

A Comprehensive Literature Review of Mode Deactivation Therapy

Marsha Ann Houston, Jack A. Apsche, and Christopher K. Bass

Abstract

In this article literature published on Mode Deactivation Therapy (MDT) was reviewed in depth. Several studies were identified that used a common outcome measure of reduction of physical and sexual aggression, other risk related behaviors. Comparisons of MDT and, other standardized approaches typically used in treating aggression in juveniles, were made. The studies involved individual clients and small groups using MDT and comparative methodology. The studies involved varying periods in treatment settings and longitudinal follow ups. The results document a greater degree of treatment success for MDT as compared with a standard Cognitive Behavioral Therapy (CBT), Dialectical Behavior Therapy (DBT) or Social Skills Training (SST). These comparisons were made in varying combinations, with observances made with similar subjects or subject groups. The degree of change associated with MDT was highly discernable in the studies, and will be reviewed and evaluated in meta-analysis study in the near future. MDT was developed for an specific age group, (14/2-18) with specific disorders. It has been demonstrated as an effective methodology as an Evidenced Based Psychotherapy. Implications for further outcome and process studies in cognitive therapy are discussed.

Keywords: Mode Deactivation Therapy (MDT), Cognitive Behavioral Therapy (CBT), Dialectical Behavior Therapy (DBT), adolescents, Social Skills Training (SST).

Introduction

In the process of analysis of MDT, this methodology has been compared to the alternative methodologies and strategies of standard CBT, DBT and SST. This review examined literature delineating the effectiveness of MDT in treating adolescent clients with reactive emotional dysregulation, who presented with behaviors involving parasuicidal acts, sexual offenses other aggression. Case studies involved clients with complicated histories of sexual, physical, or emotional abuse, as well as neglect, and multi-axial diagnoses. Data indicates that MDT is effective in reducing the rate of physical and sexual aggression across treatment.

MDT is an evidenced based treatment developed to treat adolescents with problems relating to conduct, personality and aggression. It is an empirically based therapy, rooted in CBT, DBT, (Linehan, 1993), and Functional Analytic Psychotherapy (FAP), ([Kohlenberg & Tsai, 1993] Apsche & Ward 2003).

Elements from Functional Analytic Behavioral Therapy

MDT also incorporates principles from Functional Analytic Behavioral Therapy (Kohlenberg and Tsai, 1993). First, MDT aligns with FAB in affirming that perceptions of reality and unconscious motivations evolve from past contingencies of reinforcement, such as families of origin. Second, MDT uses an assessment and Case Conceptualization method that combines elements from Beck's (1996) case conceptualization and the Factor Analytic Behavior Therapy model of Nezu, Nezu, Friedman and Haynes (1998). The assessment and case conceptualization procedure concentrates on core beliefs, fears and avoidance behaviors that are reflective of the Post-Traumatic Stress Disorder and developing personality disorders, (Apsche & Ward Bailey, 2003, 2004b, 2004c).

Unique Qualities of MDT

One crucial difference between Mode Deactivation Therapy and Cognitive Behavioral Therapy is that the core beliefs (or schemas) of the individual are *not* seen and challenged as dysfunctional because this action necessarily invalidates the person's life experience. Instead, in MDT, core beliefs are consistently validated as legitimate creations from the person's life experience (no matter how irrational and even if they have little more than a tiny "grain of truth"), which are then "balanced" through the collaborative therapeutic process to deactivate the maladaptive mode responses. Another difference between MDT and CBT is that MDT uses the "balance the belief" technique to remediate the youth's emotional dysregulation. MDT also uses a validation, clarify, technique (VCR). The VCR, uses unconditional acceptance and validation of the youth's cognitive unconscious, or out of awareness learn experience. Given the youth's background and history MDT espouses that he is exactly where and how he should be as a person with his history. The clarification offers an alternative explanation of the youth's circumstances and history, as the redirection measures the his "possible acceptance" of a slightly different belief.

MDT, unlike standard CBT and DBT, also includes a series of mindfulness exercises that are specifically designed for these adolescents. Exercises incorporated within the client workbook designed to allow the youth to practice the technique which helps ensure trust, reduce anxiety and increase commitment to treatment as it helps develop mindfulness skills for the youth. These exercises are then translated into brief, safe relaxation exercise to promote awareness of where the youth is with his emotions and feelings. MDT mindfulness is a crucial part of the methodology.

The study was designed to assess the effectiveness of Mode Deactivation Therapy (MDT) as compared to Cognitive Behavior Therapy (CBT) and Social Skills Training (SST) in the treatment of conduct disorder and personality-disorder youth with problems of aggression and sexual aggression.

This study introduces data comparing the efficacy of three different treatment methods for male adolescents in residential treatment for physical and/or sexual aggression. The analysis by assessing weekly behavioral reports, which indicated a number of observed sexual or aggressive acts. Results suggest that MDT might be effective in reducing symptoms of Axis I pathology.

The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2004, 2000 by Houghton Mifflin Company defines CBT as a highly structured psychotherapeutic approach used to alter distorted attitudes and problem behavior by identifying and replacing negative inaccurate thoughts and changing the rewards for behaviors. The crucial difference between MDT and CBT is that in MDT, the core beliefs (or schemas) of the individual are *not* seen as perceptions to be challenged as dysfunctional. To do this would invalidate the client's life experiences. The client's beliefs are accepted as truths in the client's life, by the therapist and the client. In MDT, as opposed to CBT, core beliefs are consistently validated as legitimate, and are seen as having been developed as a result of the person's life experiences (no matter how irrational, even if reality of the belief is imperceptible to observers). It is presumed that the client's belief system is not distorted, but although unbalanced, is derived from a "grain of truth" in his perception. These beliefs are "balanced" through a collaborative therapeutic process with a goal of deactivation of the maladaptive mode responses, or life interrupting behavior or behaviors.

As stated earlier in the body of literature, engaging in an argument with the client must be avoided. Apsche & Bass warn that even when the therapist has a good rapport, such youth are acutely sensitive to the power dynamic of being in a one-down position. Given their histories of victimization, they typically have serious difficulties with interpersonal trust. Challenging the reality of a youth's

beliefs and perceptions is negatively experienced as an attack on his esteem, his world-view and his fragile sense of self. Developmentally, such youth perceive the cognitive therapist as another adult trying to impose their authority and force him to change. Adolescents bristle and respond poorly to direct cognitive corrections – even when such interventions seem to be delivered in the most gentle and collaborative fashion. Cognitive therapy then, as it is normally practiced, can trigger a negative response that undermines progress (Apsche & Ward Bailey, 2004a).

Incorporating Elements from Dialectical Behavior Therapy into MDT

To accommodate this developmental and clinical barrier to traditional cognitive therapy, MDT uses two key principles from Dialectical Behavior Therapy (Linehan, 1993), which was originally developed to treat extremely unstable and volatile patients with severe personality disorders. Dialectical Behavior Therapy (DBT) uses the technique of *radical acceptance* in which the therapist elucidates and validates the unique “truth” in each individual’s perceptions. Rather than directly challenging the validity or empirical support for the youth’s beliefs and perceptions, MDT uses radical acceptance in fully validating the “grain of truth” of the individual adolescent’s beliefs based on his life experiences and trauma history. The goal is to join with the youth in order to discover how the belief system is a legitimate reflection of the youth’s life experience, relationships, sense of self and world view. Subsequently, given radical acceptance and increased trust, the therapist can use the therapeutic relationship as well as the youth’s direct experiences in the treatment program to show how beliefs can be modified based on corrective therapeutic experiences. MDT also adopts the technique of *balancing* from Dialectical Behavior Therapy. This is an interactive method of introducing increasing flexibility or balance in the individual’s rigid and maladaptive dichotomous (either/or) beliefs by redirecting the person to considering a continuum of truth or a continuum of possibilities.

From Cognitive Therapy to Mode Deactivation

In his work on the Theory of Modes, Beck (1996) suggested that there were flaws with his cognitive theory. He suggested that though there are shortcomings with his cognitive theory, there were not similar shortcomings to the practice of Cognitive Therapy. The author suggests that if there are shortcomings to cognitive theory the same shortcomings may apply to cognitive therapy. The author cites other work that indicates these same shortcomings, and suggests a modification to cognitive therapy as a “mode deactivation” therapy. The conversion of Beck's (1996) theory of modes to an applied methodology has been difficult, in that it is suggested that there are limitations to standard schematic processing for clinical interventions. These limitations to an empirically validated methodology require carefully constructed theoretical and clinical content as an alternative methodology. Beck (1996) introduced the concept of modes to address the criticisms and shortcomings of cognitive theory. Cognitive theory and Cognitive Behavior Therapy have shown limitations when addressing specific phenomenon within the context of clinical and experimental findings. He states "It has become apparent over the years that the theory (schematic processing) does not fully explain many clinical phenomena and experimental findings". Beck's words are powerful and pose many questions for cognitive therapists and theorists. If the theoretical constructs that cognitive therapy is based on do not fully explain these clinical phenomena, then is it not logical that the clinical methodology is *flawed* in treating individuals who pose clinical syndromes similar to what Beck describes? The recurring question that must be addressed is: If cognitive theory has shortcomings, does it not follow then, that Cognitive Behavior Therapy has limitations as well?

To answer the question posed, it is necessary to examine specific issues that Beck (1996) suggests are problems not adequately addressed by the model of schematic processing. These problems are specifically the eleven items detailed by Beck on. These items are reviewed in detail, as they suggest that possibly a more adaptive methodology is required to address the shortcomings of schematic processing.

The shortcomings of his schematic processing theory are as follows:

1. There are “multiplicity of related symptoms encompassing the cognitive, affective, motivational and behavioral domains in psychopathological conditions.”
2. Methodology indicates “evidence of systematic biases across many domains suggesting that a more global and complex organization of schemas is involved in intense psychological reactions.”
3. There is a prevalence of “findings of a specific vulnerability (or diathesis) to specific stressors that are congruent with a particular disorder.”
4. There is a “great variety of ‘normal’ psychological reactions evoked by the myriad of life’s circumstances.”
5. Inadequate handling of “dynamic ‘relation of content, structure and function in personality.’”
6. Observations of the variations in the intensity of an individuals' specific reaction to a given set of circumstances over time.
7. Consideration of the “phenomena of sensitization (kindling phenomenon): Successive recurrences of a disorder,” such as depression, “triggered by progressively less intense experiences.”
8. The possibility of “remission of symptoms by either pharmacotherapy or psychotherapy.”
9. Application of “apparent continuity of many psychopathological phenomena with personality.”
10. A consideration of “the relevance of the model to normal ‘moods’”.
11. An understanding of the relationship of consciousness and unconscious processing of information.

These are substantial problems discussed by the originator of the theory and archetype of clinical application of the schematic processing mode. If, as Beck states, there is a need to expand the theoretical mode, then there might be an equal need to expand the clinical model of intervention to adapt to the theoretical considerations in an applied methodology. First, it is important to examine Beck's list of problems with the schematic processing model, from a global perspective. This paper offers a methodology of cognitive behavior therapy to expand the model of CBT and incorporate Beck's system of modes, (Beck, A.T., 1996). The attempt in this paper is to expand the model of schema processing and respond to Beck's suggestions of Modes, further offering a more global construct than Cognitive theory and additional refinements related to progress in the field.

When reviewing Beck’s point one, the question raised is relate to the multiplicity of related symptoms, it can be surmised that Beck is referring to the complications and multi-axis issues, of both the Axis I and Axis II as they merge into the multiplicity of symptoms. He suggests that there is a schema overload because to the interplay of these type of symptoms and behaviors. It may be that the ability of schema processing is limited in explaining the volatility of the nature of these disorders, and, the blurring of the cognitive, affective and motivational systems because of the nature of the psychopathological conditions.

When Beck discusses "specific vulnerability or diathesis" he seems to refer to specific stressors or psychological vulnerabilities that appear to be congruent with a particular disorder. These disorders serve as charges for Beck's concept of modes. He continues to examine the great variety of "normal" psychological problems evoked by the "myriad of life's circumstances," that affect the mode. These life circumstances of normal individuals appear to activate what Beck refers to as normal psychological problems. If individuals have experienced abnormal trauma, or extremely harsh life's experiences, it is safe to assume that these circumstances would be inherently more complicated.

It is indicated that in suggesting a "systematic bias", Beck is referring to a more complex and global organization of schemas that are confounded due to intense psychological responses. This might suggest that in clinical practice these disorders are not neatly ensconced in a single delineated schema. They appear to be a product of the blending of the complexities of Axis I and Axis II disorders. Depression, for instance may be schematically blended with anxiety and Cluster B disorders. These complex schemas may be dormant, waiting for a charge to activate them. These schemas are only a part of a complex system of modes that transcend currently held concepts of cognitive therapy.

The two most important Beck points remaining involve the relationship between the unconscious and conscious processing of internalized information. The conventional perspective of theory mode examines only the conscious process. In addition to this awareness of this limitation, it is also important to bear in mind that is that these are unconscious "triggers" that ignite the activation of psychological and related reactions, prior to the "negative thought". This also accounts for why Beck suggests that there is a kindling phenomenon that activates the trigger toward disorders with less intense experiences. This phenomenon is not explained by current theoretical or applied methodologies in cognitive theory or cognitive therapy.

