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.

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Abstract

This treatment research study extended the results of Apsche, Bass, Jennings, Murphy, Hunter, and Siv (2005), from behavioral data to standard measures of psychological distress. In Apsche, et. al. (2005) results suggest that Mode Deactivation Therapy (MDT) was more effective than Cognitive Behavior Therapy (CBT) and Social Skills Therapy (SST) in reducing the overt behavior of adolescents diagnosed with conduct and personality disorders. The results of this extension of the Apsche, et. al. (2005) study suggest that MDT was superior to CBT and SST in reducing external and internal psychological distress as measured by the Devereux Scale of Mental Disorders (DSMD) and child behavior check list (CBCL).

Keywords: CBT, MDT, Social Skills Training, Conduct Disorder, Aggression, Personality Disorder.

Introduction

In a treatment research study examining only behavior data, sexual abuse and physical aggression, Apsche, et. al. (2005) demonstrated that MDT was more effective that CBT and SST in reducing these aberrant behaviors. This treatment research study examines the effects of MDT, CBT, and SST on measures of internal and external distress as measured by the DSMD and CBCL.

MDT is a methodology designed to treat conduct disordered youths who have co-occurring personality disorders or traits. The methodology is completed in individual groups and Family Therapy. There is a Clinician's manual and a client work book to assure adherence to the MDT methodology in individual, group and family therapy. MDT requires an intensive two week training that included didactic and applied learning objectives in all areas of MDT. To reach competency the trainee must complete a written and practicum exam.

MDT includes and requires completing the following sub areas in sequence:

- 1. MDT Assessment
- 2. Case Conceptualization
- 3. Deactivation / functional treatment
- 4. Validation Strategy/ validate, clarify, redirect (VCR)
- 5. MDT mindfulness- awareness of trust, fear, perception and avoidances
- 6. Complete the conglomerate of beliefs and behaviors and learn to balance their beliefs (COBB)
- 7. Family MDT

All three conditions in this study had equal training in the individual specialized areas.

Clients were selected by the availabilities of the therapists. The lengths of stay for the clients were not controlled by the completion of materials; rather they are controlled by the availability of community placements for the residents by their referral sources. The quality of the therapists and their training were equal in all areas and were controlled for by the standards of clinicians, by the facility policies, and the state regulations, which govern the facility.

SST was chosen as a control because it was the treatment as usual for part of the residents at the residential treatment center and an accepted method of intervention at many facilities (Apsche, et. al., 2005).

METHOD

Sample Characteristics

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 11 months.

Condition one: Cognitive Behavioral Therapy (CBT): A total of nineteen male adolescents were assigned to the CBT condition. The group was comprised of 14 African Americans, 4 European Americans and 1 Hispanic American with a mean age of 16.5. The principal Axis I diagnoses for this group included Conduct Disorder (14), Oppositional Defiant Disorder (4), and Post Traumatic Stress Disorder (7). Axis II diagnoses for the group included Mixed Personality Disorder (4), Borderline Personality Disorder (2), Narcissistic Personality Disorder (1) and Dependent Personality Disorder (1).

The particular CBT methodology used for this group employed a published treatment curriculum and workbook system for adolescent sex offenders called "Thought Change" (Apsche, 1999, Apsche, Evile and Murphy, 2004). This structured treatment program is specifically designed for personality disordered and conduct-ordered youth with psychosexual disturbances and high levels of aggression and violence. Components of this psycho-educational treatment curriculum included daily recording of negative thoughts, cognitive distortions, cognitive restructuring, sexual offense patterns and beliefs, aggressive patterns and beliefs, mood management, dysfunctional beliefs, taking responsibility, mental health maintenance, substance abuse issues, and victim empathy.

<u>Condition two: Mode Deactivation Therapy (MDT):</u> A total of twenty-one male adolescents were assigned to the MDT condition. The group was comprised of 15 African Americans, 5 European Americans and 1 Hispanic American with an average age of 16.5. The principal Axis I diagnoses for this group included Conduct Disorder (15), Oppositional Defiant Disorder (2), Post Traumatic Stress Disorder (7), and Major Depressive Disorder, primary or

secondary (5). Axis II diagnoses for the group included Mixed Personality Disorder (6), Borderline Personality Traits (3), and Narcissistic Personality Traits (2). The MDT condition used the methodology described earlier in this paper.

