

**MODE DEACTIVATION THERAPY AND COGNITIVE BEHAVIORAL
THERAPY:
A DESCRIPTION OF TREATMENT RESULTS
FOR ADOLESCENTS WITH PERSONALITY BELIEFS, SEXUAL OFFENDING
AND AGGRESSIVE BEHAVIORS**

Jack A. Apsche
Community Psychological Resources
Norfolk, VA
Serene R. Ward
The Pines Treatment Center

This paper is a comparison of two groups of adolescent sexual offenders receiving different types of therapy; one group participated in Treatment As Usual (TAU), which is a Cognitive Behavioral Therapy (CBT) based approach, and the other group engaged in Mode Deactivation Therapy (MDT). The data presented is reflective of treatment comparisons not a research protocol. The results are descriptive and not necessarily comparison research.

MDT is an empirically based therapy, based on CBT, Dialectical Behavioral Therapy (DBT; Linehan, 1993), and Functional Analytic Psychotherapy (FAP; Kohlenberg & Tsai, 1993), recently implemented in the Behavioral Studies Program, existing in Portsmouth, Virginia. MDT is a methodology that systematically assesses and expands underlying compound core beliefs that are a product of their unconscious experience merging with their cognitive processing, acceptance, balance, and validation. By addressing these beliefs, MDT examines underlying perceptions that may be applicable to setting in motion the mode related charge of aberrant schemas, that enable the behavior integration of DBT principles (Beck, 1996; Nezu et al, 1998). The MDT system also implements the Case Conceptualization method based an adaptation of the Beck (1996) suggested methodology of mode deactivation. Results suggest that MDT may be more effective in this treatment research than TAU, evident by reduced internal distress, resulting from various psychological disorders, and reduced sex offending risk.

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) (Linehan, 1993). The specific application of MDT is delineated by Apsche, Ward, and Evile (2002) in an article, which specified the applied methodological implications for MDT with specific typologies. The article also provided a theoretical study case study that illustrates the MDT methodology.

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.

Beck (1996) describes the notion modes as a network of cognitive, affective, motivational, and behavioral components. He further described modes as consisting of integrated sections or suborganizations of personality, that are designed to deal with specific demands. Beck continues to describe "primal modes" as including the derivatives of ancient organizations that evolved in prehistoric circumstances and are manifested in survival reactions and in psychiatric disorders. Beck (1996) also explains that the concept of charges (or cathexes) being related to the fluctuations in the intensity gradients of cognitive structures.

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 is a more cognitive approach suggesting that the schema is the determinant to the mood, thought, and behavior.

Alford and 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.

Mode Deactivation Therapy and Cognitive Behavioral Therapy

Further study of cognitive therapy emphasizes the characteristic patterns of a person's development, differentiation, and adaptation to social and biological environments (Alford & Beck, 1997). Cognitive theory considers personality to be grounded in the coordinated operations of complex systems that have been selected or adapted to insure biological survival. These consistent coordinated acts are controlled by genetically and environmentally determined processes, or structures termed as "schema." Schema are essentially both conscious and unconscious meaning structures. They serve as survival functions by protecting the individual from the trauma or experience. An alternative and more encompassing construct is that of modes and suggest that the cognitive schematic processing is one of many schemas that are sensitive to change or orienting event.

Modes provide the content of the mind, which is reflected in how the person conducts their perspectives. The modes consist of the schemas (beliefs) that contain the specific memories, the system on solving specific problems, and the experiences that produce memories, images and language that forms perspectives. As Beck (1996) states disorders of personality are conceptualized simply as "hypervalent" maladaptive system operations, coordinated as modes that are specific primitive strategies.

Although the operation of dysfunctional modes in the present state is maladaptive, it is important to note that they were developed over time for survival and adaptation. These systems prove to become maladaptive as problematic behavior result in destruction.

Mode Activation

Beck (1996) introduced the concept of modes to expand his concept of schematic processing. 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 (1996) 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. There is the sub-organization that helps 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 are activated by charges that are 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, fight) system whereas the physiological system produces the heart rate or increases or lowers the blood pressure, the tightening of muscles, etc.

