# Mapping a Course for the Future: Using Multisystemic Therapy to Correct Deviant Antisocial Behavior in at Risk Juveniles.

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#### Abstract

A new treatment approach is needed to address adolescents involved in delinquent and antisocial behavior. Multisystemic Therapy (MST) was designed to provide a clinically effective and cost-effective approach to the treatment of juvenile offenders and their families. The MST program operating in its inaugural year in Jacksonville Florida was examined. This program was randomly compared to other comparable level programs operating in the Duval County area. The MST program produced a higher successful completion ratio at less cost than the other programs currently being utilized. MST stresses the concept that parents are the key to success. Therapists can only do so much but a child's parents are involved throughout their lives continually.

#### Introduction

Multisystemic Therapy (MST) has been introduced as a home based treatment approach that can be used for problem analysis and intervention with adolescents who exhibit problem behavior. Emphasis is placed on promoting behavior change in the youth's natural environment.

## Research Problem

Violent crime committed by juveniles has become one of the most difficult challenges facing law enforcement today. Recent statistics show that juveniles were responsible for over 30.55% of the part one crimes committed in Florida in 1995 (Juvenile Justice Advisory Board, 1997). As alarming as this number is, this arrest data is an underestimate of the rate of delinquent offenses especially violent ones committed by adolescent offenders (West & Farrington, 1973, 1977). Serious juvenile offenders have been identified as the group displaying the highest probability for committing additional serious crimes (Lewis, Lovely, Yeager, & Famina, 1989; Weisz, Martin, Walter, & Fernandez, 1991). Current programs in use seem to have almost no lasting effect on the children they are designed to help.

This paper will examine the use of Multisystemic Therapy for treatment of youth exhibiting antisocial behavior. Emphasis will be placed on the Jacksonville program run under the direction of the Henry & Rilla White Foundation, Inc. The following questions will be examined and answered: 1) What is Multisystemic Therapy?; 2) Does MST provide a successful treatment alternative in lieu of commitment?; 3) Does MST provide an economical alternative to juvenile treatment programs currently utilized in Florida? Background

According to Ellis (1996), modern prevention programming was developed in the 1970's and 1980's. Modern prevention programming was created as a result of frustration over the recalcitrance of adolescent problem behavior to treatment and the recognition by researchers of common antecedents in the lives of adolescents who engage in these antisocial behaviors. Modern prevention programming interventions were developed based on the following identified facts: a) antecedents of problem

behaviors exist and can be identified; b) the effects of these determinants can be minimized or neutralized through intervention; and, c) the effects of the antecedents can also be minimized or neutralized through the enhancement of protective factors either within the individual or within his/her environment (Dryfoos, 1990; Hawkins, Catalano, & Miller, 1992; U.S. Department of Health & Human Services, 1993).

Studies conducted by Dryfoos (1990) on the antecedents of problem behaviors and by Hawkins et al., (1992) on the antecedents of substance abuse, have identified and examined the presence of risk factors for various dimensions of problem behavior. Both detected a distinct correlation between the various dimensions of problem behavior. Hawkins et al. (1992) also determined the following four important characteristics of the determinants they identified: 1) risk factors appear to remain stable over time despite the changing norms of society; 2) risk factors occur in various dimensions of the adolescent's world, including family, school, peer groups, and others; 3) different risk factors have greater impact at different stages in the development process; and, 4) the greater the number of risk factors present for an individual adolescent, the greater the risk to that individual.

Scott Henggeler is the creator and leading expert in the field of MST. This program was developed at the Medical University of South Carolina and is currently in use in several areas of the United States. Henggeler (1993)has defined MST as:

A family and community based treatment for youth with complex clinical, social, and educational problems (e.g., violence, drug abuse, school expulsion). Over a period of four to six months, MST is delivered in homes, neighborhoods, schools, and communities by master's level professionals with low case loads.(p.1)

The costs associated with placing a juvenile offender or youth with serious clinical problems in an institutional, residential, treatment, or psychiatric facility is far more cost intensive than placement in the MST program. MST has also proven to be more effective with maltreating parents and with juvenile sex offenders than the standard treatment approaches (behavioral parent training and individual treatment, respectively). MST has been identified as the first treatment approach to produce positive long term success with those children, adolescents, and families who consistently deplete the majority of the treatment dollars available in public mental health, child welfare, education, and juvenile justice systems.