Condition Three: Social Skills Training (SST): A total of twenty male adolescents were assigned to the SST condition. The group was comprised of 14 African Americans, 4 European Americans and 2 Hispanic American with an average age of 16.1. The principal Axis I diagnoses for this group included Conduct Disorder (17), Oppositional Defiant Disorder (3), Post Traumatic Stress Disorder (5). Axis II diagnoses for the group included Mixed Personality Disorder (4), Borderline Personality Traits (1), Narcissistic Personality Traits (1), and Avoidant Personality Traits. 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 each individual (Henggeler, Schoenwald, Borduin, Rowland and Cunningham, 1998).

MEASURES

Two assessments were used to measure the behavior of the residents, which included the Child Behavior Checklist (CBCL; Achenbach, 1991) and the Devereux Scales of Mental Disorders (DSMD; The Devereux Foundation, 1994).

The CBCL is a multiaxial 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 deviation of 10; a score of 60 or higher indicates an area of clinical concern.

Thus, the first analysis suggests that all types of treatment – Mode Deactivation Therapy and Cognitive Behavioral Therapy – had a positive effect of reducing rates of physical and sexual aggression over the course of treatment (See Table 1).

The CBCL is a multiaxial 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 uses T scores with a mean of 50 and a standard deviation of 10; any T score over 60 is considered clinically significant. The means and standards are divided into four scales and analyzed: (1) Internalizing (which measures negative internal mood, cognition, and attitude),

(2) Externalizing (which measures prevalence of negative overt behavior or symptoms), (3) Critical Pathology (which represents the severe and disturbed behavior in children and adolescents), and Total (which represent the conglomerate of all scores including general Axis I pathology, delusions, psychotic symptoms, and hallucinations).

Table 1

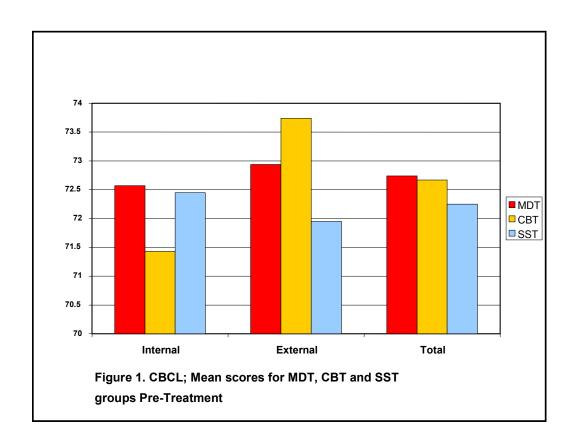
Table 1				
Measure	Scale	<u>CBT</u>	<u>MDT</u>	SST
Child Behavior	Internal	71.43 (Range = 66 - 84)	72.57 (Range = 68 - 86)	72.45 (Range= 66-84)
Checklist (CBCL)	External	73.74 (Range = 66 - 86)	72.94 (Range = 64 - 86)	71.95 (Range= 68-88)
Pre-Treatment	Total	72.67	72.74	72.25
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Child Behavior	Internal	63.66 (Range = 55 - 80)	51.75 (Range = 39 - 71)	66.33 (Range= 58-86)
Checklist (CBCL)		SD = 10.04	SD = 12.10	SD= 8.94
Post-Treatment	External	65.63 (Range = 52 - 82)	50.04 (Range = 37 - 69)	69.63 (Range = 66-88)
		SD = 10.76	SD = 11.74	SD = 8.41
	Total	64 (Range = 52 – 84)	51.00 (Range = 40 - 61)	67.98 (Range = 54-71)
		SD = 9.24	SD = 10.28	SD = 7.10
DSMD	Internal	70.5(Range = 62- 84)	71.3(Range = 64- 83)	72.10 (Range = 62-84)
	External	73.1(Range = 64- 86)	72.5(Range = 67- 84)	71.25 (Range = 60-86)
Pre-Treatment	Critical Path	68.7(Range = 58- 88)	70.5(Range = 60- 86)	72.33 (Range = 68-86)
	Total	70.77	71.50	71.79 (Range = 62-84)
DSMD	Internal	61.70(Range = 52- 74)	49.70(Range = 46- 56)	65.66 (Range = 58-82)
	External	57.81(Range = 52- 72)	45.88(Range = 41- 54)	56.86 (Range = 52-84)
Post-Treatment	Critical Path	50.21(Range = 46- 66)	46.15(Range = 42- 56)	69.75 (Range = 58-88)
	Total	58.00(Range = 56- 82)	46.15(Range = 40- 56)	65.92 (Range = 58-86)
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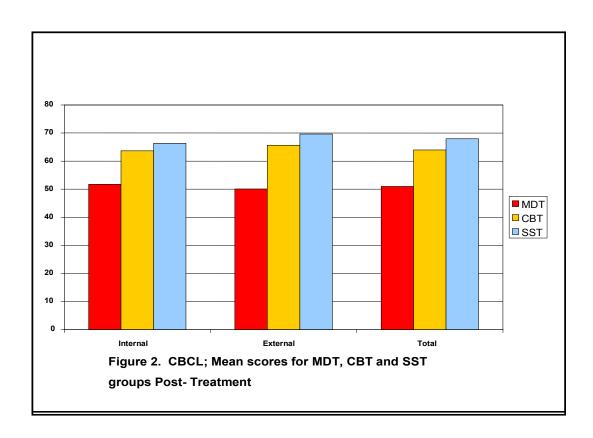
Mean scores on all scales are at least one standard deviation less.