Beck looks at the relationship between conscious and unconscious processing as part of his cognitive theory. Information processing takes into account the conscious processing of information, although it does not account for the unconscious learning. Experiential learning takes place in the cognitive unconscious. It is the process of learning from one's life experiences, both positive and negative. If this learning is negative or invalidating, then the individual's beliefs are shaped to respond to dangers and invalidation of their world. They view the world as dangerous and their experiences have been as dangerous as their perceptions of the world. These perceptions and the reaction to these perceptions are triggers for a system of primitive responses, as well as fears and beliefs that activate their survival responses, or survival modes. Beck, (1996) clearly opened the possibility that individuals process information, but also learn from their unconscious experiences. Therefore it might be necessary to address both levels of learning in therapy, rather than simply the thought process, as the cognitive model address. Apsche (2005).

Addressing Dialectical Issues

Marsha Linehan, (1991) developed DBT, based on the idea that *psychosocial* treatment of those with Borderline Personality Disorder was as important in controlling the condition as traditional psycho- and pharmacotherapy were. Concomitant with this idea was a hierarchical structure of treatment goals. Paramount among these was reducing parasuicidal (self-injuring) and life-threatening behaviors. The basic premise of DBT maintains that many people, due to abusive or invalidating environments during upbringing and perhaps due to biological factors react problematically to emotional stimulation. Their level of arousal goes up much more quickly, peaks at a higher level, and takes more time to return to baseline. (Deb Martinson, 1996-2002).

MDT incorporates principles from FAB, First, MDT aligns with FAB in affirming that perceptions of reality and unconscious motivations evolve from past contingencies of reinforcement, such as families of origin. According to the FAP website, FAP is a psychotherapy developed by Robert Kohlenberg and Mavis Tsai at the University of Washington. FAP is based on the behavior analytic, or functional contextual approach to human behavior first described by B. F. Skinner. (<http://www.functionalanalyticpsychotherapy.com/ref.html>)

Sloane's explanation of behavior analysis is that it is a science concerned with the behavior of people, and it attempts to understand, describe and predict their behavior. Behavior analysis does not assume that there are mental causes for inappropriate behaviors. Variations in behavior are related to events that take place in the real world. According to Sloane, operants and reflexes are the two major classes of behavior. Operants, or voluntary behaviors, include most of the things one does on a daily basis. Consequences are events which follow operants, and influence whether or not a behavior is likely to occur again under similar circumstances. Reflexes, or respondents, are automatic responses to stimuli. They are frequently physiological, and are not usually influenced by consequences. Behavior analysis suggests that most everyday behavior is operant in nature, not respondent; therefore, behavior changes as the environment changes, creating the possibility of a variety of consequences.

The theoretical constructs of MDT are based on Beck's Mode Model (Beck, 1996) suggesting that people learn from unconscious experiential components and cognitive structural processing components, (Apsche, Ward & Evile, 2003). Therefore, to change behavior of individuals there must be a restructuring of the experiential components and a corresponding cognitive reformation of the structural components. MDT is an empirically based methodology that systematically assesses and restructures dysfunctional compound core beliefs, (Apsche & Ward, 2003)

He suggests that his model of individual schemas (linear schematic processing) does not adequately address a number of psychological problems; therefore he suggests the system of modes. Beck described modes as a network of cognitive, affective, motivational and behavioral components. He suggests that modes are consisting of integrated sectors of sub-organizations of personality that are designed to deal with specific demands to problems. These are the sub-organization that help individuals adopt to solve problems such as the adaptation of adolescents to strategies of protection and mistrust when they have been abused.

Beck also suggests that these modes are charged, thereby explaining the fluctuations in the intensity gradients of cognitive structures. They are charged by fears and dangers that set off a system of modes to protect the fear. Modes activate by charging related to the danger in the fear ↔ avoids paradigm. The orienting schema signals danger, activates or charges all systems of the mode. The affective system signals the onset and increasing level(s) of anxiety. The beliefs are activated simultaneously reacting to the danger, fear ↔ avoids and physiological system. The motivational system signals the impulse to the attack and avoids (flight or fight) system. The physiological system influences the heart rate or blood pressure, the tightening of muscles, etc. According to Dodge, Lochman, Harnish, Bates and Petti, (1997), there are two sub-groups of aggressive conduct type youngsters. These sub-groups are the proactive and reactive. The first, proactive, derives benefits and rewards from aggression; the second sub-type, reactive, operates from a construct of emotional dysregulation. Forty percent of reactive adolescents have multiple personality disorders, (Dodge, et al., 1997). It appears that Reactive Conduct Disorder adolescents emotionally dysregulate and many of their aberrant responses are results of this emotional dysregulation.

Koenigsberg's work address associated aggression, as well as suicidal threats and gestures were associated with emotional dysregulation. MDT Case Conceptualization methodology provides the

framework to assess and treat these complicated typologies of adolescents and integrates them into a functionally-based treatment.

MDT Methodology as a Collaborative Process for Case Conceptualization

Underlying MDT methodology is the Case Conceptualization. MDT Case Conceptualization is a combination of Beck's (1996) case conceptualization and Nezu, Nezu, Friedman, and Haynes's (1998) problem solving model, with several new assessments and methodologies recently developed. The goal of conceptualizing the "case" is to provide a blueprint to treatment within the case conceptualization. The objective of treatment is to deactivate the Fear→ Avoids→ Compound Core Beliefs mode and teach emotional regulations through the balancing of beliefs.

Apsche & Ward, 2003, assert that part of the design of the MDT case methodology is intended to create a functional team-based Mode Deactivation approach. The team operates within the implementation guidelines, focusing all efforts in a concerted manner; one tape, one chapter and one group at a time. Clinical energies are directed toward assisting the client to master and implement the MDT concepts and skills. By systematically assessing and the authors further offer that in restructuring these beliefs, MDT addresses underlying perceptions that may be applicable to setting in motion the mode related charge of aberrant schemas. This lends to the behavioral integration of Dialectic Behavioral Therapy (DBT) principles of Linehan, 1993, in treating of sex offending or aggressive behavior, as indicated by Kohlenberg & Tsai, 1993, (Apsche, et al., 2003).

Typology Driven Modes and the Fear ↔ Avoid Paradigm

Understanding modes is important in treating the population served by MDT, in that these youth are particularly sensitive to danger and fear, which charge their modes; this includes an awareness of conscious and unconscious fears being charged, and activation of the mode system. This explains the level of emotional dysregulation and impulse control issues of the indicated in the typology of the young client (Apsche & Ward, 2003).

With long histories of sexual, physical, and/or emotional abuse, these youth often respond in ways that are translated into personality disorders and/or conduct disorders. They may act out by committing sexual offenses, aggressive acts, or other aberrant behaviors. They may be viewed as "criminals" and considered to have origins from the underclass within society, with involvement in the criminal justice system. The term typology refers to specific complexities of the adolescent with these types of histories. It is believed that aberrant behavior is related to dysfunctional schema. CBT would attempt to identify dysfunctional schemas in the typology and modify them. MDT is a methodology that addresses dysfunctional schemas through systematically assessing and restructuring underlying dysfunctional compound core beliefs. MDT is applicable to adolescents who engage in aggressive and/or delinquent behaviors, as well as sexual offenses. It incorporates the model of individual schemas with Beck's notion of modes as integrated sub-organizations of personality. Modes are seen as assisting individuals to adapt and solve problems; for example, the adaptation of adolescents to strategies of protection and mistrust when they have been abused. A mode consists of schemas (beliefs) that are activated by a fear ↔ avoids paradigm. To address schema processing based on thoughts and beliefs without understanding associated modes is insufficient. MDT addresses the specific typology of the youth with severely life-interfering behaviors.

Once the clinician has constructed the Case Conceptualization, underlying fears of the resident can be examined. These fears serve the function of developing avoidance behaviors in the youngster. This fear-connected acting-out is seen in the history, and as an array of problem behaviors that may be

prevalent in the treatment milieu. The development of personality disorders often surrounds underlying post traumatic stress disorder (PTSD) issues.

The Case Conceptualization process includes identifying the underlying compound core beliefs that are generated in the development of personality disorders. Preliminary results suggest that the typology of subject youngsters have a conglomerate of compound core beliefs associated with personality disorders. The nature and dynamics of the conglomerate of beliefs is at the crux of why typical treatment fails these youngsters. One cannot treat specific disorders, such as sex offending and aggression, without understanding the operant application these conglomerate beliefs. It is apparent that these beliefs are not cluster specific; this is to say that the MDT Conglomerate of Beliefs and Behaviors can involve beliefs connected to more than one personality disorder and that may integrate with one another. Because of this complex integration of beliefs, treatment for this typology in the youngster's schema is more complicated.

The MDT Conglomerate of Compound Core Beliefs represents a system of protection for the individual from his abuse issues, which may present as being treatment interfering. The attempt to use standardized didactic approaches to treatment, without addressing the convoluted nature of the beliefs can amount to treatment interfering behavior on the part of the clinician. This may also be referred to as clinical unattractiveness, and may cause what is perceived as "client resistance". This methodology is not empirically supported and counter-intuitive.

Countering Resistance with Validation of the "Truth"

By restructuring beliefs, MDT addresses underlying perceptions that may set in motion the mode related charge of aberrant schemas, thus enabling the behavior integration of DBT principles (Linehan, 1993) of treating of sex offending or aggressive behaviors. Many of Linehan's teachings describe radical acceptance and examining the "truth" in each client's perceptions. This methodology of finding the grain of truth in the perception of the adolescent is crucial to the effectiveness of MDT. Its effectiveness can be measured as an empirically based and driven treatment, and it is designed to assess and treat this conglomerate of personality disorders, as well as remediate aggression and sexual offending.

With MDT radical acceptance is "borrowed" in the form of helping the youth accept who he is based on his beliefs. The other major similarity between DBT and MDT is the use of balancing the dichotomous or dialectical thinking of the client.

Often CBT, viewed as "arguing" with or challenging the client's concepts of cognitive distortions, fails with these youngsters. These clients do not respond to being in a one-down position, no matter how well aligned with the therapist. Cognitive therapy as normally practiced, will trigger a negative reaction by these youngsters. The therapist is perceived as another person attempting to change them due to a system of defenses developed to protect them. CBT will often fail with the typology of this client.

An integral part of MDT is the concept of validation, clarification, and redirection (VCR). Validation was defined by Linehan (1993), as the therapist's ability to uncover the validity within the client's belief. The grain of truth reflects the client's perception of reality. The truth in this reality needs to be validated so that clarify the content responses may then be given. This also lends to clarify the beliefs that are activated. It is important to understand and agree with the "grain of truth" in the clarification.

The redirection component of the VCR assists the client to consider responses to others views, or alternative possibilities on his or her continuum of truths. There are numerous continuums implemented, as scales from 1 to 10 to evaluate areas such as truth, trust, fear, and beliefs. These continuums are

essential to MDT, in that they give both the client and the therapist an empirical measurement of the client's spectrum of perceived truth.

Teaching a client who often engages dichotomous "all or nothing" thinking that his perception can fall within the range of a continuum, rather than only a 1 or a 10 (all or nothing), is extremely validating. This learning process is the basis for positive redirection toward a new awareness for the client, (Apsche & Ward, 2003).

Comparing TAU and MDT

At one Residential Treatment Center, Treatment As Usual (TAU) was based on a manualized cognitive-behavioral therapy approach. Residents recorded negative thoughts and beliefs, and examine how cognition effected their beliefs, feelings, and behaviors. The TAU addressed sexual offending issues, as well as underlying psychological distress such as anxiety and depression. Fourteen males with sexual offending behaviors from the Behavioral Studies Program (BSP) at the Residential Treatment Center, (nine European-American, three African-American, one Native-American, and one Caribbean) between ages 12 and 19 years, (N=16.62) participated in treatment. All participants were first-time admissions to the BSP, and had never participated in a cognitive-behavioral or mode deactivation based sexual offending treatment program before. Informed consent, including the tasks involved and participants' rights were reviewed. Both verbal and written consent was obtained from the participants.

Four assessments were used to measure the behavior of the residents, which included the *Child Behavior Checklist* (CBCL); (Achenbach, 1991), the *Devereux Scales of Mental Disorders* (DSMD; The Devereux Foundation, Naglieri, J.A., LeBuffe, P.A. & Pfeiffer, S.I. (1994). the *Juvenile Sex Offender Adolescent Protocol* (J-SOAP; Prentky, Harris, Frizzell, & Righthand, 2000), and the *Fear Assessment* (Apsche, 2000).

The sixteen residents were assigned to caseloads based on space availability. All therapists carried a caseload of 10. Discharge or transfer of a resident created an opening that was be filled, in order to maintain the caseload of 10. It was important to bear in mind that this was a treatment facility and that these data reflect the results of treatment comparisons, not a research protocol. Residents were assigned to MDT and CBT groups. The treatment group engaged in Mode Deactivation Therapy and the control group participated in TAU. After a mean number of 12 months in treatment, the assigned therapists, (two MDT, and seven TAU) administered test packets which included the CBCL, DSMD, J-SOAP, and MDT Fear Assessment. The following were assessed: (a) Behavioral and emotional problems, including psychopathology, (b) strengths and types of fear, (c) behaviors and ideation observed by clinical staff, and (d) and level of risk to the community.

