical population and treatment intervention, (2) illustrate what makes the treatment explicitly transdiagnostic, (3) discuss distinct developmental considerations in the development or delivery of the treatment, and (4) review the available empirical evidence for the treatment. As this area represents a large domain of future growth, these chapters also highlight future directions in treatment development.

Ehrenreich-May, Queen, Bilek, Remmes, and Marciel (Chapter 12) describe the rationale and subsequent development of two unified protocols, for children and for adolescents, respectively. These protocols follow solidly from the theoretical principles first outlined by Barlow and colleagues (2004; Barlow et al., 2010) in their descriptions of a unified approach to “emotional disorders” but also reflect a lengthy process of iterative treatment development to tailor such work for youth. The protocols are described in detail and, although only open trial and case series results have been published to date, randomized controlled trials (RCTs) of the adolescent (UP-A) and child (UP-C: Emotion Detectives) protocols are nearing completion. These RCT data are viewed as a needed next step to supporting the feasibility and comparative utility of transdiagnostic treatments for anxiety and depressive disorders in youth.

Following this, a fascinating chapter by Lochman, Powell, Boxmeyer, Ford, and Minney (Chapter 13) details the evolution of a treatment, Coping Power, that truly targets a singular mechanism, anger and its regulation, and suggests far-reaching implications for its utility as a transdiagnostic approach. Lochman and colleagues make the case that Coping Power is flexible and comprehensive enough in its structure to accommodate a number of co-occurring problems, beyond the disruptive behavior concerns alone that the intervention was originally designed to influence. Lochman and colleagues illustrate this point throughout their discussion of Coping Power’s components, pointedly tying its processes and strategies to their impact on related behavioral and emotional domains.

Much like DBT, multisystemic therapy (MST) is a comprehensive approach somewhat born of the necessity that a highly impaired population, in this case juvenile offenders, requires a variety of flexible and overlapping intervention strategies, guided by an overarching theoretical and systemic view. Helpfully distinguishing the related classes of transdiagnostic, modular, and principle-based interventions for the reader, Schoenwald (Chapter 14) does a masterful job of describing MST as a “principle-based, measurement-based, and flexible” intervention that guides case conceptualization and treatment selection for a variety of target populations. Schoenwald further illustrates how MST provides guidance when a population is sufficiently novel to warrant the inclusion of additional techniques and gives examples of such extensions.
Suárez, Ellis, and Saxe (Chapter 15) provide an example of a treatment, trauma systems therapy for adolescent substance abuse (TST-SA), that started with an existing treatment complexity—youth trauma and its aftermath—then extended its reach to be inclusive of a commonly comorbid problem area, adolescent substance abuse. Rather than simply adding new treatment components to address a related concern, Suárez and colleagues describe how their approach views both youth trauma and substance abuse singularly as “dysregulated emotional and behavioral states that occur in the context of a potentially unstable, and at times threatening, environment” and uses central principles of change to address these challenging problems.

Looking through the lens of eating disorders in youth, Le Grange and Loeb (Chapter 16) then describe how individual eating disorders are fundamentally intertwined with one another, both in terms of current symptom presentations and over the longitudinal course of illness. Although it was originally designed for treatment of anorexia nervosa, Le Grange and Loeb convincingly describe the transdiagnostic applications of family-based treatment (FBT) across eating disorder categories in youth. They support this position through both empirical findings across relevant diagnoses and succinct description of how FBT strategies apply both broadly across dysregulated eating patterns and more specifically within the context of varying clinical presentations.

Chapter 17, by Payne, Tsao, and Zeltzer, discusses a focal application of the unified protocol to a new systemic and intrapersonal context: that of a pediatric population with pain. Payne and colleagues note the high incidence of emotional disorders in pediatric samples, along with the potential common mechanisms of change across emotional disorders and pain management. The authors describe the unified model in further detail, along with the substantive adaptations and revisions they have made to better suit the unique challenges faced by children with chronic pain.

In Part V, following the previous sections’ review of contemporary transdiagnostic science and treatment, we were fortunate to have Ollendick, Fraire, and Spence, in Chapter 18, provide commentary on the current state of the research. They critically evaluate the current literature base and acknowledge the promise of current efforts but caution the field to wait until further evidence accumulates.

Returning to the simultaneous excitement and confusion that we sought to address, Chu and Ehrenreich-May (Chapter 19) conclude this book with an endeavor to identify the challenges ahead for the transdiagnostic movement in youth psychopathology. We address the concerns raised by Ollendick and colleagues and look to even further challenges ahead to fully establish the meaning and reach of transdiagnostic research. Although transdiagnostic research and treatment are in their
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infancy, the current volume demonstrates that they are in a rapid period of development and empirical evaluation. The road ahead is filled with both promise for efficiency in our youth treatments and caution about the need for further research to see this promise fulfilled.

REFERENCES