Modes are important to the typology we serve in that they are particularly sensitive to danger and fear, serving to charge the modes. The understanding of conscious and unconscious fears being charged and activation the mode system explains the level of emotional dysregulation and impulse control of the typology of youngsters that we treat.

To address the schema processing based on thoughts and beliefs without understanding the modes is insufficient and does not explain the specific adolescent typology referred to in Mode Deactivation Therapy.

Underlying the 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 is

to provide a blueprint to treatment within the case conceptualization.

The Case Conceptualization helps the clinician examine underlying fears of the resident. These fears serve the function of developing avoidance behaviors in the youngster. These behaviors usually appear as a variety of problem behaviors in the milieu. Developing personality disorders often surrounds underlying post traumatic stress disorder (PTSD) issues. The Case Conceptualization method has an assessment for the underlying compound core beliefs that are generated by the developing personality disorders. Thus far, preliminary results suggest that our typology of youngsters have a conglomerate of compound core beliefs associated with personality disorders. This conglomerate of beliefs is the crux of why youngsters fail in treatment. One cannot treat specific disorders, such as sex offending and aggression, without gathering these conglomerate beliefs. It is also apparent that these beliefs are not cluster specific. That is to say that the conglomerate of beliefs and behaviors contains beliefs from each cluster that integrate with each other. Because of this complex integration of beliefs, it makes treatment for this typology of youngster more complicated. The conglomerate of compound core beliefs represents protection for the individual from their abuse issues, which may present as treatment interfering behaviors. The attempt to use the usual didactic approaches to treatment, without addressing these beliefs amounts to treatment interfering behavior on the part of the Psychologist, or treating professional, is not empirically supported and counter-intuitive.

Mode Deactivation Therapy includes imagery and relaxation to facilitate cognitive thinking and then balance training, which teaches the youngster to balance his perception and interpretation of information and internal stimuli. The imagery is implemented to reduce the external of the emotional dysregulation. The emotional dysregulation is the basis for the underlying typologies of these youngsters. Many of their underlying behaviors include aggression (physical and verbal) as well as addictive and self-harm behaviors.

Mode Deactivation Therapy is designed to assess and treat this conglomerate of personality disorders, as well as remediate aggression and sexual offending. It is important to note that Mode Deactivation Therapy is an empirically based and driven treatment methodology.

The theoretical underpinnings of Mode Deactivation Therapy are based on the Mode Model. Specifically, suggesting that people learn from unconscious experiential components and cognitive structural processing components. Therefore, to change behavior of individuals there must be a restructuring of the experiential components and a corresponding cognitive restructuring of the structural components. The dysfunctional experiential and structural learning (conscious and unconscious) develop dysfunctional schemas that generate high levels of anxiety, fear, and general irrational thoughts and feelings, as well as aberrant behaviors. This system is self-reinforcing and protected by the development of the conglomerate of the developing personality disorders. This conglomerate is comprised of multiple clustered compound core beliefs. These conglomerates of personality disorders are the most pronounced impediment to treatment, and are systematically treated throughout Mode Deactivation Therapy, beginning with the Case Conceptualization.

Application of Validate, Clarify, and Redirect (VCR)

MDT integrates with Linehan's (1993) basic premises for DBT. MDT, like DBT, uses behavior goals, problem solving goals, reflection and radical acceptance of the client. The mode-deactivation theory (Beck, 1996) clearly delineates the truth in the client's perceptions based in their cognitive unconscious and conscious information processing that developed their perception or world view.

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 beliefs. The grain of truth reflects the client's perception of reality. The truth in this reality needs to be validated to clarify the content of his responses; and also clarify the beliefs that are activated. It is

important to understand and agree in the “grain of truth” in the clarification.

Redirect responses to others to other views or 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 measure of the client’s measured perception of truth.

Teaching a client who often engages in dichotomous thinking that their perception can fall within the range of a continuum, rather than only a 1 or a 10 (all or nothing), is extremely validating and it is the basis for a positive redirection to other possibilities for the client.

Treatment As Usual

Treatment As Usual (TAU) was based on a manualized cognitive-behavioral therapy approach. The residents record negative thoughts and beliefs, and examine how cognition effects their beliefs, feelings, and behaviors. The TAU addressed sexual offending issues as well as underlying psychological distress, such as anxiety and depression.