The assessments revealed that the two groups differed significantly. Residents who participated in MDT had lower scores on all measures than did residents who engaged in TAU. It appeared that both CBT and MDT where effective treatments, although MDT appeared significantly more effective with this particular typology of adolescents. All of the residents had prior unsuccessful treatment outcomes at either another facility or at an outpatient treatment center. The results of this study suggest that MDT methodology, in addressing underlying personality traits may be effective for severely disturbed youth with sexual offending behaviors who have experienced previous treatment failure.

The combination of results from the CBCL, DSMD, and JSOAP suggested that MDT is effective for these typology types, in reducing internal distress as a result of varying psychological disorders present. As measures indicated, the critical pathology factors were reduced by more than one standard deviation. It was also suggested that MDT methodology reduces externalizing aberrant behaviors.

Despite the sample size, the results still indicated that MDT was more effective than CBT with these residents.

It was recommended that the results be tested in an empirically based research protocol for a true test of efficacy. The treatment results suggested that the implementation of MDT in a clinical curriculum reduced aberrant behaviors, as well as, internalizing, externalizing, and critical pathology measures across assessments; however the small sample size of the non-research comparison study may indicate limitations for generalized use. It is important to note that the comparison of treatment results also suggested that sexual offending adolescents, in the described typology, have a conglomerate of personality beliefs. Treating sex offending behaviors without addressing the underlying personality beliefs appeared to be related to recidivism.

Apsche cites Kohlenberg & Tsai to explain FAP, and states that the theory offers that people act based on reinforcement contingencies. Although FAP takes into consideration that cognitions are involved, the focus is on the deeper unconscious motivations that were formed as a result of past contingencies. Perception is based on past contingencies, therefore, reality and the concept of reality reflects what has been experienced in the past. Considering reinforcement history in the context of the person provides a more complete assessment of a person and specific behaviors.

A case analysis was prepared representing theory integrated into practice in treatment of a youngster who was in seven correctional and treatment facilities previous to this treatment. The subject had been removed from previous facilities due to aggression; he attacked staff and residents alike. The case analysis involved a step-by-step case study, with a corresponding theoretical analysis based in MDT. As a collaborative methodology, MDT was implemented by the treating professional with the aid of the client. The Case Conceptualization helped the clinician examine underlying fears of the resident. Fears served the function of developing avoidance behaviors in the youngster. These behaviors usually appeared as a variety of problem behaviors in the milieu. The Case Conceptualization method provided a vehicle for assessment of the underlying compound core beliefs that were generated by developing personality disorders. The conglomerate of compound core beliefs represents protection for the individual from his abuse issues, which may have contributed to past aggressive behavior, interfering with treatment. Since previous treatment settings did not appear to address client belief, it can be inferred that previous treatment attempts were actually treatment interfering on the part of the Psychologist, or treating professional, not empirically supported, and counter-initiated, (Apsche, & Ward Bailey 2003).

The Case Conceptualization also provided a methodology to address reactive adolescent emotional dysregulation. The emotional dysregulation refers to the Linehan (1993) model of the Borderline Personality Disorder (BPD) emotional dysregulation, integrated with the Reactive Conduct Disorder, (Dodge, et al., 1997).

Linehan (1993) sees individuals with borderline personality disorder as analogous with burn victims, who, with the slightest movement, automatically experienced extreme pain. "Because individuals cannot control the onset and offset of internal or external events that influence emotional response," she suggests that the experience is itself a "nightmare of intense emotional pain," and creates an struggle for clients to regulate themselves.

Koenigsberg was said to say that many types of aggression, as well as, suicidal threats and gestures were associated with emotional dysregulation.

Once topological information is gathered and the case is formulated, the client and the therapist collaboratively develop the Conglomerate of Beliefs and Behaviors (COBB). The completion of the

COBB follows the review of the five-column Fear ↔ Avoids ↔ Compound Core Beliefs and moves to the form designed to develop this component of MDT.

As stated earlier, the Conglomerate of Beliefs and Behaviors is the heart of the treatment plan for the client. Once the clinician collaboratively validates the Fear ↔ Avoids ↔ Compound Core Beliefs and moves to this component, the clinician helps validate his behavior responses that are congruent with his compound core beliefs. This form once completed remains with him throughout treatment and is the basis for all of his work in the MDT manual. The client recognizes that these beliefs could be activated throughout his lifetime and he continually works to deactivate his fears, avoids, and beliefs.

The MDT Case Conceptualization is a systematic and sequentially designed methodology intended to provide functionally based treatment, to address complex emotional, thought and behavior disorders. Assessments used in MDT are Typology Survey, Fear Assessment, and Compound Core Belief Questionnaire (CCBQ). The Typology Survey gathers information about the resident's history including: family, substance abuse, medical, educational, emotional, physiological, interpersonal relationships/social, offenses, physical abuse, sexual abuse, emotional abuse, neglect, and expectations of treatment. The Fear Assessment is a Likert format question assessment exploring fears of the resident, providing insight into the resident's underlying traumas. The CCBQ (Compound Core Beliefs Questionnaire) is also a Likert format question assessment used to gather a succinct understanding of a resident's beliefs or thought processes, (Apsche, & Ward Bailey, 2003, Part II).

A Single-Case Study of MDT Effectiveness

John was a subject used to complete an MDT case. The case was developed using a stepwise approach. (The case information came from accomplishing the Typology Survey.)

This included:

STEP I: RELEVANT CHILDHOOD DATA (ABUSE HISTORY): This section includes physical/sexual, emotional abuse, development, behavioral, aggression, suicidal, parasuicidal, substance abuse, and medication history. It was important to complete this review systematically, in laying the foundation for the case conceptualization. In reviewing the data from this case, it was necessary for the clinician to ask: "What do I need to know about this youngster, and how does the following information help to begin to understand this youngster?" Further, asking: "What do I begin to look for behaviorally?" was an important element to gaining key data.

STEP II: SEX OFFENSE DATA: Included here was all relevant information specific to the resident's sexual offense. This was attained from the typology survey and by completing the Sexual Offense System part of Mode Deactivation Therapy Workbook. Regarding the Sexual Urge and Fantasies, this section also included Risk Assessment instrument findings as well as, significant results from objective measure of sexual interests.

STEP III: DIAGNOSES: This is the diagnosis given by a physician or, if appropriate, a licensed clinical psychologist. It can be attained from the most recent psychiatric assessment. Take notice of the concordance of diagnoses to beliefs endorsed in the CCBQ.

STEP IV: FEARS, AVOIDS, COMPOUND CORE BELIEFS CORRELATION:
Fears: The key to treating the youngster was the proper administering of the Fear Assessment. Investigate the level of trauma. Begin by identifying the fears endorsed as occurring always and/or almost always.

STEP V: CONGLOMERATE OF BELIEFS AND BEHAVIORS: The conglomerate of beliefs and behaviors incorporated compound core beliefs and the corresponding behaviors. This conglomerate developed as a defense to underlying trauma. It is the pathway to the complex series of moods, schemes, and behaviors. Beliefs endorsed as “Always” or “Almost Always” from the CCBQ were used. The personality disorder beliefs are the pathways for numerous problem and aberrant behaviors, as well as emotional dysregulation.

STEP VI: SITUATIONAL ANALYSIS: This section required an analysis of situations experienced by the youngster. Completing the situational analysis provided an opportunity to test the hypotheses formulated in the Fear, Avoids, Compound Core Belief – Correlation section.

STEP VII: MODE ACTIVATION/ MODE DE-ACTIVATION: Beck, Freeman and Associates, (1990) suggested that cognitive, affective and motivational processes are determined by the idiosyncratic structures or schema that constitute the basic elements of personality. This schema translates to MDT methodology in considering mode activation and deactivation.

STEP VIII: FUNCTIONALLY BASED TREATMENT FORM: The completion of Functionally Based Treatment Development Form is the culmination of all previous components of the MDT Case Conceptualization. The form is intended to give direction to treatment, based on what has been learned about the resident through doing the case. The goal for this work is the development of a new, healthier belief system. These beliefs are healthy alternatives to the compound core beliefs identified in the Fear, Avoid, Compound Core Belief correlation.

This was the blueprint for treatment. Developing it required time and thought. The Functionally Based Treatment Form was designed to identify desired behaviors and prescribe the implementation of these new behaviors through validating, clarifying, and redirecting.

In the case considering John, results revealed that he reduced his aggressive outburst from an average of 1 per day to two per month by the sixth month of treatment. He also stopped overt physical aggression, would verbalize his anger, and withdrew himself, behaviorally from the situation. John attributed this to understanding his preconscious triggers of perceiving that he was vulnerable. This perceived vulnerability set off the entire mode system. He was able to identify situations that produced the vulnerability, and examine his cue beliefs that were part of the activation process. He began verbalizing when he was he was uncomfortable. He also learned to recognize physiological responses that signaled his perception of danger or vulnerability. This enabled John to work on balancing his belief exercises. The theoretical case analysis of John provided the framework for future investigations for alternative treatment methodologies for reactive adolescents with personality traits/ disorders. MDT offered new methodology specifically designed for difficult adolescents. It has been shown to be effective as compared to manualized CBT in a descriptive study, (Apsche, & Ward Bailey, 2004).

Empirical Comparison of CBT and MDT

In empirical comparison of CBT and MDT in treating adolescent males with Conduct Disorder and/or personality disorders and sexually reactive behaviors, the study was initiated to illustrate the efficacy of MDT as compared to CBT on aggression and sexually acting out or sexually reactive behaviors. It was also intended to compare these approaches with one another. The rationale of the comparison approach was to attempt to validate and further understand the differences in outcomes of the differing treatment approaches.

TC, as a CBT methodology was designed to treat a conglomerate of personality disorders. The treatment of the higher risk, aggressive client with sex offenses, focused on specific deviant sexual arousal and a antisocial sub-structure. For the client who had same-sex offended with young children,

and who continued to show deviant interest in young victims, the Thought Change approach addressed the specific indices of this sub-group. TC explored deficits in self-esteem, social competency, and issues of frequent depression. Youth with these issues displayed severe personality disorders with psychosexual disturbances and high levels of aggression and violence. For this client type, TC also focused on the specific individual indices of these issues by identifying and modifying complex system of beliefs.

The TC curriculum consisted of a structured treatment program, which addressed the dysfunctional beliefs that drove sex offending behaviors. Topics in the TC curriculum included the: Daily Record of Negative Thoughts, Cognitive Distortions, Changing Your Thoughts, Sexual Offense System, System of Aggression and Violence for Sex Offenders, Moods (How to change them), Beliefs (How it all fits together), Responsibility, Health Behavior Continuum, Beliefs and Substance Abuse, Beliefs and Empathy, The Beliefs of the Victim/Offender, The Victim/Victimizer, and the Mental Health Medication System. The sections of the TC Workbook were designed to progress sequentially through therapy. This provided a record of dysfunctional beliefs prior to, during, and following the sexual offense.

MDT as a Type of CBT

The focus of MDT is based on the work of Aaron Beck, M.D., particularly his recent theoretical work, the system of modes (Beck, 1996, Alford & Beck, 1997). Other aspects of MDT have been included in the Behavior Analytic literature, such as Kohlenberg and Tsai (1993), Functional Analytic Psychotherapy (FAP), as well as, Dialectic Behavior Therapy (DBT) (Lineham, 1993). The specific application of MDT and applied methodological implications for MDT with specific typologies is delineated by Apsche, Ward, and Evile (2002). The article also provided a theoretical study case study that illustrates the MDT methodology.

Beck, Freeman and associates, (1990), suggested that cognitive, affective and motivational processes are determined by the idiosyncratic structures or schema that constitutes the basic elements of personality.

This is a more cognitive approach suggesting that the schema is the detriment to the mood, thought, and behavior. Beck (1996) suggested that the model of individual schemas (linear schematic processing) does not adequately address a number of psychological problems; therefore the model must be modified to address such problems. Working with adolescents who present with complex typologies of aberrant behaviors, it was necessary to address this typology of youngsters from a more “global” methodology, to address their impulse control and aggression.

Alford & Beck (1997) explain that the schema typical of personality disorder is theorized to operate on a more continuous basis; the personality disorders are more sensitive to a variety of stimuli than other clinical syndromes.

Comparison of Effectiveness of CBT and MDT

Twenty one participants were studied for clinical effectiveness in first-time admissions to the program and had never participated in a cognitive-behavioral or mode deactivation based sexual offending treatment program before. The twenty-one MDT participants were composed of 15 African Americans, 5 European Americans and 1 Latino youth. Informed consent including the tasks involved and participants’ rights reviewed. Both verbal and written consent was obtained from the participants.

This research study was initiated to illustrate the efficacy of two different treatment approaches for male adolescents who are in treatment for acting out aggressively and in some cases sexually. It was

also intended to compare said approaches to one another. The rationale behind the comparison was to attempt to validate and further understand the differences in outcome of the different models.

Based on the results of this study we have demonstrated that regardless of treatment model, recidivism rates have significantly declined.

Thus it was clear that MDT produced significantly superior results when compared to CBT treatment. MDT provides a new empirically based alternative for treating sexual and aggressive based behaviors in adolescents. MDT offers a therapeutic intervention which allows the treatment provider to be efficient and provide a timely intervention, as well as the potential for positively affecting recidivism rates, (Apsche, Bass, Murphy, 2004).