MST is partially rooted in traditional family therapies; however, there are several important differences. The multisystemic approach is based on the belief that the youth is intertwined within a series of interconnected systems that encompass individual, family, and extra familial (peer, school, neighborhood) factors. Antisocial problem behavior is perpetuated by interactions within one system or among a combination of these systems. MST draws its strength from applying problem focused interventions within the family and all other systems as needed. MST focuses on child development variables and incorporates interventions that are not systemic such as cognitive behavior therapy Kendall & Braswell, 1985). Cognitive behavior therapy incorporated into the MST program teaches children greater self-control, reflectivity, and problem solving skills in academic and interpersonal situations. Emphasis is placed on thinking and planning before acting.

Multisystemic Therapy provides a child focused and family centered approach to treating the problems of multi-need families. According to Henggeler, Melton, and Smith (1992):

MST is a highly individualized family and home based treatment that is grounded, in part, on Bronfenbrenner's (1979) social-ecological model of development. Using intervention strategies derived from family therapy and behavior therapy, MST intervenes directly in systems and processes known to be related to antisocial behavior in adolescents (e.g., parental family affective peer discipline, relations. associations. school performance). Moreover, because MST involves highly individualized treatment plans based on assessment of the strengths and weaknesses of the adolescent, family, peer system, and school, it can deal flexibly with sociocultural differences in adolescents' psycho-social contexts. (p.954)

Henggeler and his colleagues strongly suggest that the following intervention and treatment guidelines be strictly adhered to by all MST programs.

- 1. The primary purpose of assessment is to understand the "fit" between the identified problems and their broader systemic context.
- 2. Interventions should be present focused and action oriented, targeting specific and well-defined problems.
- 3. Interventions should target sequences of behavior within or between multiple systems.
- 4. Interventions should be developmentally appropriate and should fit the developmental needs of the youth.
- 5. Interventions should be designed to require daily or weekly effort by family members.
- 6. Intervention efficacy is evaluated continuously by the therapist from multiple perspectives.
- 7. Interventions should be designed to promote treatment generalization and long-term maintenance of therapeutic change.
- 8. Therapeutic contacts should emphasize the positive and use systemic strengths as levers for change.
- 9. Interventions should be designed to promote responsible behavior and decrease irresponsible behavior among family members. (Scherer, Brondino, Henggeler, Melton, & Hanley, 1994, p. 200).

Intervention programs currently in use to treat serious antisocial behavior in juveniles primarily target only one antecedent or only one dimension in which risk occurs. For instance, an intervention may focus on family problems, ignoring difficulties in the school and association with deviant peer groups (Hawkins et al., 1992). In addressing only one of the numerous risk factors, one may somewhat reduce risk, but ultimately fail to minimize or neutralize the effects of other determinants. MST intervention programs are centered on systemic change; however, individual therapy can be utilized on both the child and the parents when necessary. Interventions of this

type primarily focus on altering or improving the way the child deals with the following: peer pressure, the individual's perspective-taking skills, belief system, and motivational system (Henggeler, Bourdin, Melton, Smith, Hall, Cone, & Fucci, 1991).

#### The Jacksonville MST Program

The following guidelines have been established to insure the MST program is operated in accordance with the policies of the Medical University of South Carolina and the Henry & Rilla White Foundation's policies, procedures and contractual agreements.

Prior to treatment all MST therapists will perform an assessment of the youth's systems, including family, peer, and academic. Therapy focus, treatment interactive plans, and strategies are developed during therapist supervision meetings based on these assessments. Therapy sessions involving both family and youth are focused on changing necessary behaviors and attitudes to achieve the desired goals. Treatment strategies are constantly subject to modification primarily due to input from the parents and the child. The Clinical Director is responsible for ensuring that these priorities are observed and addressed properly by the therapist. Interventions by the therapist may be held as frequently as every day or as infrequently as once a week. The frequency and duration of the sessions will depend upon the need for assistance demonstrated by the child or parents in meeting the demands for responsible behavior. Emphasis is also placed on improving the necessary attitudinal and behavior changes required for successful completion of the program. As the family successfully meets the program goals outlined by the therapist, additional goals are then introduced and instruction is given on how to modify behavior to attain these goals. Goal progress and attainment are utilized by the therapists to track the families progress in the MST program (White Foundation, 1996).