METHOD

Participants

Fourteen male sexual offenders from the Behavioral Studies Program (BSP) at the Pines Residential Treatment Center (9 European-American, 3 African-American, 1 Native-American, and 1 Caribbean) between ages 12 and 19 years ($M=16.62$) participated in treatment. All participants were first-time admissions to 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 reviewed. Both verbal and written consent was obtained from the participants. Their mean estimated length of stay is 16.36 ($SD=1.73$, range 12-19), mean number of reported victims is 3 ($SD=3.16$, range 1-13). Types of offenses included flashing, fondling, vaginal and anal penetration, or a combination.

Measures

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, 1994), the *Juvenile Sex Offender Adolescent Protocol* (J-SOAP; Prentky, Harris, Frizzell, & Righthand, 2000), and the *Fear Assessment* (Apsche, 2000).

The CBCL is a multi-axial assessment designed to obtain reports regarding the behaviors and competencies of 11- to 18-year-olds’. The means and standards are divided into three categories: internalizing (which measures withdrawn behaviors, somatic complaints, anxiety and depression), externalizing (which measures delinquent behavior and aggressive behavior), and total problems (which represent the conglomerate of total problems and symptoms, both internal and external).

The DSMD illustrates level of functioning in comparison to a normal group, via behavioral ratings. T scores have a mean of 50 and a standard deviation of 10; a score of 60 or higher indicates an area of clinical concern.

The J-SOAP is an actuarial risk assessment protocol for juvenile sex offenders. The total score, which includes the sexual drive/preoccupation factor score, impulsive-antisocial personality factor score, clinical/treatment factor score, and community stability/adjustment score is calculated to determine the individual’s level of risk to the community.

The Fear Assessment is a 60-question assessment that measures fear and anxiety reactions that are related to or are associated with the symptoms of Posttraumatic Stress Disorder. Mean scores are divided into five sections, which include personal reactive/internal, personal reactive/external, environmental, physical, and abuse. Any mean score above 2 is considered significant.

Procedures

The sixteen residents were assigned to caseloads based on availability in caseloads. All therapists carried a caseload of 10. Discharge or transfer of a resident created an opening that needed to be filled to maintain the caseload of

10. It is important to remember that this is a treatment facility and 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 Treatment As Usual (TAU). After a mean number of 12 months in treatment, the assigned therapists (7 TAU and 2 MDT) were administered test packets, which included the CBCL, DSMD, J-SOAP, and 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) level of risk to the community.

RESULTS

At the time of assessments, the two groups differed significantly. Residents who participated in MDT had lower scores on all measures than did residents who engaged in TAU.

Table 1. T-scores, ranges, and standard deviations in all measures for both groups

<u>Measure</u>	<u>Scale</u>	<u>Treatment As Usual (TAU)</u>	<u>Mode Deactivation Therapy (MDT)</u>
Child Behavior Checklist (CBCL)	Internal	63.63 (Range=55-80, SD=10.04)	51.75 (Range=39-71, SD=11.88)
	External	65.63 (Range=52-82, SD=10.76)	50.88 (Range=37-69, SD=10.74)
	Total	66.63 (Range=55-80, SD=8.35)	50.00 (Range=36-69, SD=11.78)
Devereux Scales of Mental Disorders (DSMD)	Internal	64.25 (Range=52-84, SD=10.65)	51.00 (Range=40-61, SD=9.24)
	External	56.88 (Range=49-75, SD=9.09)	45.88 (Range=40-62, SD=7.30)
	Critical Pathology	50.88 (Range=42-69, SD=8.49)	46.25 (Range=42-54, SD=5.01)
	Total	58.00 (Range=49-71, SD=8.85)	47.25 (Range=40-60, SD=6.90)
Juvenile Sex Offender Assessment Protocol (JSOAP)	Treatment Factor	26.38 (Range=17-40, SD=7.87)	10.62 (Range=6-14, SD=3.20)
	Total	9.75 (Range=0-18, SD=6.20)	3.38 (Range=1-7, SD=2.45)

Child Behavior Checklist

The CBCL means and standards are divided into three categories: internalizing, externalizing, and total problems. In comparison to the TAU group, the MDT group

mean scores on all scales are at least one standard deviation less.