In another comparison, comparative data was examined between two published studies, one CBT and the other MDT as a CBT. The CBT study was completed first. Thought Change, the CBT methodology, was an effort to establish an effective manual-based treatment to address the complexities of the adolescent males with sexual offenses. MDT was developed to address the more reactive adolescents who were not successful in the regular CBT. The MDT treated individuals did not, and perhaps could not complete the Thought Change (CBT) program. The methodology required adjusted for the extreme dichotomous, emotional dysregulation, and reactive aggression of the subjects.

TC as a CBT methodology was designed to treat a conglomerate of personality disorders. The treatment of the higher risk, aggressive sex offender focuses on specific deviant sexual arousal and antisocial sub-structure. For the same-sex offender of young children who continues to show deviant interest in young victims, TC addresses the specific indices of this sub-group. TC explores deficits in self-esteem, social competency, and frequent depression. Many of these youths display severe personality disorders with psychosexual disturbances and high levels of aggression and violence; therefore, TC also focuses on the specific individual indices of these issues by identifying and modifying the complex system of beliefs.

The TC curriculum consists of a structured treatment program, which addresses the dysfunctional beliefs that drive sex offending behaviors. Topics in the TC curriculum include the following: Daily Record of Negative Thoughts, Cognitive Distortions, Changing Your Thoughts, Sexual Offense System, System of Aggression and Violence for Sex Offenders, Moods (how to change them), Beliefs (how it all fits together), Responsibility, Health Behavior Continuum, Beliefs and Substance Abuse, Beliefs and Empathy, The Beliefs of the Victim/Offender, The Victim/Victimizer, and the Mental Health Medication System. The sections of the TC Workbook are designed to progress sequentially through therapy, and to be used as a record of dysfunctional beliefs prior to, during, and following the sexual offense.

Similarities and Differences between CBT and MDT

There are many similarities and differences between CBT and MDT. MDT was developed as an extension of CBT. CBT was adapted to the specific facility by the developer of MDT. MDT was developed in order to find a methodology that might be successful with treatment resistance and/or failures with standard CBT methodologies. The results of this comparison of published "best data" from CBT and MDT suggests that MDT is more effective than CBT for adolescents with conduct disorder and personality beliefs or co-morbid disorders and sexual offenses.

It is important to note that the CBT study and the MDT study shared one therapist. These studies were completed approximately 1 ½ years apart. MDT addressed many of the more difficult issues the adolescent males had who were not amenable to CBT and failed in CBT treatment. The MDT group, for

the most part, comprised individuals who were not able to complete treatment with a manualized treatment because of increased aggression and/or non-compliance, (Apsche, et al., 2004).

David's Case: A Study of MDT Effectiveness

This case study Apsche & Ward Bailey, 2004, presented a theoretical analysis of implementing MDT family therapy, with a 13 year old Caucasian male. MDT has been shown to be effective in a descriptive study with CBT (Apsche & Ward, 2002). The analysis of this case illustrated the effectiveness of MDT as applied in family therapy. The individual in this case, David, was a troubled youngster. Although he denied ever experiencing physical and/or emotional abuse, his family of origin demonstrated extremely poor physical and emotional boundaries. David did report that he had been sexually victimized by a boy. He did not disclose the name of the boy because his parents were friends with the boy's family and the lack of appropriate boundaries in his family created an unstable atmosphere, causing David to feel compelled to follow his parent's wishes to refrain from disclosing the name. David had a learning disability. In order to make sense of and compensate for his unstable home life, David developed a complex system of personality disorder beliefs. Along with providing David with a way to cope with his unpredictable world, his beliefs also led him to commit numerous sexual offenses. David had previous unsuccessful treatment; basic cognitive therapy techniques were ineffective. Mode deactivation therapy was found to be more effective, due to this approach more adequately to addressing David's personality disorder beliefs without challenging him to engage in dialectical debates. It was essential to incorporate David's family in his therapy since, they were so involved in his life and treatment. Unexpectedly, his family made progress along with him, gaining insight into his beliefs as well as their own. David and his family learned how to balance their beliefs and modify their behavior. The family's progress inspired the application of MDT in family therapy. This theoretical case study represented effectiveness of MDT in applying theory to clinical practice within family therapy.

This study was done as David's first admission to a sex offender residential treatment program. He had a two year history of progressively increasing initial and midstate insomnia, mood variation, dysphoria, and difficulty concentrating. David was prescribed Adderall and Zoloft. At age 11, David offended against a 5-year-old neighborhood girl. He stated that the victim suggested that they participate in sexual play after seeing her sister and a boyfriend do it. Over the next year, there were several additional incidents, both to that victim and to other children in the neighborhood, with victims ranging in ages from five to 11 years of age. David also forced his primary victim to perform oral sodomy on him. David had four charges of Felony Sexual Assault, to which he pled guilty. Two additional charges of Sexual Assault and one charge of Sodomy were continued. According to the victims, all offenses included threats, force, and coercion; David denied using any form of aggression.

David was determined to be a high risk to the community and was recommended for placement in a sex offense specific residential treatment program by his probation officer and outpatient therapist. He was placed in detention for 6 months while waiting for placement in a residential program. His diagnosis involved a major mood disorder, attention disorder, emotional disturbance and related behavior, multiple personality disorders, many social stressors, and anti-social legal issues. His GAF indicated a need for inpatient stabilization.

Results from the Fear Assessment suggested that David was an individual who had anxiety and fear related to external areas or things outside of himself over which he has little or no control. Endorsed fears indicated that he behaved in response or reaction to external stimuli, which he perceived as threatening. This appeared to validate his history of sexual abuse and strong family enmeshment. He endorsed fears of trusting anyone outside of the family, being in a closed room/going to bed/being alone, being alone with kids that looked like his abuser, and hurting someone. Endorsed fears are matched with

corresponding beliefs, which were annotated to complete the Trigger, Fear, Avoids, Beliefs (TFAB) worksheet.

The Compound Core Beliefs Questionnaire (CCBQ) suggests that David has a personality disorder NOS – mixed features of borderline, paranoid, antisocial traits, histrionic, and narcissistic. He endorsed numerous beliefs of the borderline personality. Many of these beliefs appear to have gone untreated by the previous therapists. Examining his beliefs indicates that David's sexual aggression and oppositional behavior are related to his dichotomous borderline beliefs and emotional dysregulation. He endorsed the following compound core beliefs as occurring always: "if I let others know information about me, they'll use it against me," "when I'm bored, I need to become the center of attention," "if I act silly and entertain people, they won't notice my weaknesses," "when I hurt emotionally, I do whatever it takes to feel better," "when I'm in pain, I'll do whatever I need to feel better," "I deserve admiration and respect, whether I work for them or not, others don't deserve recognition," "I try to control and not show my grieving, loss, and sadness, but eventually it comes out in a rush of emotions," "when I'm angry, my emotions are extreme and out of control," "if I'm afraid something will be unpleasant, I will avoid it," "if I'm not on guard, others will take advantage of me," "weaker people are here for the strong to prey on, using any means I need," "only I count, others are there to fill my needs," "if it makes me feel good, I do what I want," "if you annoy me, I'll go off and let you know it."

The collaborative nature of the Case Conceptualization process allowed David an opportunity to gain trust in his therapist as well as himself. By empowering him to actively participate in the development of his MDT Case Conceptualization, and the planning of his treatment, he became significantly more motivated in participating in his treatment. David remarked as to the amount of his beliefs, which tended to correspond with most of his negative behaviors. He demonstrated insight, and recognized that resolving his compound core beliefs would address his negative behaviors. He was pleased with this realization and expressed optimism for true change and relief. Following through the mode activation worksheet and inserting the already identified information into the appropriate boxes, David's experience became clearer. By providing a visual representation, the worksheet clearly demonstrated the overwhelming nature of David's cognitive system (preconscious processing, perceptions, beliefs, motivational schema), physiological system, affective schema, and behavioral schema all activating simultaneously. The deactivation of David's modes was evident. Addressing his unbalanced, dichotomous beliefs, prevented the rest of the sequence from occurring. This indicated that by balancing his beliefs, David could prevent his negative behavior from happening. If David perceived that he could be in a situation where he may be confronted or reprimanded, his anxiety would increase and he would shut down. Anticipating confrontation set in motion David's cognitive, affective, behavioral, and physiological processes.

Although David may not have been consciously thinking about confrontation (and may actually have been focused on another activity), an attempt to elicit his thought at this point, generated the same information as if he were actively thinking about the anticipated event. He expressed anger about the upcoming perceived confrontation or attack on his vulnerability and he would be able to discuss that his dichotomous belief system had been activated. He was able to identify the fear that was endorsed related to his anger and that he perceived physical danger from the perceived upcoming situation. As the time of the perceived confrontation neared he experienced a conscious fear or threat of being a victim and was also fearful that he would become verbally and/or physically aggressive to protect himself. The situation appeared threatening (real or perceived) based on his life's experiences. He was fearful of his own actions in this situation and worried that he would later feel humiliated by the outcome of the situation. At a later time when David is no longer confronted with the dangers of the situation, he did not experience the fears of the perceived situation. The distance from the dangerous situation represents the Woody & Rachman's concept of a "safety signal." When the parameters of the same situation recur the pattern of fears ↔ avoids beliefs is repeated. Reviewing the fear reaction pattern in David, using Beck's analysis of

modes, the activating circumstances are directly related to the anticipated event and the perception of the re-victimization of the meeting. These circumstances are processed through the orienting component of the “primal mode relevant to danger;” the imagined risk of being victimized, beaten and letting someone else control him. As this related fear is activated, the various systems of the mode are also activated and energized. During the physiological manifestation of the activation of the mode, David became tense, grinded his teeth, had involuntary muscle movements, experienced increasingly intense head aches, tightened facial muscles, had shaking hands and legs, moved around nervously, had anxiety increases, and tightened his fists.

The actual progression of the mode activated as David nears the time of the group or a meeting, indicating that his orienting schemas signaled danger ahead. This system was based on the perception of danger of victimization/vulnerability and was sufficient to activate all the systems of the mode. The affective system generated rapidly increasing levels of anxiety; the motivational system signaled the impulse of the flight/fight signal, increasing the attack or avoid and the physiological system, which produced many physiological indicators, as noted above.

David became aware of his distressing feelings at that point, and he was often unable to activate his own cognitive controls, or “voluntary controls” to override this “primal” reaction to be able to mediate the conflict. He did gain progressive mastering of this, and was able to mediate the fears and avoidance, schema, enabling him to participate in a supportive meeting, and the anxiety began to subside.

In David’s case, he was able to develop healthier beliefs with help from his therapist and all staff working with him through using V-C-R techniques, as described in his treatment plan, originating from his Functionally Based Treatment Development Form. For example, David was able to consider a belief about not being able to trust anyone outside the family. Validating his fears of trusting anyone outside of the family, clarifying that he could trust one person outside the family at a time, and redirecting him to use the trust scales to objectively measure his level of trust for others allowed David to open his mind to possibilities, thereby balancing his beliefs about trust. The process also taught David how to balance his beliefs for himself. As a result, he developed a new belief, to trust some people some of the time.

Applications to Family Therapy

Following completion of David’s COBB, he was excited to share his discoveries of himself and the family structure with his family. He reviewed each belief and explained the corresponding behaviors. His family remarked about the succinct capturing of David. Additionally, they remarked about how familiar his thinking was. The family recognized that they shared many of the same beliefs and were able to appreciate and understand the beliefs they did not share with David. They too remarked about how overwhelmed David must be feeling with so many conflicting beliefs.

While teaching David how to balance his beliefs with V-C-R, David shared his newly found knowledge with his family. He shared with them that he was using trust scales to measure his trust for people so that he had a concrete measure of how much he trusted someone today versus yesterday. He also shared insight he gained into the criteria he used to trust others, encouraging his family to use the scales as well. They began thinking about trust in measurable terms, identifying that a person demonstrated negative behavior they could decrease their level of trust, rather than immediately dismissing any possibility of trust based on one small indiscretion. This not only increased trust within the family, but also helped the family to see that authority figures were not all seeking to break the family apart. This revelation was truly validating for David, allowing him to communicate more openly in therapy sessions.

Beliefs are referenced and balanced with any issue presented in therapy sessions, whether individual or family therapy sessions. For example, if David presented in a session being upset about receiving a consequence from staff, he and his therapist would identify his behavior and the corresponding beliefs on his COBB. Once identified, he and his therapist could balance his belief and allow him an opportunity to recognize that he was reacting to the fear of being vulnerable, due to getting caught and given a consequence for negative behavior. This would work similarly in a family therapy session. If David presented in a family therapy session upset about this issue, he, his therapist and his family could collaboratively work, using his COBB to identify and balance his beliefs.

With its empirically based and driven treatment methodology, MDT provided an effective intervention for David. For example, David had not been receptive to traditional cognitive behavioral therapy techniques. He had exhibited a compendium of problem behaviors, which others labeled as antisocial aggression. David also demonstrated extremely poor boundaries with others and struggled with limits. He had been unable to deal with the concept of cognitive distortions or irrational beliefs. David's beliefs protected him; to change or strip his beliefs away activated his vulnerability. He would then become reactive and engage in dichotomous and defensive thinking, beliefs, and behavior. Therapy would be sabotaged at the very beginning.