Therapy sessions are primarily held in the home however locations such as schools, community centers, or the MST office may be utilized from time to time. Family attendance at therapy will vary depending upon the nature of the problems being addressed. Children are excluded from sessions that primarily deal with parenting skills. This is done to avoid compromising the parents' authority in the eyes of the child. A key component of MST is to provide parents with the proper parenting skills to deal effectively with problem situations which may arise during adolescence. The therapist's main goal is to provide motivation and instruction to all family members. Adherence to this rule must be strictly followed or key components necessary for success may go unlearned by members of the family. In situations where a family member has not established an adequate social support system outside of the home the therapist will concentrate on helping to establish a strong one. The establishment of this support system may require a reconciliation with relatives, or active involvement in church related activities (Henggeler et al., 1991).

## Case Planning and Assessment

Emphasis is placed on identifying and defining the causes of problem behavior and delinquency which are present in the youth's environment. A continuing process of interviews and assessments are utilized to develop therapeutic strategies for the family. The therapist's diagnostic accuracy is tested by the success of the designed interventions. Interventions consist of devising and implementing strategies to minimize or neutralize the effects of identified determinates. The strength of MST is centered in its ability to address all identified determinates, while focusing on those believed to be the most important.

#### The Role of Family Members

The assigned case therapist will conduct a psychological assessment of the family prior to designing a treatment plan. This assessment enables the therapist to identify the strengths and weaknesses present in the family system, school setting, and the community. This information is then incorporated into the treatment program. The therapist will then discuss these findings with the parents. Identified strengths and weaknesses are reviewed and a plan is outlined to build on strengths and resolve problem areas. Family members are given supportive roles to play based upon areas identified as strengths for them, and they are encouraged to do more of the things that they already do well.

## Clinical (Individual and Family) Service Planning

Treatment plans for each family are designed and modified at weekly team meetings. Therapeutic interventions are primarily conducted by the assigned therapist, or by the parents with the guidance of the therapist. The therapist and team leader are responsible for all aspects of the designed intervention program. All specialized interventions (e.g., special educational placement, referral to other providers) must also be closely monitored to ensure program success.

## Working with Hostile or Uncooperative Parents of Serious Offenders

Occasionally parents perceive the therapist as a threat. When this occurs additional meetings are required to help build rapport between the parents and the therapist. Parents are given time to voice their concerns and complaints. Therapists remain supportive and work on establishing a partnership with the parents. Gradually, a partnership develops and the therapist becomes a source of alliance for the parents. This alliance facilitates the teaching of positive parenting skills and the correction of identified problem areas.

#### Using Community Resources

MST encourages families to draw upon all available community resources. Public health services, community action programs, Department of Health and Rehabilitative Services, church programs, and organized youth activities such as sports and scouting programs have proven very effective in helping the family deal with the problems of delinquent youth.

#### Case Management

Weekly team meetings are chaired by the MST Clinical Director. Family progress is reviewed and new weekly targets are set. Parents are given instruction on newly established short term goals and objectives. A weekly case review is conducted via telephone with the MST staff at the Medical University of South Carolina. The university staff ensures that the local provider is conducting treatment according to the established principles and guidelines of MST.

On a monthly basis the team meets with the MST project manager. At this meeting the MST project staff review the month's progress and formulate plans for the next month. These plans are based on established quality assurance standards. The team leaders oversee the implementation of these plans and report to the project manager and clinical director, as needed, on progress and any identified problems.

#### Program Discharges

The 1996 MST Pilot Project Program Description has mandated that the following rules must be followed on all discharges from the project:

Prior to the discharge of a youth/family from the program, Department of Juvenile Justice approval must be obtained. In cases where both sides cannot come to an agreement the Department of Juvenile Justice has the ultimate discharge authority. Case termination based on short term success occurs when: (a) the MST team feel the parents have the motivational skills necessary for dealing with future problems, (b) the demonstrated considerable improvement vouth has in his educational/vocational efforts; ( c ) the youth has become involved with prosocial peers and has only minimal involvement with problem peers; and, (d) the family and youth have functioned together at acceptable levels for at least 3-4 weeks. All justifications for discharging a youth prior to successful program completion shall be based on MST staff findings and approved by the Department of Juvenile Justice. In cases where all goals have not been met but treatment has reached a point of diminishing returns, treatment is recommended for termination as a partial success. Treatment is recommended for termination as a failure when: (a) there has been little or no behavior change in spite of significant efforts on multiple fronts; (b) the youth and the parents are not making a sincere effort at the program; or, (c) there are no viable alternatives (e.g., lack of extended family assistance, necessary resources are unavailable, or the problems are not serious enough for placement in an alternative program). The MST provider must clearly justify in writing any recommendations for discharging a youth prior to successful completion of the program (p4).