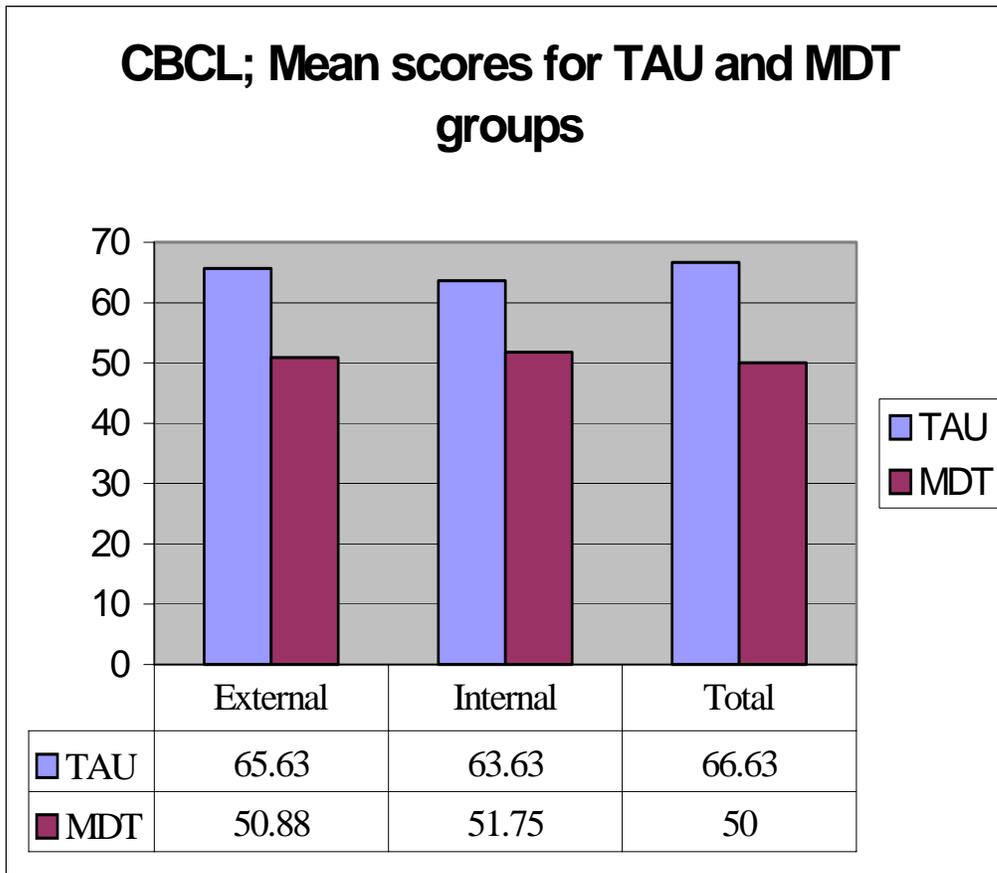


Figure 2. CBCL; mean scores for TAU and MDT groups

Devereux Scales of Mental Disorders

The DSMD uses *T* scores with a mean of 50 and a standard deviation of 10. Any *T* score over 60 is considered clinically significant. The following four scales were analyzed: (1) Externalizing, which indicates prevalence of negative overt behaviors or symptoms, (2) Internalizing, which measures negative internal mood, cognition, and attitudes, (3) Critical Pathology, which represents the severe and disturbed behavior in children and adolescents,

and (4) Total, which indicates a conglomerate of all scores including general Axis I pathology, delusions, psychotic symptoms, and hallucinations.

The results indicate that the mean scores the externalizing factor, internalizing factor, critical pathology, and total score for the MDT group is at or near one standard deviation below the TAU group.