Completing David's MDT Case Conceptualization revealed a conglomerate of beliefs, rather than discrete categorized beliefs. Understanding his conglomerate of beliefs allowed a better understanding of David and his behaviors. Reviewing his identified conglomerate of beliefs offered David insight, allowing him to feel hopeful.

Recognizing the amount of beliefs and how they activated due to his identified underlying fears, validated how overwhelmed he felt and why he often overreacted.

David initially perceived all authority figures as threats since his parents had convinced him that all authority figures had intentions to break the family apart. This obviously had an effect on David's ability to trust his therapist and therapeutic rapport was a primary focus in treatment.

David stopped exhibiting intimidating behaviors and began to verbalize his feelings, rather than shut down and withdraw from the situation. He attributed this to understanding his preconscious trigger of perceiving that he was vulnerable. This perceived vulnerability set off the entire mode system. He was able to identify situations that produced the vulnerability and to examine his cue beliefs that were part of the activation process. He began verbalizing when he felt or thought he was uncomfortable. He also knew his physiological responses to the danger signal, vulnerability and they disabled David to work on balancing his belief exercises. David was originally perceived as sexually aggressive and proactive, which would have suggested that he was aggressive due to a perceived positive outcome from the aggression. Careful analysis of his MDT Case Conceptualization revealed that David is actually reactive, indicating an entirely different purpose for his aggression, and a need for a different focus in treatment.

David had previous unsuccessful treatment and basic cognitive therapy techniques were ineffective. Mode deactivation therapy was found to be much more effective due to its ability to address the personality disorder beliefs without challenging David to engage in dialectical debates. It was essential to incorporate David's family in his therapy since they were so involved in his life and treatment. His family made progress along with him, gaining insight into his beliefs as well as their own. (Apsche, & Ward Bailey, 2004)

A Comparative Analysis of CBT, SST and MDT

Another study compared the efficacy of MDT, CBT and SST for adolescent males in residential treatment for conduct disorders and/or personality dysfunctions, and documented problems with physical and sexual aggression. The results showed that MDT was superior to traditional CBT and SST in reducing both physical and sexual aggression. The study indicated that MDT was the only treatment of the three that significantly reduced sexual aggression for these youth.

Apsche, et al., 2005 point out that:

“Youth with conduct disorders and personality dysfunctions are extremely difficult to conceptualize and treat effectively. Such youth typically come from deprived environments with multiple stressors and often extensive histories of physical, emotional and sexual victimization and neglect.

The authors cite Kazdin & Weisz in reflecting that:

“As a group, conduct disordered youth present with a complex array of recurrent behavioral problems, including aggression, bullying, violence, intimidation, delinquency, rule violations, recklessness, property destruction, callous disregard for others, substance abuse, sexual abuse and other disruptive and anti-social behaviors. In fact, the prevalence rate for conduct disorder is 6% to 16% for males under age 18 and it is one of the most frequent problems diagnosed in outpatient and inpatient mental health programs. Moreover, 80% of these youth are likely to meet criteria for psychiatric disorders in the future.

A study by Johnson, Cohen, Brown, Smailes, and Bernstein that showed a clear connection between childhood maltreatment and the development of cluster B personality disorders in later adolescence. Apsche, et al. also used Boesky's work to indicate that conduct disorder is by far the most frequent psychiatric diagnosis given to youth involved in the juvenile justice system with rates as high as 81% to 91% of incarcerated youth.

The work of Dodge, et al., 1997 was useful in distinguishing between the “reactive aggressive” and “proactive aggressive” youth, and the reasons for each behavior. It is stated that “the former category appear to share a common characteristic pattern of emotional dysregulation, in which the youth is overwhelmed by a sudden surges of intense emotions, sensations and irrational thoughts that are occur in combination and are disproportionate to the situation.” Koenigsberg, et al., 2001, found that many types of aggression, including self-destructive behavior, are linked to the personality disordered traits of affective instability and impulsivity, also seen as emotional dysregulation. Apsche's research and clinical experience with violent and sexually aggressive youth suggests that this common phenomenon of “emotional dysregulation” is the same process that Beck described as “modes” and that treatment must be modified to accommodate and address this process in order to be effective.

The comparative CBT, SST and MDT study was designed to assess the effectiveness of Mode Deactivation Therapy (MDT) as compared to Cognitive Behavior Therapy (CBT) and Social Skills Training (SST) in the treatment of conduct disordered and personality-disorder youth with problems of aggression and sexual aggression.

In a real world setting, a total of 60 male adolescents participated in the study. All subjects were referred to the same residential treatment facility for the treatment of aggression and/or sexual aggression. Subjects were randomly assigned to one of three treatment conditions upon admission:

Condition One: CBT: A total of nineteen male adolescents were assigned to the CBT condition. The group was comprised varying culturing backgrounds and presented with issues typical to the typology.

Condition Two: SST: A total of twenty male adolescents were assigned to the SST condition. The group was comprised of varying culturing backgrounds and presented with issues typical to the typology, not dissimilar to the group in Condition One. The Social Skills Training program included identification and reinforcement of appropriate behaviors, target skill identification, modeling, practicing skills, and role playing. The youth in this condition were encouraged to practice skills and were reinforced by shaping and fading procedures. All staff and therapists were trained and supervised in SST by a doctoral level psychologist. All skill training was performance based and evaluated for each individual, and indicated by Henggeler, et al.

Condition Three: MDT. A total of twenty-one male adolescents were assigned to the MDT condition. The group was comprised of varying culturing backgrounds and presented with issues typical to the typology, not dissimilar to the group in Condition One and Condition Two.

The three treatment conditions showed similarity in terms of the frequency of Axis I and Axis II diagnoses, age, and racial background. To ensure consistency in the delivery of the three respective treatments, therapists were specifically trained in the one of the three treatment curriculums/methods. The average length of residential treatment across all conditions was roughly 11 months.

Apsche, et al.'s study showed that while all three treatments were effective in reducing physical aggression, only MDT demonstrated a significant reduction in rates of sexual aggression. This suggested that the technical modifications of cognitive behavioral treatment used in MDT may be better suited to the unique developmental and clinical presentation of these behaviorally disturbed adolescents and may yield superior outcomes, especially with regard to sexual abuse issues.

Apsche, et al., identified limitations of this study, with several factors that may have limited the strength of the conclusions drawn from the study outcomes.

First, the results were derived in a long-term residential treatment program and might not show potential for replication in less intensive outpatient treatment settings. The authors also saw that there were inherent difficulties in identifying "pure" diagnostic types for multiply-challenged youth such as those studied. The write:

"While there was striking similarity in the distribution of diagnostic categories across treatment conditions (e.g. Conduct Disorder, Oppositional Defiant Disorder, Personality Disorders), exact matching by diagnosis could not be realistically achieved in this real world setting. Moreover, while all of the youth had documented histories of physical aggression and nearly all had histories of sexual aggression, it was not possible to definitively distinguish individual youth as primarily sex offenders or primarily aggressive youth nor match them accordingly across the three conditions."

"As in any real world study, it is always difficult to control for the levels of competence of the participating therapists and their adherence to the "purity" of each of the three treatment methods. Best efforts were made to control for this common problem by ensuring that therapists shared the same professional degree and level of clinical experience in each of the three methodologies and by providing training in the delivery of each model prior to the study.

The strength of the outcomes could be further enhanced with the inclusion of additional outcome measures and, ideally, long-term follow-up of the youth who participated in the study. It is important to note that the authors do not purport that MDT will generalize to any groups other than youngsters with conduct and personality disorders.” (Apsche, et al., 2005)

Apsche & Bass, 2006, in a “Review and Empirical Comparison of Three Treatments for Adolescent Males with Conduct and Personality Disorder: Mode Deactivation Therapy, Cognitive Behavior Therapy and Social Skills Training” examined a case where MDT was used to treat an adolescent with reactive conduct disorder, PTSD who had eight dangerous suicide attempts.

The reactive adolescent has similar experiences of the world as clients in Linehan’s study, with borderline personality disorder. Their intense emotional pain has led them to “shut down” emotionally in order to control life’s painful experiences. When they are in a situation that triggers fear, this reminded them of pain they could not control, and caused them to “relive” the “internal or external events that influenced emotional response.” They reacted with anger or aggression; they also often dysregulated.

The study also found a reduction of internal distress, resulting from various psychological disorders, as well as a reduction of sex offending risk in the group that participated in MDT. Overall, the study indicates that treating typological issues without addressing the underlying compound core beliefs, again, appeared to be related to recidivism. This reinforced the ideas that often, these classifications are not immediately recognizable when treating these youths.

Apsche & Ward, (2002) presented descriptive treatment results between two groups of adolescents who were sexually and physically aggressive. The results of this study demonstrated that MDT was superior to CBT in redirecting both physical and sexual aggression. The authors’ results suggested that MDT was far superior by more than one standard deviation in reducing the internal and external distress in all categories as measured by the Child Behavior Checklist, (*CBCL*) and the Devereux Scale of Metal Disorders, (*DSMD*). MDT also reduced sexual offending in all behaviors as measured by the Juvenile Sex Offenders Adolescents Protocol (*J-SOAP*). MDT reduced the non-static portion of the *JSOAP* almost two standard deviations more than CBT.

In addition, the authors Apsche & Ward indicated that treatment protocols were often complicated by the presence of conglomerate of personality disorders, as found by Johnson, et al., in their longitudinal study that childhood maltreatment results in the development of personality disorders in adolescents. The combination of conduct disorders and personality traits or disorders presents a challenge to the clinicians and researchers alike when working with adolescents.

Apsche & Siv, 2005, stated that Conduct Disorder has been found to be a difficult disorder to understand and treat; problems and symptoms associated with Conduct Disorder include chronic violence, various forms of physical aggression, sexual aggression and property destruction. They point out that while Kazdin and Weiz delineate evidence based treatments practices for children with Conduct Disorder, no evidence based procedures exist for adolescents over 14 years old with Conduct Disorder. They further, state that the prevalence rate for Conduct Disorder is 2% to 6% for children in the United States, as of 2005. They additionally submitted that clinical referral rates of 33% to 50% of cases referred to outpatient treatment: and 80% of these children and adolescents are likely to meet criteria for a psychiatric disorder in the future; presenting a major dilemma when attempting to treat a difficult disorder.

MDT and Suicide

Apsche reviewed data from 12 years of published studies on adolescent suicide. It was found that the rate of personality disorders among adolescents who died by suicide were as high as 17%. It was also revealed that the rates of serious suicide were 9 times higher with adolescents who were diagnosed with Anti-Social Personality Disorder, Bipolar Personality Disorder and Narcissistic Personality Disorder. Links, et al. 2003, also reported that suicide rates for adolescents who had Borderline Personality Disorder were indicated at a rate of 44%. In addition, they indicated that adolescents with Narcissistic Personality Disorder were 9% more likely to die by suicide.

Adolescent suicide was indicated to continue to be a leading cause of death in North America. Reports show a five to one ratio of males to females of suicide in adolescents in Canada. Adolescents have the highest prevalence of risk behaviors including suicides. Suicide in adolescents between the ages of 15 and 19 rose 24.5 % between 1956 and 1994. During the past 30 years there has been an increase in the number of incidences of suicide in adolescents ages, 15-19 years of age, and data has shown important ethnic variations. The rate of adolescent suicides in males has risen from just under 6 per 100,000 to 17.8 per 100,000 in 1992 (Shaffer, Gould, & Hicks 1994). Between the ages of 15 and nine, suicide is the second leading cause of death for white males and the third leading cause of death among African American boys. The rate of suicide among adolescents is rising at an alarming rate over a ten year span. It was found that 17% of adolescents aged 13 to 19 years met criteria for conduct disorder or antisocial personality disorder (APD). When suicide attempts were studied, it was found that 45% of the males had significant symptoms of APD. Adolescents with borderline personality disorder (BPD) represent 9% to 33% of all suicides. Narcissistic personality disorder (NPD) or traits was found in 14% of lethal suicides in a 15 year study of suicide by Stone, published in 1989.

Apsche & Siv (2005) completed a case study with an adolescent male with conduct and personality disorders who was actively suicidal. They found in this case study that MDT was effective in reducing suicidal attempts, thoughts and ideation in this adolescent. This study is the first attempt to test the effectiveness of MDT on suicidal adolescents in a larger group setting.

A history of suicidal behavior is found in 55% to 70% of individuals with personality disorders. An MDT study, (Apsche, Bass, & Siv 2005 and 2006), compared adolescents who had many of these personality disorder or traits. It examined the effects of Mode Deactivation Therapy (on a population of adolescents with a variety of personality traits, a decrease in their suicidal ideation and cognition are measured by the Beck Depression Inventory II and the Reynolds Suicidal Ideation Questionnaire.

The sample comprised of 20 male adolescent residential patients. All subjects were referred to the same residential treatment facility for the treatment of aggression. In this study, subjects were randomly assigned to one of the two treatment conditions at the time of admission based on available openings in the caseload of the participating clinicians. The two treatment conditions showed similarity in terms of the frequency of Axis I and Axis II diagnoses, age, and racial background. To ensure consistency in the delivery of the two respective treatments, therapists were specifically trained in one of the three treatment curriculums/methods. The average length of residential treatment across all conditions was one year.

MDT has shown evidence of promise as a effective treatment in adolescents with conduct disorder, and personality disorder or traits (Apsche, et al. 2004, 2005, 2006). This study suggests that MDT might be effective in treating these adolescent with suicidal ideation, cognitions or beliefs.