#### Aftercare Plans for Youth and Family

A main component of the youth's treatment program is an aftercare plan designed to increase the likelihood of successful community living after completion of the multisystemic therapy treatment program. All aftercare plans are designed during the development of the treatment plan. The program is designed to empower families to continue moving toward successful completion of treatment goals after discharge from the program.

At least 60 days prior to discharge the MST staff initiate planning for the details of the aftercare plan to be followed by the parents and aftercare staff. The White Foundation 1996 MST program description states:

Case management activities include ongoing re-evaluation and updates as necessary to ensure that aftercare services are properly attuned to the youth's strengths and the facilitative factors in the home, school and community previously identified and, where possible, augmented during the multisystemic therapy program. For example, a youth with very low self esteem upon admission to the program may have benefited from close supervision of peer group activities or even restrictions from that contact in the initial phases. However, the same youth with significantly enhanced self-esteem may not require as much scrutiny at peer group activities as the youth would presumably be more self-directed and able to resist negative peer pressures. The aftercare plan, then, would specify a comparatively lower frequency of peer group supervision from the parents. (p.5)

#### Clinical Supervision

All teams are provided ongoing clinical supervision and training by the MST projects clinical director, a licensed professional. Each team is also headed by a licensed professional who also provide support services to families. The MST clinical director is responsible for treatment guidance, supervisory decisions, and clinical training for all therapy teams. Weekly treatment team meetings are scheduled to provide the clinical director the opportunity to evaluate both treatment objectives and the methods of treatment service delivery. The clinical director monitors, supports, and coordinates the case management effort through attendance at the weekly treatment team meetings and monthly staff meetings, and in daily phone contacts.

## **Project Direction**

According to the White Foundation 1996 program description, the project manager is responsible for the following duties:

The MST project manager provides overall administrative supervision of the project, ensuring that the project is operated in accordance with the providers policies and procedures and contractual agreements. The project manager reports to the providers president and CEO, and is responsible for promoting interagency relations by arranging joint meetings with the Department of Juvenile Justice, social service agencies, community agencies, schools and any other group or entity whose activities impact on the goals of the multisystemic therapy program (p.5).

## **Treatment Fidelity**

MST is provided by two teams of therapists consisting of a lead therapist and two additional therapists. All therapists are clinical psychologists or experienced clinical social workers. Team members carry a case load of 5 to 6 families while the lead therapist carries a 3 family case load along with supervisory/administrative responsibilities. Therapists are available to the families 24 hours a day, 7 days a week. Each staff member is required to attend a 40 hour comprehensive training program on MST provided by the staff from the Family Services Research Center of the Medical University of South Carolina. The Family Services Research Center also provides an hour long weekly case review, via telephone, with each therapist. Quarterly booster sessions are provided to discuss treatment options for difficult cases and to address any issues or problems that the provider has identified.

## MST Service Delivery

A central component of the MST program is to empower parents to deal effectively with the day to day problems that arise when raising children. The youth is also provided with the tools necessary to help cope with family, school, neighborhood, and peer problems that are encountered during daily interactions. MST promotes the utilization of "real life" behavior change in a manner that encourages long-term gains.

## Purpose and Rationale

In order to examine the MST program in a coherent fashion, statistics for the sixty children involved in the MST program's inaugural year were obtained and reviewed. The Department of Juvenile Justice provided random comparison statistics for sixty children placed in equivalent level programs throughout the Duval County area. The programs used for this comparison follow the MST intent for avoidance to commitment for troubled youth. This comparison was necessary to fully measure and compare the efficacy of MST to other currently utilized programs. Emphasis was placed on the following. 1) successful program completions; 2) average length of service; 3) average length of service for successful completions; 4) average costs for services; and, 5) recidivism.

Prevention and rehabilitation efforts in the past have experienced at best mediocre results. This may be due in part to our failure to recognize and address the many risk factors present in the adolescent's life. A multifaceted intervention plan must be utilized to deal effectively with the multi-dimensional variables which contribute to delinquent behavior. Multisystemic therapy provides a carefully targeted cost effective treatment approach for serious juvenile offenders and their multi-need families. This paper will examine the treatment approach and benefits provided by the Jacksonville MST program.