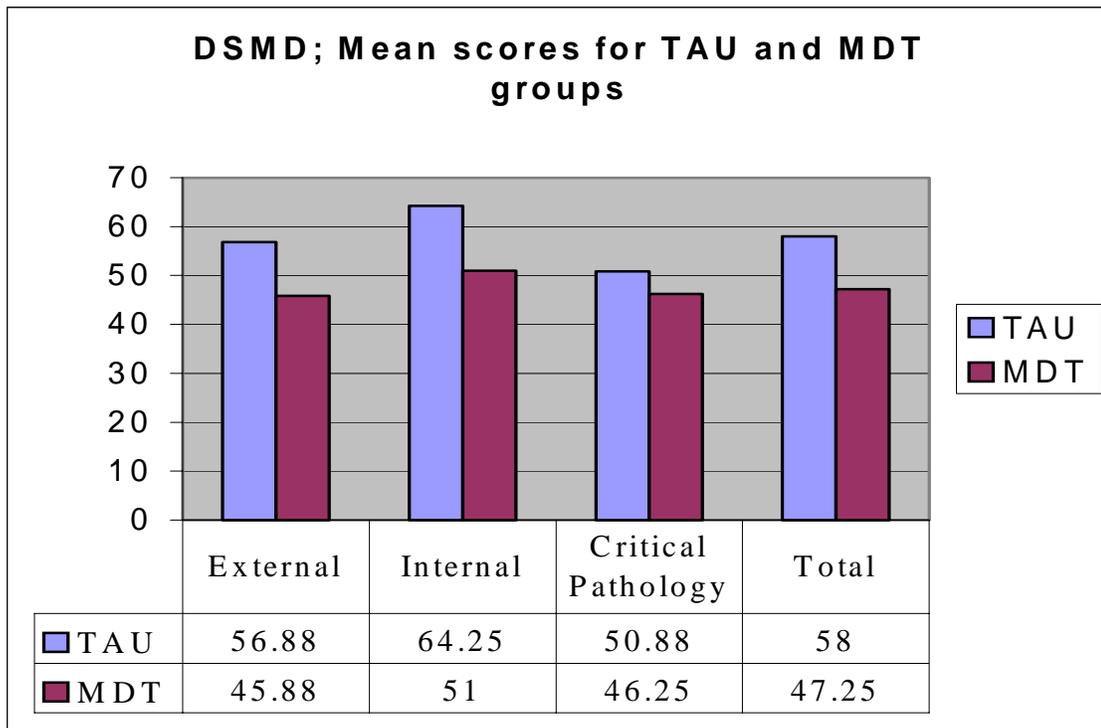


Figure 3. DSMD; mean scores for TAU and MDT groups

Behavioral Consequences/ Restrictions and Monthly Points

Behavioral consequences and restrictions are given when the resident(s) intentionally fail to follow guidelines and unit rules. Monthly points are rewarded for positive behavior. Minimum points possible is 0 and the highest attainable score is 100. These points are analyzed and reported on a monthly basis.

In comparison to the TAU group, the MDT group resulted in fewer restriction and special precautions due to aggressive and destructive behavior; TAU mean scores indicate M=6.75 (SD=12.92, Range=0-38) and MDT resulted in M=1.87 (SD=2.02, Range=0-6).

These results suggest that the MDT had significantly less aggressive and destructive behaviors than the TAU group.

Also, the MDT group reflected a higher monthly behavioral points average (TAU=87.41, MDT=91.29), signifying that the residents in this group were on task and participated appropriately in treatment at a higher average than residents in the TAU group. This also indicates that the overall performance and behavior of the MDT methodology have a significant effect in reducing aberrant behavior of this typology of adolescents.