It appeared that MDT reduced the suicidal risk in this study as measured by the BDI-II and SIQHS assessments. MDT's effectiveness might be effective because it addresses both the personality disorder or traits and the axis I disorders. MDT was significantly more effective than TAU by over 1 SD per category. These data suggest that MDT might be an effective methodology in reducing suicidal

beliefs or traits in adolescents with axis I disorders, and personality disorders or traits. There were several limits to this study. First as all of the MDT studies thus far, it was completed in a clinical residential setting, although all assignments to caseloads are random by assignments these are limits in this randomization, although the limits are also the strengths. The effects of MDT in less controlled setting suggest that the fidelity to the model might be more effective than more controlled studies. There are several limits to any clinical study that must be identified. Random assignments were made as openings occurred within the therapists caseloads. These openings were often more controlled by the availability of aftercare services arranged by the referral source, than by the specific skills of the individual therapists.

Data suggested that there was a significant risk of serious suicide attempts for category of reactively aggressive conduct disorder. These behaviors increased the risk of lethality, as well as aggression and other destructive behaviors. It was clearly stated that complications of conduct disorder were paired with Anti-Social Personality Disorder, Bipolar Personality Disorder and Narcissistic Personality Disorder as being the manifestation of the disorder by lethal behaviors, both internally and externally.

This prevalence underscored the necessity for the clinician to be aware of the personality beliefs as delineated in the COBB. When implementing MDT, the clinician is required to be aware of these risks of personality, and the indication of potential lethal suicide attempts.

Charles was a 17-year-old African American male who met the criteria as an appropriate subject for MDT. He had been diagnosed with PTSD, Conduct Disorder, Major Depressive Disorder and Borderline Personality Disorder. He had a history positive for seven serious and nearly lethal suicide attempts, including, an attempted involving hanging, which prompted admission to treatment with Dr. Jack Apsche, (Apsche & Siv, 2005). He had a tragic family history, including parental substance dependency which led to his mother's death and father's incarceration. He was also brutally abused by his grandmother. Charles was sexually abused from the age of two to ten. He and sexually abused an eight-year-old girl in his neighborhood when he was four. At 14, he started to "hang out" on the streets, returning home only to shower. His school history included the need for individualized assistance in the classroom and disruptive behavior. He was often aggressive and truant.

The step-by-step approach of MDT as previously indicated in this paper, was used to treat Charles. He was discharged from treatment and moved with his brother in another state. Charles, at the time the authors published their article, was attending a university, and had recently reported that he had not attempted suicide since the since the admission connected event. He also reported that he continued to use "balance the beliefs" regulating exercises.

This case study results suggested that in at least this case, MDT was helpful in reducing lethal suicide attempts. The authors could not suggest MDT would be effective in treating adolescent suicide without further rigorous study. They held, however, that MDT might hold some promise in treating adolescent males with PTSD, Conduct Disorder, and personality disorders, for youth that had a history of potentially lethal suicide attempts. It was hoped that the results of this case study would prompt further study in a carefully monitored and controlled situation. (Apsche & Siv 2005)

Further Validation of MDT Effectiveness

Apsche, Ward & Evile, 2002, Apsche & Ward, 2003, Apsche, and Apsche & Ward Bailey, 2003 presented information that makes MDT seem very promising in offering empirically based therapy. Authors referred to the American Psychological Association (APA)'s Task Force on Prevention, which found that universal programming is not as effective as programs that are empirically based and designed for a specific target group, such as those with a typology of adolescents described in this paper.

Weissberg, et al., indicate that empirical literature regarding this area is ‘sparse’ and that ‘the most important advances regarding the effective implementation of empirically supported’ treatment are yet to come. It was hypothesized that MDT would prove to address the need for empirically supported treatment for the specific target group. Although Weissberg, et al., discussed this need in the context of prevention, application of MDT addressed this specific need as a methodology for adolescents both as treatment for existing problem behaviors, as well as for preventing problem behaviors by addressing the underlying beliefs. Apsche and the collaborative authors offered guidelines for empirically supported treatments for children and young people. These guidelines were based on the 1995 Society of Clinical Psychology Task Force on Promotion and Dissemination of Psychological Procedures published report on empirically validated psychological treatments.

As Ollendick & King, (2000) pointed out, the Task Force proposed three categories of treatment efficacy one, well-established treatments, two, probably efficacious treatments and three, experimental treatments. According to their definition and criteria for these treatments, MDT moved from experimental treatment to probably efficacious treatment. The rationale for this statement was in meeting the definition of efficacious treatment. Ollendick & King were cited in clarifying the definitions of the three categories of efficacious treatment:

“.....the primary distinction between well-established and efficacious treatments was that a well-established treatment should have been shown to be superior to a psychological placebo, pill, or another treatment, whereas a probably efficacious treatment must be shown to be superior to a waiting-list or no-treatment control only”. Furthermore, “probably efficacious treatment may be validated through group designs in which patients would be assigned randomly to the treatment of interest, or one or more comparison conditions – or carefully controlled single-case experiments and their group analogues”

Apsche & Ward, (2003), showed that this indicated that MDT was shown to be more effective than standardized normalized CBT in a descriptive study.

Apsche & Ward (2002) found that MDT reduced personality disorder/trait beliefs significantly and taught the client to self-monitor and balance personality disorder beliefs himself. The study also indicated a reduction of internal distress, resulting from various psychological disorders, as well as a reduction of sex offending risk in the group that participated in MDT. Overall, the study showed that treating this population typology without addressing the underlying compound core beliefs, appeared to be promote recidivism.

Implications for MDT Involving Preventative Intervention

It was established by Apsche, et al., that their theoretical case work provides framework indicating the need for future investigations for alternative treatment methodologies for reactive adolescents with personality disorders or traits. MDT showed great value in use to treat existing problem behaviors as well as preventing future problem behaviors by addressing the underlying compound core beliefs, which drive behavior. MDT offers methodology specifically designed for difficult adolescents, a treatment need indicated by Weissberg, et al., (2003). MDT has been shown to be effective as compared to manualized CBT in a descriptive study. (Apsche & Ward Bailey, 2004)

At the same time, several factors might limit the strength of the conclusions drawn from the outcomes. First, the results were derived in a long-term residential treatment program and may not find replication in less intensive outpatient treatment settings. Second, there are inherent difficulties in identifying “pure” diagnostic types for multiply-challenged youth studied. While there was a striking

similarity in the distribution of diagnostic categories across treatment conditions (e.g. Conduct Disorder, Oppositional Defiant Disorder, Personality Disorders), exact matching by diagnosis could not be realistically achieved in this real world setting. Moreover, while all of the youth had documented histories of physical aggression and nearly all had histories of sexual aggression, it was not possible to definitively distinguish individual youth as primarily sex offenders or primarily aggressive youth, nor match them accordingly across the two conditions. As in any real world study, it was found that it remained difficult to control for the levels of competence of the participating therapists and their adherence to the “purity” of each of the three treatment methods. Best efforts were made to control for this common problem by ensuring that therapists shared the same professional degree and level of clinical experience in each of the two methodologies and by providing training in the delivery of each model prior to the study.

The strength of the outcomes could be further enhanced with the inclusion of additional outcome measures and, ideally, long-term follow-up of the youth who participated in the study. Prior MDT studies measured levels of psychological distress, including internal and external, as measured by the CBCL and DSMD. MDT demonstrated a significant decrease in all levels of behavior and psychological distress.

The authors stressed that they did not purport that MDT would generalize to any groups other than youngsters with conduct and personality disorders. (Apsche & Bass, 2006)

Further Studies

Another case study examined a 13 year old adolescent male who engaged in severe aggression, self-injurious and impulsive behaviors. Prior to being given MDT intervention, he was treated with DBT for thirteen months. DBT had limited success in reducing his problem behaviors. He was then treated with MDT for four months. His problem behaviors were reduced significantly. It appeared that in this case study MDT was more effective than DBT in reducing his severe behaviors.

Since the inception of DBT, it has been shown to be an effective methodology in treating a variety of disorders. Apsche, Siv, and Matteson, 2005, cite others studies that demonstrated the effectiveness of DBT with female juvenile offenders. The effectiveness of this approach had been demonstrated also with older populations. In these studies DBT has demonstrated its effectiveness with populations other than Borderline Personality Disorder cases. Apsche's study published in 2004 offers the first case study that examines the effects of MDT with a youngster who did not have successful with DBT intervention.

The case study was presented using a step-by-step case study procedure. Use of MDT suggested the potential for effective treatment of youngsters with similar backgrounds to a subject named William. William was a thirteen-year-old Caucasian American male. He has been diagnosed with Post Traumatic Stress Disorder, Impulse Control Disorder, Reactive Attachment Disorder, Obsessive Compulsive Disorder and Personality Disorder Traits.

William demonstrated a pattern of continuous disruptive behaviors, lying, social phobias, hoarding, aggressive and threatening behaviors, property destruction, academic performance and school behavior problems, as well as difficulties with peer relationships. He also showed enuresis with purposeful urination on furniture and clothing, and sexually inappropriate behaviors, including attempting to have sex with his sister, excessive masturbation with stolen undergarments from his mother and sister, masturbating with animals and in front of other children, early sexual experiences and inappropriately touching other children. His case history involved benign neglect, abandonment, and foster care placement, in addition to substance abuse. William was referred to a residential program to treat his disruptive behaviors. William presented as an extremely anxious child with obsessive compulsive

features. Prior to the case study, William had been in treatment 13 months. William had received DBT individual and group therapy during that time.

The target goals were to develop skills for managing his emotions and tolerating his distress, and to address his sexually reactive behaviors. This would also address his problematic sexual behaviors, and teach him about appropriate sexuality and relationships. William also participated in therapeutic recreation for further skill building and self-esteem enhancing activities. William performed at the normal grade level at school, but he required increased structure and individualized attention. William has a history of repeated violations of school rules and disruption in class. He often was aggressive and frequently cut school.

An MDT stepwise Case Conceptualization for William provided an assessment of the underlying compound core beliefs that were generated by William's developing personality disorders. As previously stated, this strategy goes beyond standard case conceptualizations because it included the presenting problems, test data, cultural issues, history and development, cognitive issues, and behavioral issues.

MDT does not label the client's modes. Rather, MDT recognizes that modes are fluid and ever changing and therefore, they are not categorized.

Results from the Fear Assessment suggested that William was an individual who had anxiety and fear related to external areas, or issues outside of himself, over which he has little or no control. Endorsed Fears indicated that William's behavior was in response or reaction to external stimuli, which he perceived as being threatening. This appeared to validate his history of sexual exposure and possible abuse, as well as strong family enmeshment. He endorsed Fears of being emotionally alone, being home alone, of failing (life), of being emotionally intimate, fear of crowds, being alone, fear of being in a crowded room, fear of being dumb, someone coming up behind him, of being touched by someone that you I don't know well, confronting his abuser, being physically hurt for no reason, his feelings and emotions, hurting someone and losing control. These Fears were matched with corresponding Beliefs to complete the Trigger, Fear, Avoids, Beliefs (TFAB) worksheet.

The Compound Core Beliefs Questionnaire (CCBQ) suggested that William had a personality disorder NOS – with mixed features of antisocial, borderline, paranoid, antisocial, histrionic, and narcissistic, and obsessive-compulsive beliefs. After completing the COBB and TFAB, the MDT Case Conceptualization was used to address the deactivation of his modes.

In anticipating that he could be in a situation where he may be confronted or reprimanded, his anxiety would increase and he would emotionally shut down. Anticipating the confrontation set in motion the cognitive, affective, behavioral, and physiological processes. William's cognitive system (preconscious processing, perceptions, beliefs, motivational schema), physiological system, affective schema, and behavioral schema all activated simultaneously. The With MDT therapy, deactivation of William's modes became evident. Addressing his unbalanced, dichotomous beliefs would prevent the rest of the sequence from occurring. This meant that by balancing his beliefs, William would prevent his negative behavior.

Ultimately, William became aware of his distressing feelings at this point and he is often unable to activate his own cognitive controls, or "voluntary controls" to override this "primal" reaction and thus be able to mediate the conflict. Once he is able to mediate the fears and avoidance, he is able to participate in a supportive meeting and the anxiety begins to de-escalate.

William's interpretation of his physiological sensations magnifies his fears of the anticipated physical and psychological re-victimization. Throughout the process of interpreting the signals that he

received from his bodily sensations, such as the flush caused by anxious feelings related to the powerful fear of loss of control and the sequel of physiological responses, he responded with fear. This fear was compounded by the events that led to other fear, which involved the feeling humiliated by the perceived threat of victimization/vulnerability and loss of control in the presence of other people.

The final step in developing William's Case Conceptualization was to complete the Functionally Based Treatment Development Form. Ultimately, due to the pin pointed therapy driven from the Case Conceptualization, William's therapist was able to develop healthier beliefs due to his therapist and all staff members working with him using V-C-R techniques, as described in his treatment plan, originating from his Functionally Based Treatment Development Form. This focused on issues such as William's belief about his inability to trust anyone outside the family. Validating his fears of not trusting anyone outside of the family, clarifying that he could trust one person outside the family at a time, and redirecting him to use the trust scales to objectively measure his level of trust for others, allowed William to open his mind to possibilities, thereby balancing his beliefs about trust. The process also taught William how to balance his beliefs for himself. As a result, he developed a new belief, to trust some people some of the time.