#### Method

This research project was conducted through review of literature as well as historical and current data on Multisystemic therapy programs designed to treat adolescents exhibiting antisocial behavior. Informal telephone interviews were also conducted with representatives of the founders of MST at the University of South Carolina and also with the Jacksonville project coordinators at the Henry and Rilla White Foundation.

#### Interview Procedures

The following questions were presented to the Jacksonville MST provider.

- 1) Number of juveniles in Jacksonville program at least 9-12 months.
- 2) Client profile.
- 3) Juveniles presenting offense.
- 4) How do you define program success?
- 5) Performance outcome measures.
  - \*Length of treatment.

\*Number of juveniles that successfully completed program.

\*How many juveniles taken into custody, adjudicated and either recommitted to DJJ, or incarcerated or placed on probation within the adult system?

- 6) Program description.
- 7) Costs per case.
- 8) How do you define recidivism?

Past delinquency prevention efforts dating back to the early 1970's have experienced at best only limited success. The questions presented to the White Foundation's MST program were intended to determine if MST was more effective than treatment programs presently in use throughout the state. Due to the fact that only nine months worth of data were available at the time of this study, additional research will be necessary over the next two years to confirm the initial findings of this paper.

#### Results

#### Demographics

MST Participants

Sixty juvenile offenders at risk of out of home placement were admitted to the program. Fifty-seven were admitted for felony arrests. The remaining 3 were admitted for misdemeanor assault or battery charges. Eleven were black females, 20 were black males, 6 were white females, 22 were white males, and 1 was Hispanic male. The average age of all admissions was 14.7 years. The age of all admissions ranged from 8.3 years to 17.8 years at time of admission.

Treatment services for MST were provided in the community, the school, and the home. The White Foundation project provided 41.5% of all services in the home, 25.0% of all services in other community locations, 33.5% of all services in the foundation offices or by telephone. The family received 51.0% of all services, the individual child received 32.5% of all services, individual parents received 13.5% of all services, and other family members received 3.0% of all services.

#### Comparison Group

Of the 60 juveniles placed in comparable programs, 23 were admitted for felony violations, 31 for misdemeanor charges, and 6 for violation of community control. Twenty-six were black males, 10 were black females, 20 were white males, and 4 were white females. The average age of all admissions was 15.9 years. The age of all admissions ranged from 10.9 years to 18.1 years at time of admission.

#### **Referrals and Admissions**

#### MST Participants

Ninety-four referrals for service were directed to the MST program during the program's nine months of operation this year. Sixty of those referrals were approved and admitted into the program for treatment. Twenty-seven were rejected as unsuitable for admission and 7 referrals were still pending at the time of this report.

Sixty juveniles and their families were admitted into the MST program; 42 participants have successfully completed the program. The remaining 18 juveniles and their families were discharged from the program prior to successful completion.

#### Comparison Group

Thirty-eight juveniles successfully completed their assigned programs and 22 were discharged for unsuccessful completion.

## Status of Releases

## MST Participants

Of the 18 families discharged for unsuccessful program completion from MST, 11 of these cases were terminated within the first fifteen days of program admission. Program termination for these eleven cases involved additional charges pending at time of admission and subsequent placement in a residential program, or parent's refusal to participate in the program. These cases averaged 6.9 days of service in the program prior to termination. Due to their brief participation in the MST program these cases were not considered when evaluating the program's success. As a result of these discharges, a one week screening program was designed and implemented to identify additional pending charges and the family's willingness to participate in the program. The remaining 7 cases averaged 84 days in the program prior to termination. Two cases were discharged for commitment to higher level programs, 2 for parent (s) refusal to continue service, 1 for pending trial, 1 for lack of progress and 1 for runaway.

### Comparison Group

Of the 60 juveniles placed in comparable programs, 22 were discharged for unsuccessful program completion, and 5 were discharged within the first 15 days of program admission. Program termination for these 5 cases involved 1 runaway, 1 detention placement, 1 maximum time served, and 2 transferred to another program. These 5 cases averaged 10.6 days of service in their assigned programs prior to termination. These cases were not considered when evaluating program success. The remaining 17 cases averaged 63.71 days of service in their respective programs prior to termination.

#### Successful Program Completions

#### MST Participants

The MST program had 42 successful program completions, 7 unsuccessful program completions and 11 short term admissions (which were not considered). The MST program operated at a 85.70% successful completion rate during the first year of operation.