At the time both CBCL and DSMD assessments, of the three groups differed significantly. Residents who participated in MDT had lower scores on all measures then did residents who engaged in CBT.

The results indicate that the mean scores the internalizing factor, externalizing factor, critical pathology, and total score for the MDT group is at or near one standard deviation below the CBT group (Figure 1).

MDT is more than one SD more significant in reducing internal, external, and total scores on the CBCL (Figure 2).





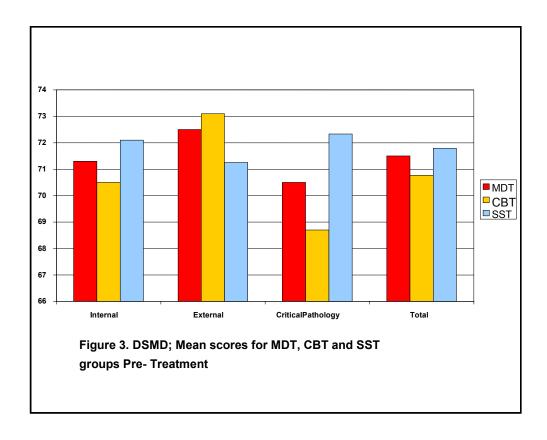


Figure 3: DSMD; mean scores for MDT and CBT groups Pre-Treatment.

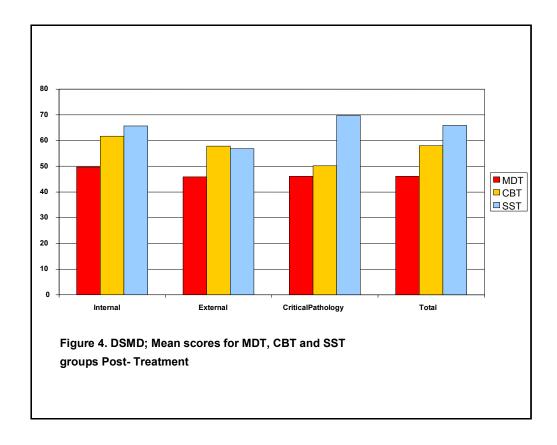


Figure 4: DSMD; mean scores for MDT and CBT groups Post-Treatment.

RESULTS

The data indicates that adolescent's with personality and conduct disorders received superior results in this study with MDT. It appears that MDT is superior in reducing sexual and physical aggression, Apsche, et. al., (2005), and internal and external distress as measured by the CBCL and DSMD.

The results of this study were significant. MDT was over 1 SD per category on the CBCL and the DSMD, although there are some precautions that come with these results. This study was completed in a residential treatment center and not all conditions are perfectly controlled for in actual "real world" treatment studies. The Assignments of therapists were made as randomly as possible, for "a real world study." The 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.

DISCUSSION

MDT appears to offer a probably efficacious treatment methodology for conduct and personality disordered adolescents. It also offers an intensive and effective enhancement of CBT for implementing psychotherapy with their specific adolescent population. It is hoped that MDT will be continued to be developed and tested in controlled research trials. Although, it is clear that MDT offers effective enhancements in psychotherapy as a specific Cognitive Behavior Therapy.

The first author recently completed a study that compares MDT to treatment as usual in a community outpatient setting. Hopefully, the authors will be able to complete continued controlled studies to test the effectiveness of MDT on adolescent populations.

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