This case study again suggested that in at least this case, MDT was more effective than DBT in reducing physical aggression and self injurious behaviors. It did not, however, suggest that MDT was superior to DBT; but it was noted that MDT was developed for this typology of youngster and there is data suggesting that MDT is could be an effective psychotherapy for adolescents. Apsche, Siv, and Matteson, 2005, in their *Comparison of MDT and DBT: A Case Study and Analysis* hoped to continue to develop MDT and conduct randomized studies to test its effectiveness as compared to DBT and other interventions.

In many previously published studies, Apsche and colleagues Bass, Siv and Matteson, 2005, showed that MDT has been could be effective treatment with aggressive and abused or reactive adolescents. MDT and CBT were compared together and with social skills training.

One of these studies examined a 16.5 year- old male adolescent. Results from the case study indicated that MDT was effective in reducing his severe behaviors. A comparison of observed physical and sexual aggression using DBT and MDT was done.

His topology indicated poor parental care, with fetal exposure to illicit drugs due to maternal substance abuse, which continued after his birth and ultimately resulted in removal from her care. He was placed with a grandmother, from whom he did not receive adequate supervision. During the years he was placed with the grandmother he was raped repeatedly by a male cousin. He reported this to the grandmother, but was not believed and was subsequently punished. A female cousin eventually believed him and reported the assaults. This led to one of many placements. He engaged in fire setting, severe aggression and self injurious and impulsive behaviors.

He was previously treated with Dialectical Behavior Therapy (DBT). He was removed from most of the nine placements due to disruptive, aggressive, suicidal behaviors. He was treated with MDT for four months with significant reduction of problem behaviors.

The MDT therapist was given intensive training by the Dr. Apsche. MDT was shown to be more effective with aggressive adolescent males with conduct and personality disorders than CBT and SST. MDT was previously demonstrated to be effective in reducing aggression, personality disorders beliefs and symptoms of Post Traumatic Stress Disorder.

After a thorough literature review this appears to be the first case study that examined the effects of MDT with an adolescent with fire setting behaviors.

Another step-by-step case study was made with a corresponding theoretical analysis based in MDT. The methodology showed potential for use with subjects such as Peter. Peter was a 16.5 -year-old Caucasian male. He has been diagnosed with PTSD, Conduct Disorder and Personality Disorder Traits. Peter demonstrated a pattern of disruptive behaviors including; fire setting, lying, social phobia, aggressive and threatening posturing, property destruction, academic performance problems and school behavior problems, peer relationship problems and torturing animals.

His history indicated that Peter had demonstrated significant behavioral and impulsive problems since early childhood, which were manifested more prominently when he was four. During this time he was removed from his mother's care due to her continuous substance abuse. She reported using alcohol and cocaine during her pregnancy. He was the second youngest of six children all of whom have delinquent problems and are in Department of Social Services custody or involvement in some way. He was placed with his grandmother who also failed to provide adequate supervision; as a result he was removed from her care. From 2000 to 2003 he was placed in nine inpatient settings, including residential placements and hospitals. Peter reported that while still in the custody of his grandmother, he tortured animals in front of other children, engaged in sexual behavior with animals, and burned toys. He had a history of early sexual experience, specifically sexual touching of other children. He also reported that he set his grandmothers bed on fire while she was sleeping in it. Peter preformed at the normal grade level at school, but he required increased structure and individualized attention. Peter has a history of repeated violations of school rules and disruption in class. He often was aggressive and cut school. He was placed briefly at a hospital then moved to a residential setting on an island. Within a couple of days, out of staff supervision he started a fire, which destroyed over 40 acres of protected woodlands. An assessment indicated Peter had an average IQ. He struggled with low self-esteem, and oddly on a sentence completion test, several times responded: "I wish I was never born". Significant DSM IV data includes PTSD, ADHD, and mixed features of borderline, antisocial, avoidant, and narcissistic personality disorders.

The case provided the structure of the conglomerate of beliefs and behaviors to address dysregulation through balancing the beliefs. Peter's Case Conceptualization included information regarding his presenting problems, test data, cultural issues, history and development, cognitive issues, and behavioral issues.

As previously discussed, studies suggest that the typology of youngsters such as Peter have a conglomerate of compound core beliefs associated with personality disorders. This conglomerate of beliefs may be a personality disorder reason why many youngsters fail in treatment. Additionally, Peter's fears, as indicated on the MDT Fear Assessment, were associated with his presentation as being "Proactive," suggesting that Peter was an individual who had anxiety and fear related to external areas or things outside of himself, over which he perceived little or no control. Endorsed Fears indicated that Peter's behavior is in response or reaction to external stimuli, which he perceived as a threat, which appeared to be indicated by his history of sexual exposure and abuse.

The Compound Core Beliefs Questionnaire (CCBQ) results suggested that Peter had a personality disorder, NOS – with mixed features of antisocial, borderline, paranoid, antisocial, histrionic, narcissistic, and obsessive-compulsivity. He endorsed numerous beliefs of the borderline personality. Many of these Beliefs appeared to have gone untreated by previous therapists.

Over the course of treatment, Peter became aware of his distressing feelings and he often was unable to activate his own cognitive controls, or "voluntary controls" to override this "primal" reaction to be able to mediate the conflict. However, once he was able to mediate the fears and avoidance, he

showed the ability participate in supportive meetings; the anxiety he felt in such interactions began to decrease with each event.

Peter's residential treatment milieu first included group and individual therapy once a week using a psycho-educational model (PEM) and Social Skills training both during school and on the residential unit. After 15 months with limited progress in reducing the number of hold interventions due to aggressive behaviors, Peter's therapy was changed to MDT. Shortly after starting MDT, the need to administer hold-restraints due to aggression was reduced. This case study suggested that, MDT was more effective than DBT in reducing physical aggression and self-injurious behaviors, (Apsche, Siv, Bass 2005).

The results of this study were significant. It was indicated that MDT was over 1 SD per category more effective than DBT on the CBCL and the DSMD, although there are some precautions that come with these results, because of the small sample size. The study was completed in a residential treatment center and not all conditions are perfectly controlled for in actual "real world" treatment studies. Therapist assignments were made as randomly as possible, to create "a real world" environment. Clients were assigned to therapists by the availability of the therapists. Discharges were not based on the skills of the therapists, rather the availability of placements. Training was equal in time and the expertise of the trainer was equal in each treatment condition, (Apsche, Bass, and Siv, 2005).

Follow-Up Study

A paper involving a follow-up study reviewed outpatient data and recidivism for an 18 month post MDT

A two-year study summarized two treatment research works that examined recidivism data for two years in a post discharge group. The study compared MDT, CBT, and SST. The data from the studies of Apsche and his colleagues, (Apsche, Bass, and Siv, 2005, and Apsche, et al., 2005), were used to demonstrate the overall efficiency in treatment of MDT. The follow-up data signaled that MDT had positive generalization effects, as indicated in post-treatment review.

Another research work summarized the collected studies of outcome of Apsche and his colleagues. It includes recidivism data for two years since treatment was terminated and the adolescents were discharged. Recidivism data was collected by written surveys sent to parents, guardians and case worker's of the residents. Phone calls were initiated as reminders to case managers and their supervisors to assure confidence. The summary of the data suggests that in three groups of equal size in a total population of 60 male adolescents, MDT was far superior to CBT and SST in reducing aggression, sexual aggression, and psychological distress as measured by the CBCL and DSMD. Further analysis suggests that MDT is superior in reducing recidivism over CBT and SST. Because of MDT's superior results, it is hypothesized that the effects of MDT are superior in generalization to the home environments of the adolescents.

The results of the series of studies on MDT suggested that it might be an efficacious treatment for adolescents with problems with conduct and personality disorders, and with aggressive and other aberrant behaviors. The follow-up data also suggested that MDT might be effective, not only during treatment, but it might generalize to the home environment. The outcomes suggested that MDT showed promise as an effective out patient treatment approach.

First, the adolescents in this study were all from Urban Centers of the Northeastern United States. Most had a history of legal issues and charges. Many of these adolescents were extremely aggressive and most likely would not be participants in federally funded grant based research studies. These individuals

in the MDT studies would most likely be “dropouts” from such studies because of non-compliance or aggression. In other words, these adolescents are troubled, aggressive, suspicious, largely under served, and not often represented in University based research, (Apsche, Bass and Siv 2006).

This study involved an outpatient replication of a previous study that examined the effectiveness of MDT on adolescent conduct disorders in male youth being treated in an inpatient setting. The research compared the effectiveness of MDT and Treatment as Usual (TAU) as treatments on adolescents with conduct and personality disorders in an outpatient setting. The results showed that MDT was superior in reducing overt aberrant behavior, including physical aggression and psychological distress as measured by the Achenbach Child Behavioral Checklist.

Given the prevalence of conduct disorders and its major contribution to juvenile anti-social behavior, societal violence, sexual violence and delinquency, there appeared to be an urgent need for empirically based treatment methods for such youth. There were several interventions which have been implemented to reduce antisocial behavior in disruptive disorders. Because many clinicians conducted therapy in a more eclectic fashion, the problem encountered was difficulty identifying generalizable and efficient treatments which could be effective in many treatment environments. Other researchers conducting a review of treatments for children and adolescents were they identified 82 studies carried out between 1966 and 1995 involving 5,272 youth. Of the 82 studies, they discovered that many were not well established with empirical validation, and many more did not indicate efficacious treatment. There were problems with identifying a comprehensive treatment approach that showed suitability, reliability and external validity. Unlike findings involving treatment provided by clinicians who worked primarily in inpatient settings using structured empirically validated treatments, the finding of empirically validated studies which examined outpatient therapeutic practices with conduct disordered adolescents were scarce. While it was noted that some evidence-based treatment practices existed for children with Conduct Disorder, it was not established that for adolescents over 14 years of age.

MDT as Compared to DBT

A study examined the effectiveness of MDT as compared to DBT, in a residential treatment center for adolescent males. This study was initiated to compare Mode Deactivation Therapy (MDT) and Dialectical Behavior Therapy (DBT) in the treatment of aggressive adolescent males in residential treatment. The analysis of the daily behavioral reports, which indicated a number of observed aggressive acts, was compiled; statistical analysis of the results ensued. It was found that all participants benefited from treatment regardless of the theoretical orientation used.

Clients were admitted to the same facility. They presented with physical aggression, suicidal ideation, with mixed personality disorders/traits. One group of clients was treated with MDT, while the other group received DBT treatment.

The sample size for each group type, MDT and DBT, was calculated based on the potential residential length of stay. Each group participant was randomly assigned to groups based on a census of 30. Since this was a clinical study, there were no study drop-outs. Due to the nature of the residential treatment center, the clients in the study were not homogenous and presented with more severe behavioral problems than target populations in typical research therapy. Written informed consent was obtained from all parents or guardians.

The sample was comprised of 20 male adolescents at a residential treatment center. All subjects were referred to the residential treatment center for anger, aggressions, and externalizing problem behaviors. The clients were referred to their treatment group randomly. The first client assignment was

to the DBT group and was determined by a “coin toss”. The second assignment was to the MDT group, followed by DBT client assignment on an alternating basis, until each group was filled.

The DBT group therapists were all trained in DBT at the official DBT training center. The MDT group therapists were trained by Jack Apsche. Participating therapists shared comparable professional degrees, training and clinical experience in each of the two methodologies. Training and supervision was provided by a doctorate level clinician for both groups. The MDT group was trained by the developer of MDT in order to reduce confounds that may have been produced by additional trainers.

Findings indicate that MDT may achieve superior results in reducing physical aggression in conduct-disordered and personality-disordered youth in a residential treatment setting. While both MDT and DBT reduced physical aggression in these adolescents; MDT was significantly more effective in reducing aggression in this particular study. These findings also support earlier studies indicating that MDT can be used as an effective treatment for reducing depression and suicidal ideation, as shown by BDI and SIQ results. Use of MDT demonstrated a significant decrease in all levels of behavior and psychological distress.

The authors did not propose that MDT was more effective than DBT in any manner except in that particular, “real world study.” They also did not propose that MDT was effective with any populations.

Again, it was indicated that the strength of the outcomes could be further enhanced with the inclusion of additional outcome measures and, ideally, with long-term follow-up of the youth who participated in the study. (Apsche, Bass and Houston, 2006)

MDT as Approach with Multiple Applications

MDT can address the need to simultaneously address the multiple problems issues of conduct and personality disordered youth, while also accommodating the particular defensive characteristics of the adolescent. Given the prevalence of conduct disorders and its major contribution to juvenile crime, societal violence, delinquency and sexual violence, there is an urgent need for effective treatment methods for such youth. As one study has indicated, MDT showed merit for treating adolescents with sex offense behavior, as well as those with mentally illness:

“A total of 60 male adolescents participated in the study. All subjects were referred to the same residential treatment facility for the treatment of aggression and/or sexual aggression. In this study, subjects were randomly assigned to one of the three treatment conditions at the time of admission based on available openings in the caseload of the participating clinicians. The three treatment conditions showed similarity in terms of the frequency of Axis I and Axis II diagnoses, age, and racial background.

To ensure consistency in the delivery of the two respective treatments, therapists were specifically trained in the one of the three treatment curriculums/methods. The average length of residential treatment across all conditions was roughly 11 months.