#### Comparison Group

This group had 38 successful program completions, 17 unsuccessful program completions, and 5 short term admissions which were not considered. The comparison group operated at a 69.0% successful completion rate during the past year of operation.

## Average Length of Service

#### MST Participants

The 42 families who successfully completed the MST program averaged 158.2 days in service. The average length of service is reduced to 154 days when the seven unsuccessful program completions are factored in.

#### Comparison Group

The 38 juveniles who successfully completed their assigned programs averaged 109.3 days in service. The average length of service is reduced to 97.8 days when the 5 unsuccessful completions are factored in.

## Cost for Services

## MST Participants

The White Foundation entered into a contract with the Department of Juvenile Justice for \$350,000.00 for the year of 1996. The contract called for MST to provide treatment services for 100 youths and their families. The number of families treated under this program fell short of program expectations for the following reasons. The first quarter of operation involved project planning and implementation activities. Staff interviews, selection, and training had to be completed prior to providing any services. A phase-in schedule of admissions to the project was utilized so that intensive time could be spent with each admission. This phase- in prevented therapists form carrying a full case load until the month of May. Staff turnover also adversely affected the programs ability to meet its goals. Thirty five hundred dollars (\$3500.00 ) per family was designated for treatment purposes for the 100 families. Based on providing services for 60 families, the cost per day is \$15.98 per family. This cost would be reduced to \$9.50 per day when treatment is provided for the 100 families budgeted for in the contract.

### Comparison Group

Six comparable level programs operating in the Jacksonville area were picked at random by the Department of Juvenile Justice for comparison purposes. Upon review of the contracts for service with the Department of Juvenile Justice the following per diem costs were identified:

| 1) Jacksonville Marine Institute East  | \$ 26.44 |
|--|----------|
| 2) Jacksonville Marine Institute West  | \$ 26.44 |
| 3) Rilla White Special Intensive Group | \$ 9.59  |
| 4) Bridge Special Intensive Group      | \$ 65.00 |
| 5) Clay Special Intensive Group        | \$ 2.72  |
| 6) Jacksonville Youth Center           | \$ 7.52  |

The average cost per day for these programs was \$22.95.

#### Discussion

In order to fully evaluate the effectiveness of MST, a control group of similarly situated delinquent youth were tracked through non-MST treatment programs. This comparison provided information on program success ratios, length of treatment, and project costs per youth. Archival records were searched for the juveniles successfully completing all programs. At the time of this report, only 2 of the 42 successful MST program graduates had received felony adjudications. The comparison group had 1 felony adjudication out of the 38 successful completions.

MST has produced a successful completion rate of 85.70% during the first year

of operation compared with a 69.0% successful completion rate for the control group. MST program participants averaged 56 additional days in therapy than the other programs, however, the rehabilitation costs were below those of the comparison group average.

A key component of MST therapy absent from other programs is the emphasis placed on the family to prepare its children to function successfully and prosocially in society. To be successful the family must provide continuous positive support, instruction, and opportunities for its children. MST has clearly demonstrated its value in treating the many forms of antisocial behavior exhibited by youth today. The practice of institutionalizing juvenile offenders has produced mixed results at best and is financially impractical given our current fiscal climate.

The findings support the effectiveness of MST in identifying and correcting antisocial behavior in at risk youth. Multiple deficiencies among systems is likely to lead to both an increase in risk factors and a decrease in protective factors (Dryfoos, 1990), yet the majority of interventions currently being utilized focus on only single dimensions such as the individual or the family (Henggeler, 1993).

MST has proven to be equally effective with a wide range of youths and families from a diverse cultural background. The program's versatility has been verified through its ability to produce successful interventions while working with parents and children possessing a wide variety of strengths and weaknesses.

An additional study of no less than four years is recommended to provide data on the long term effects of the MST program. It would be beneficial to track the younger siblings in families of juveniles who successfully completed MST. This would provide some insight into the programs efficacy in providing long term positive parenting skills which could be utilized during the raising of other children in the family.

## Lt. DeNaro holds an A.S. degree from Broward Community College and a Bachelors Degree in Professional Studies from Barry University.

He is in his twenty first year of service with the Oakland Park Police Department. He has held a number of key positions within the department including watch commander, criminal investigations commander, and professional standards commander. Lt. DeNaro has also taken an active role in designing and promoting the departments community relations initiative.

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