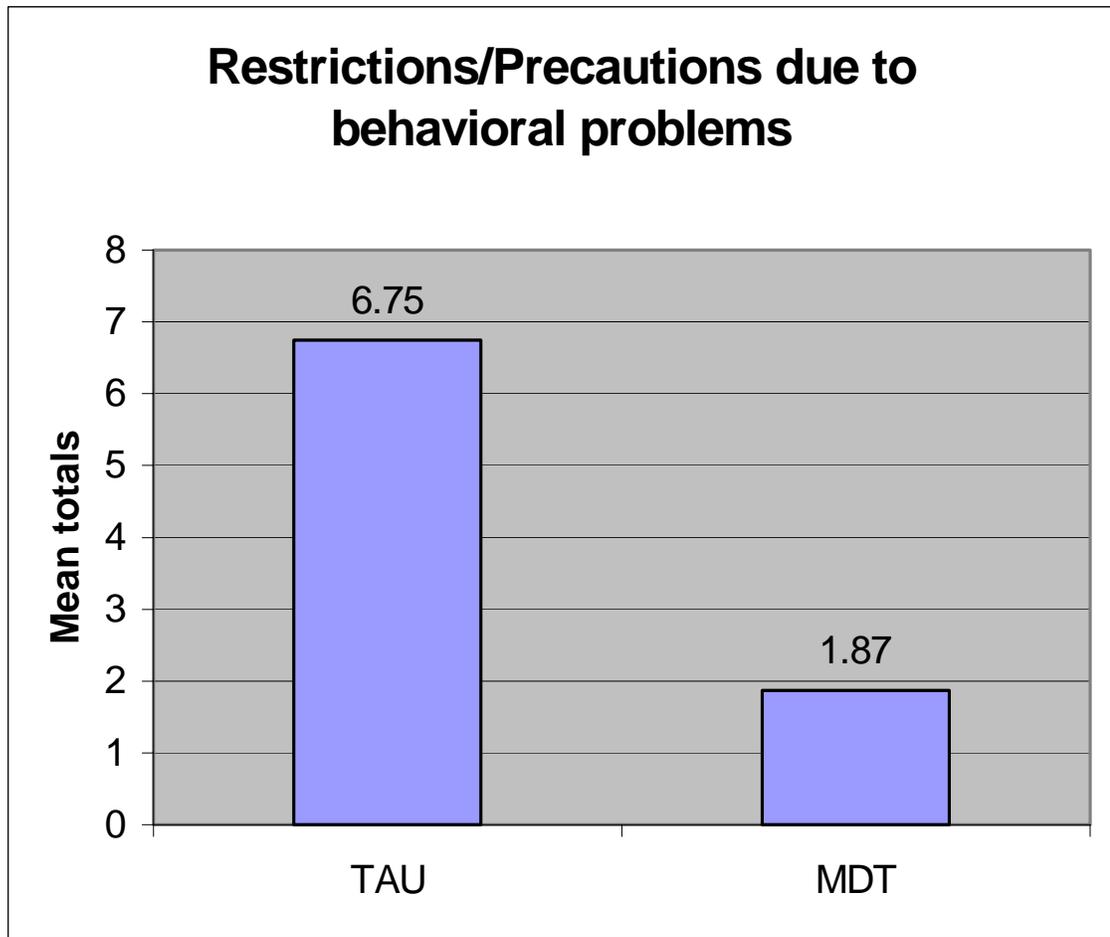


Figure 4. Restrictions/ precautions due to behavioral problems

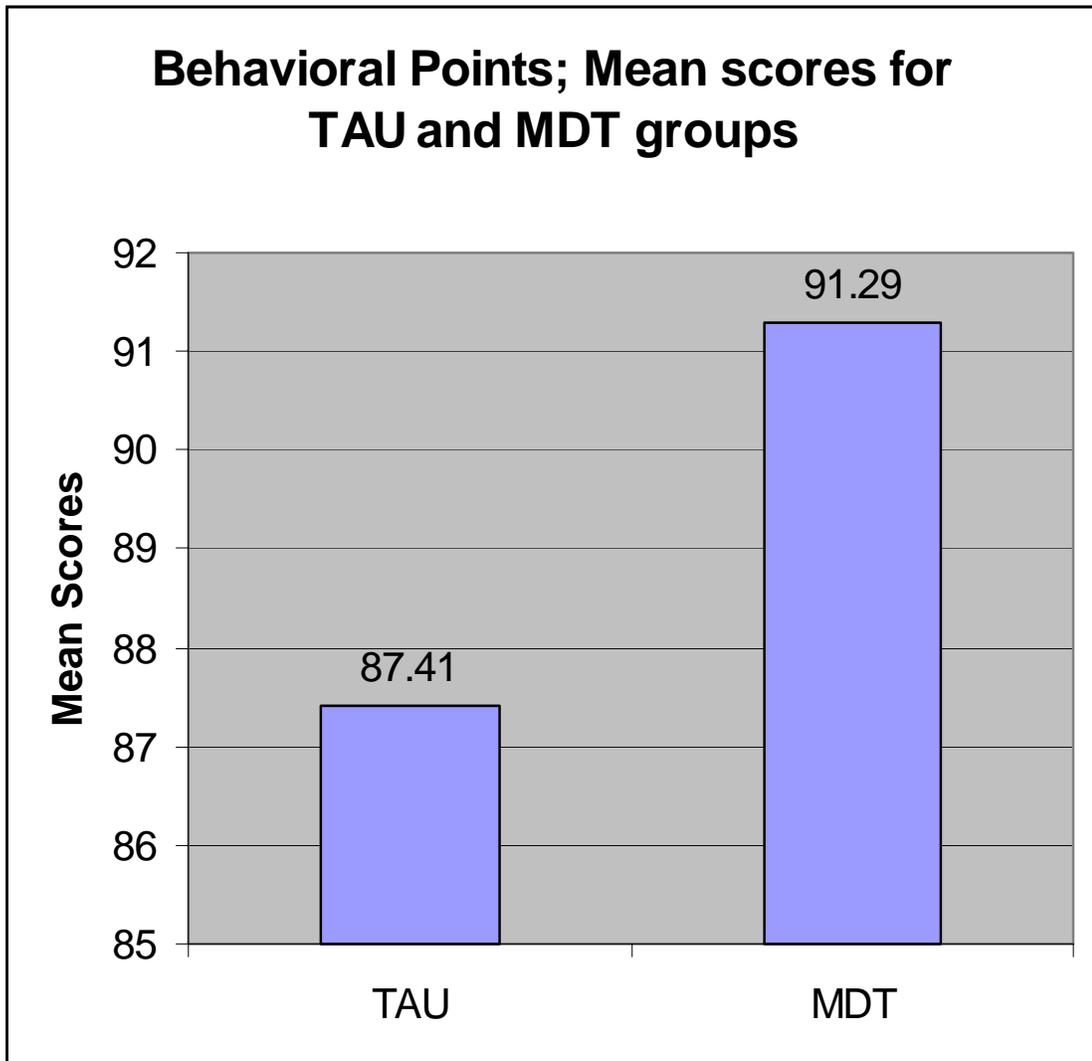


Figure 5. Behavioral Points; mean scores for TAU and MDT groups

Juvenile Sex Offender Adolescent Protocol (J-SOAP)

The total score representing level of risk to the community is significantly lower for the MDT group, than the TAU group. The mean score of the MDT group reflects a low level of risk to the community and the TAU mean score reflects a moderate/high level of risk to the community. According to the J-SOAP scores that range from 0-12 are low risk, 13-28 are moderate risk, and 28+ is high risk.

Another important aspect of the J-SOAP is the clinical/treatment factor score. This indicates the individual’s internal motivation, acceptance of responsibility, understanding of the sexual assault cycle, and level of empathy. Results indicate that mean score of the MDT group is significantly lower than the TAU group, as illustrated on the table.