The data indicates that Mode Deactivation Therapy (Apsche & Ward Bailey, 2004a) may achieve superior results to traditional Cognitive Behavioral Therapy (CBT) and Social Skills Training (SST) in reducing both physical aggression and sexual aggression in conduct-disordered and personality-disordered youth in a long-term residential treatment setting. Moreover, while both treatments were effective in reducing physical aggression, only Mode Deactivation Therapy (MDT)

demonstrated a significant reduction in rates of sexual aggression. This finding suggests that the technical modifications of cognitive behavioral treatment used in MDT may be better suited to the unique developmental and clinical presentation of these behaviorally disturbed adolescents and yield superior outcomes, especially with regard to sexual abuse issues.

At the same time, several factors may limit the strength of the conclusions drawn from the outcomes. First, the results were derived in a long-term residential treatment program and may not find replication in less intensive outpatient treatment settings. Second, there are inherent difficulties in identifying “pure” diagnostic types for multiply-challenged youth such as these. While there was striking similarity in the distribution of diagnostic categories across treatment conditions (e.g. Conduct Disorder, Oppositional Defiant Disorder, Personality Disorders), exact matching by diagnosis could not be realistically achieved in this real world setting. Moreover, while all of the youth had documented histories of physical aggression and nearly all had histories of sexual aggression, it was not possible to definitively distinguish individual youth as primarily sex offenders or primarily aggressive youth nor match them accordingly across the two conditions.

As in any real world study, it is always difficult to control for the levels of competence of the participating therapists and their adherence to the “purity” of each of the three treatment methods. Best efforts were made to control for this common problem by ensuring that therapists shared the same professional degree and level of clinical experience in each of the two methodologies and by providing training in the delivery of each model prior to the study. Training was provided by a doctorate level psychologist in both groups. The MDT group was trained by the first author and developer of MDT.

The strength of the outcomes could be further enhanced with the inclusion of additional outcome measures and, ideally, long-term follow-up of the youth who participated in the study. This study measured levels of psychological distress, including internal and external, as measured by the CBCL and DSMD. MDT demonstrated a significant decrease in all levels of behavior and Psychological distress.

It is important to note that the authors do not purport that MDT will generalize to any groups other than youngsters with conduct and personality disorders. The authors hope that future research may use randomized trials in outpatient clinics and attempt to replicate these findings in other residential treatment facilities and with other relevant adult and adolescent populations, particularly with those identified with severe aberrant behaviors including personality disorders, conduct disorder and aggression. Thus, MDT might be considered in a future studies as a consideration to reduce problems related to Axis I disorders and internal distress.” (Apsche & Bass 2006)

Parent Involved Treatment

It was important for the authors to state that MDT is indicated to be effective in treating certain underserved populations, such as African American youth and families. This population is poorly represented in other evidenced based psychotherapies.

The two treatments examined were: A parent training program based on the manual *Living With Children*, and a videotape modeling parent training. While both treatments were effective, they were more psycho-educational programs geared toward parents rather than stand alone treatments for the adolescent with conduct related disorder. Another promising approach for the treatment of conduct disorder is multi-systemic therapy, an intensive home- and family-focused treatment that has been empirically validated. Multi-systemic Treatment has shown promise for antisocial youth, and for adolescent sex offenders. However, this scenario requires a resource-rich combination of services, (one of which is psychotherapy,) and may not a realistic option for interventions for most youth. CBT is widely employed in the treatment programs for behaviorally disordered youth across many settings and is frequently used with aggressive youth. There are clear limits to the effectiveness of CBT in the treatment of personality disordered clients, especially borderline and narcissistic types, as Apsche states, is pointed out by Young, Klosko & Weishaar.

Apsche & Bass in their 2006 article: *Family Mode Deactivation Therapy Results and Implications* summarized the outcome of use of MDT as a treatment modality for families in crisis.

Family MDT is Treatment as Usual in a Community Setting. Apsche, Bass & Houston represents a randomized study of the effectiveness of MDT as a Family Therapy to address the adolescents and Families problem behavior.

MDT Family is a manualized treatment that examines the individual and collective beliefs of the Families of conduct disordered adolescents. The MDT and TAU groups consisted of eight individuals and families.

MDT Family Therapy

Apsche, Bass & Houston, in 2007, presented a brief study showing the use of Family MDT vs. treatment as Usual in a Community Setting. MDT family therapy as initiated by implementing the Family MDT assessments. The Family MDT assessments resemble the individual MDT assessments. The family MDT methodology includes a Family MDT Workbook. This workbook is revised to structure the Family Therapy, following an MDT methodology. The workbook is designed to provide a collaborative effect for all family members. The Family MDT Manual addresses the following topics:

- **Family Commitment to Treatment**
- **Responsibility for the Family**
- **Family Belief Analysis (Compound Core Beliefs)**
- **Mode for the Family**
- **MDT and Reactive Anger, Aggression, and Impulse Control**
- **Your Family's Beliefs and Problem Behaviors**
- **Problem Behaviors and NMDT**
- **Substance Abuse in Your family**
- **Empathy for the Family**
- **Becoming Survivors**

1). *The Fear-Family Assessment*: an assessment of sixty items that identifies basic difficulties, anxieties, or fears of the family. Each family member completed the assessment individually and the scores were totaled and a mean score was determined across each item.

2). **The Family Core Beliefs Assessment:** an inventory of ninety-six questions related to the familiar beliefs systems. The Family Core Belief Assessment was scored in the same manner as the Family Fear Assessment.

3). **The Functionally Based Treatment Development Form:** a form that addresses the collective family beliefs and supplies the family a specific methodology to develop and maintain more functional family beliefs.

The families re taught how to balance its beliefs with the **V-C-R** method. V-C-R is a methodology of *validation*, *clarifying* and *redirecting* the belief of the family. While there may be some identification of opposing beliefs, this method attempts to expose the unbalanced or irrational, illogical beliefs deeply held by families in crisis. The individual components of the V-C-R method included:

Validation. Each family member’s thoughts and beliefs were validated initially. Therapists searched or grains of truth in each family member’s responses. It was important to assure each member that his/her responses were accurate as far as his/her interpretation of his/her perceptions. Each member was given appropriate reinforcement that (s)he was certain that (s)he fully understood and believed.

Clarification. Therapist clarified the content of responses. Therapists also clarified the beliefs that were activated. It was important that clinicians understand and agreed with the content o the clarification. The Clarification step was crucial in understanding the long held thinking schemas. This was clarification of the member’s perspective or reality and beliefs.

Redirection. Therapists redirected responses, to view other possibilities or the continuum of held beliefs. The goal of this step was to help the family member find the exception in the beliefs system. The redirection involved in examining te opposite side of the dichotomous or dialectical thinking. It was crucial to partner with the member to see the “grain of truth” in each of the dichotomous situations presented.

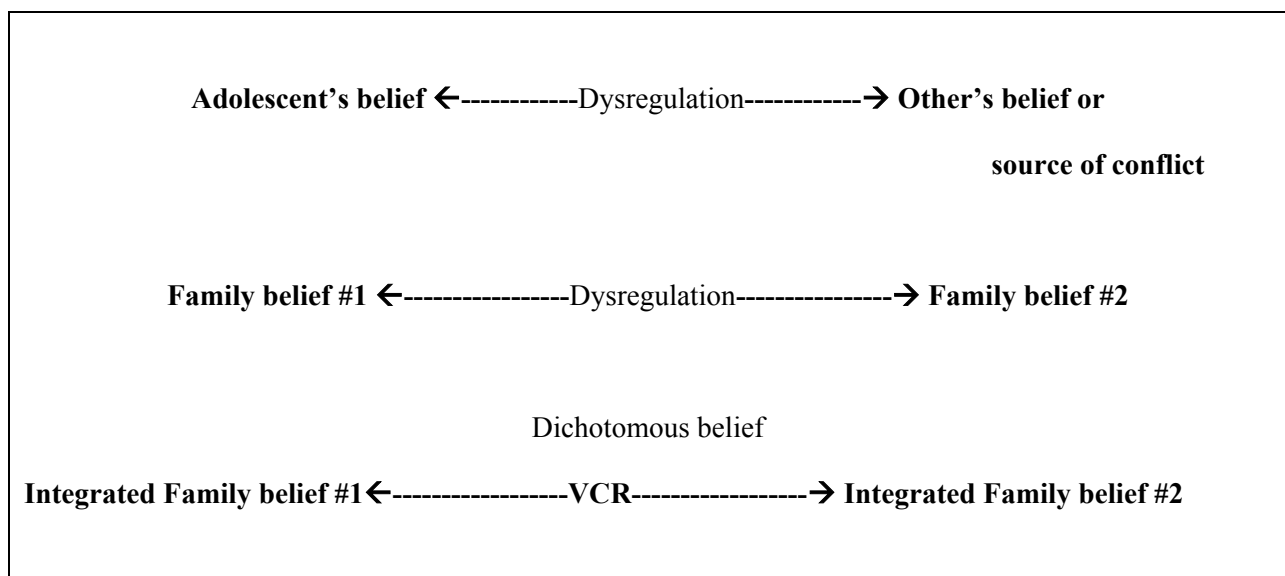


FIGURE 1: Diagram of the Dysregulation process

Figure 1 highlights the direction of the deregulated belief system. The redirection was an attempt to aid the youth and family member in seeing both sides of the dichotomous belief(s). Also, important was to look for the truth in each and compromise in understanding the truth in both beliefs. The use of a continuum of belief was implemented to examine the individual’s belief of truth in both of the dichotomous beliefs and situation.

Each individual in the family, as well as the family collectively completed the Conglomerate of Beliefs and Behaviors, (COBB). The COBB examined each individual’s belief as well as their corresponding behaviors. Once the families Beliefs and Behaviors were determined they were compared to each individual’s beliefs and behaviors.

These methodologies addressed the specific behavior of each family member and contrasted the family at larges’ score. The behavior was explained and understood as the individual integrated his/her belief(s) and behavior(s) within the family system at large.

CHART 1: Family Beliefs, Behavior and subsequent behavior

| Client’s Belief | Direct Behavior | Sibling Reaction | Mother’s Reaction | Conclusion |
|--|-----------------|----------------------|---------------------------------------|--|
| “When I get angry my emotions go from annoyed to furious.” | Punches brother | Pain; runs to mother | Screams at client | Mother apologizes but criticizes again |
| | | Isolates | “You are a f--- mess!” Hits client | Continuation of Conglomerate Family |

If we look at this example of the client’s behavior, he cuts or hurts him, he is isolated, the mother would, “put things right”, yet as a family they said they waited for the “pain to go away” and things will go “back to normal.” “Normalcy” was a continuation of illogical belief schema which in time would be the catalyst for a new cycle of self mutilation in the future.

The goal of the MDT therapist was to implement V-C-R with the family while pointing out and balancing the individual and family beliefs.

Conclusions

In the process MDT has been shown to be as effective as other approaches such as CBT, DBT and SST. This review also showed the results of a thorough review of literature delineating the effectiveness of MDT in treating adolescent clients with reactive emotional dysregulation, who presented with behaviors involving parasuicidal acts, sexual offenses other aggression. Case studies confirmed that MDT showed as much merit as conventional cognitive therapy. Clients with complicated histories of sexual, physical, or emotional abuse, as well as neglect, and multi-axial diagnoses, can be helped using this approach, enhancing clinical rapport.

This is seen as preferred alternative to other approaches, which sometimes sets up an atmosphere of argumentativeness. This confrontational approach is contraindicated with juveniles who present with proactive or reactive disorders. Clinical attractiveness can be enhanced, which can lead to decreased resistance from the client.

Data indicates that MDT is effective in reducing the rate of physical and sexual aggression across treatment. The evidenced-based approach of MDT readily lends to providing clinical data in a real-world setting that has profoundly positive impact in reducing extremely life interrupting behavior.

MDT can be successful as an approach used in multiple levels of care, both as a preventive and interceptive therapy regarding aggression, sexual offense and suicidal behaviors.

MDT also shows promise in use with underserved populations, and brings sensitivity necessary to respond to certain culturally bound norms prevalent with special groups. MDT can greatly help the identified client and his family members to become stable and more productive in society.

Limitations

Findings of the MDT studies summarized could be enhanced with the inclusion of extended outcome measures and, ideally, however, this would be difficult, due to limited access to past study participants. Again, it is noted that MDT has not, as of yet, been shown to generalize to any groups other than those studied, as delineated in this review.

Recommendations for Further Study

Since the “non-research” study results as presented in these comparison studies, indicated some limitation for generalized use, it is recommended that further empirically based research protocols be implemented to confirm efficacy in globalized applications. While “real world” setting provided operationalized results, it would be interesting to have clinical substantiation of the effectiveness of MDT in a controlled research study.

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Author Contact Information:

Marsha-Ann Houston, MHS
Human Services Department
Camden County College
P.O. Box 2000
College Drive Blackwood, NJ 08012
Email: Mhouston1957@hotmail.com

Jack A. Apsche, Ed.D., ABPP.
Capital Academy & The Apsche Center for Evidenced Based Psychotherapy
Email: Jackmdt@aol.com
Phone: 215-321-4072

Christopher K. Bass, Ph.D.,
Dept. of Psychology
207 Knowles Hall
Atlanta, GA 30313
Email: CBass@cau.edu