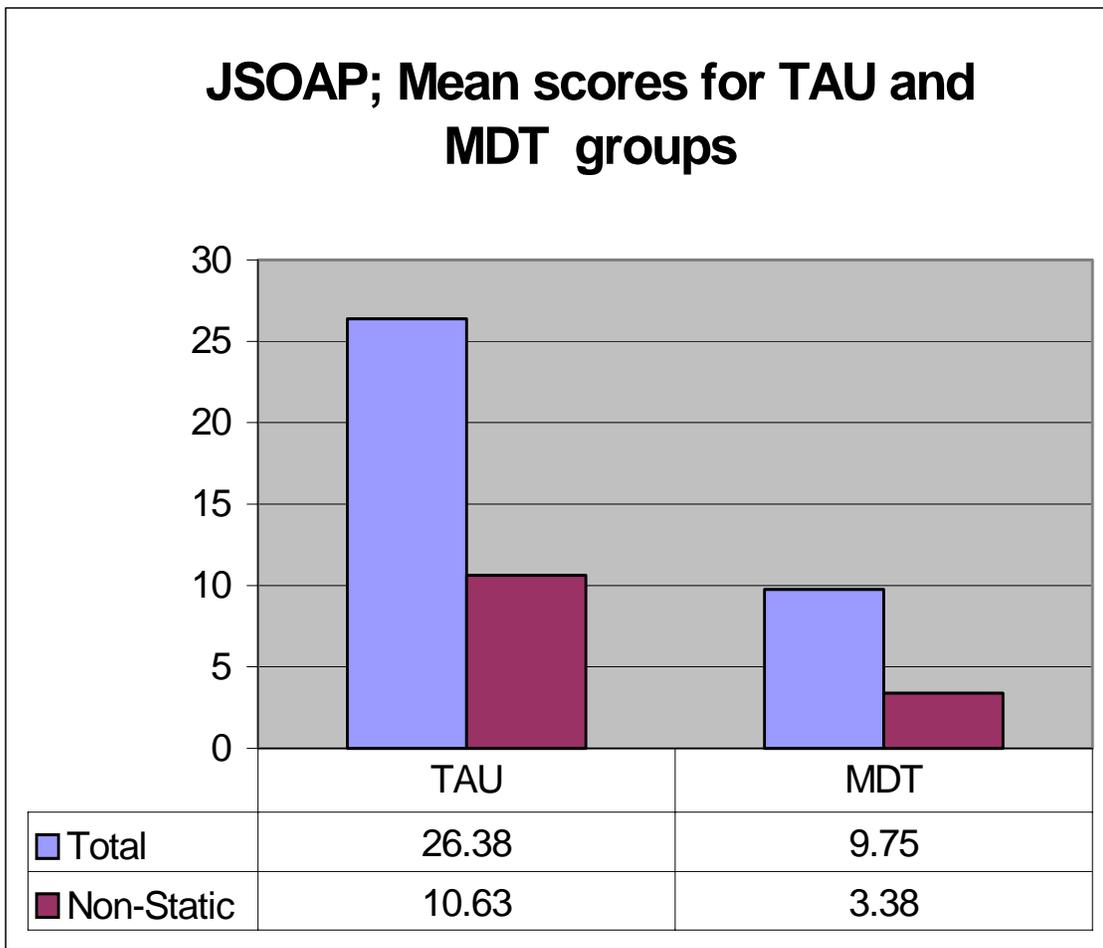


Figure 6. JSOAP; mean scores for TAU and MDT groups

Fear Assessment

The endorsement of fears, on all five scales, indicated no significant difference, however the symptomatology and overt behaviors of the residents from each group demonstrated better coping skills and techniques. This is evidenced by the total scores from the DSMD, CBCL, and the clinical treatment factor score in the JSOAP.

DISCUSSION

This was a description of treatment results of adolescent male sex offenders with a conglomerate of personality disorders and sexual offending issues. The results suggest that both MDT was more effective in treating this typology of adolescents, than CBT in these groups. It appeared that both CBT and MDT are 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 that addresses the underlying personality traits may be effective for severely disturbed, previous treatment failure, sexual offending adolescents.

The combination of results from the CBCL, DSMD, and JSOAP suggest that MDT is effective for these typologies in reducing internal distress as a result of varying psychological disorders present. As measures indicated, the critical pathology factor was reduced by more than one standard deviation. It also suggests that this particular MDT methodology has an effect on reducing externalizing aberrant behaviors. Despite the

sample size, the results still suggest that MDT may be more effective than CBT with this typology of residents. It is suggested that these results be tested in an empirically based research protocol for a true test of efficacy.

CONCLUSION

The treatment results suggest that the implementation of MDT in the 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 limit generalizability. It is important to note that the comparison of treatment results also suggests that sexual offending adolescents, in the described typology, have a conglomerate of personality beliefs. Treating sex offending behaviors without addressing the underlying personality beliefs appears to be related to recidivism.

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Author Note: Correspondence concerning this article should be addressed to Jack A. Apsche, Ed.D., ABPP, at 810 Baldwin Ave., Norfolk, VA, 23517, or email: jackmdt@aol.com