Multisystemic Therapy (MST) - intensive family- and community-based intervention for antisocial behaviour in juvenile offenders

Submitted by paidako on Wed, 10/18/2017 - 15:09

At a glance

Country of origin:
USA

Added to registry:
Wednesday, October 18, 2017 - 15:00

Target group:
Young offenders aged 12-17 years

Age group:
11-14 years
15-18/19 years

Programme setting(s):
Community
Family
Juvenile justice setting

Level(s) of intervention:
Targeted intervention

Multisystemic Therapy® (MST®) is an intensive family- and community-based treatment that addresses the multiple causes of serious antisocial behaviour in juvenile offenders. The MST programme seeks to improve the real-world functioning of young people by changing their natural settings ? home, school and neighbourhood ? in ways that promote prosocial behaviour while decreasing antisocial behaviour. Therapists work with young people and their families to address the known causes of delinquency on an individualised yet comprehensive basis. By using the strengths in each system (family, peers, school and neighbourhood) to facilitate change, MST addresses the multiple factors known to be related to delinquency across the key systems within which young people are embedded. The extent of treatment varies by family according to clinical need. Therapists generally spend more time with families in the initial weeks (meeting daily if necessary) and gradually reduce the frequency of their meetings (to as infrequently as once a week) over the three- to five-month course of treatment.

Keywords:
No data

Overview of results from the European studies

Last reviewed:
Wednesday, October 18, 2017
Evidence rating:
Likely to be partially beneficial

About Xchange ratings
×Close

About Xchange ratings

**Beneficial:** Interventions for which significant effects for most outcomes\(^\text{1}\) are in favour of the intervention as found in randomised controlled trials (RCTs) or experimental design studies of good quality in Europe. An intervention ranked as ?beneficial? is suitable for most contexts.

**Likely to be beneficial:** Interventions for which the effects for most outcomes\(^\text{1}\) are in favour of the intervention as found in evaluation studies of acceptable quality in Europe and for which the evidence is therefore limited. An intervention ranked as ?likely to be beneficial? is suitable for most contexts, with some discretion.

**Likely to be partially beneficial:** Interventions for which the effects for some outcomes\(^\text{2}\) are in favour of the intervention as found in evaluation studies of acceptable quality in Europe and for which the evidence is therefore limited and partial. An intervention ranked as ?likely to be partially beneficial? is suitable with caution, and should be tested in more contexts.

**Unknown effectiveness:** Interventions for which the effects for a few outcomes\(^\text{3}\) are in favour of the intervention as found in evaluation studies of acceptable quality in Europe, making it difficult to assess if they are effective or not.

**Evidence of ineffectiveness:** Interventions that gave no or negative results in evaluation studies of acceptable quality in Europe.

Not included in Xchange are interventions for which there are no evaluation studies of acceptable quality in Europe, notwithstanding ratings of their effectiveness in other continents.

\(^\text{1}\) Generally this would be more than 50% of measures. It would also be based on most relevant, e.g. some effects on child outcomes, and not only effects on parent outcomes

\(^\text{2}\) For example there is an effect only on parent outcomes or only about 30% of outcomes

\(^\text{3}\) There is a positive effect on less than 20% of outcomes or a negative effect

Close
Studies overview:

No data

References of studies
Click here to see the reference list of studies
×Close

**References of studies**


Close
Countries where evaluated:
Canada
Netherlands
Norway
Sweden
United Kingdom
USA
Links to this programme in national registries:
No link
Implementation experiences
Read the experiences of people who have implemented this programme.

Contact details:

Mr Marshall Swenson  
MST Services  
710 J. Dodds Boulevard  
Suite 200, Mount Pleasant  
SC 29464  
United States of America  
Phone: (843) 856-8226  
Email: marshall.swenson@mstservices.com  
Website: www.mstservices.com or www.mstinstitute.org

Protective factor(s):
Community: opportunities and rewards for prosocial involvement in the community (including religiosity)  
Family: attachment to and support from parents  
Family: opportunities/rewards for prosocial involvement with parents  
Family: parent involvement in learning/education  
Family: parent social support  
Family: verbal reasoning/non-violent parent-child discipline  
Individual and peers: clear morals and standards of behaviour  
Individual and peers: interaction with prosocial peers  
Individual and peers: opportunities and rewards for prosocial peers involvement  
Individual and peers: Problem solving skills  
Individual and peers: skills for social interaction  
School and work: commitment and attachment to school  
School and work: opportunities for prosocial involvement in education  
School and work: rewards and disincentives in school

Xchange Risk factor(s):
Community: community disorganisation (crime, drugs, graffiti, abandoned buildings etc)  
Community: laws and norms favourable to drug use and antisocial behaviour  
Community: low neighbourhood attachment  
Family: aggressive or violent parenting  
Family: family conflict  
Family: family management problems  
Family: neglectful parenting  
Family: parental attitudes favourable to alcohol/drug use  
Family: parental attitudes favourable to anti-social behaviour  
Family: parental depression or mental health difficulties  
Individual and peers: early initiation of anti-social behaviour  
Individual and peers: early initiation of drug/alcohol use  
Individual and peers: interaction with antisocial peers  
Individual and peers: peers alcohol/drug use  
Individual and peers: rebelliousness and alienation  
School and work: low commitment/attachment to school

Outcomes targeted:  
Not depressed or anxious  
Other emotional outcomes  
Good relations with parents  
Good relations with peers  
Alcohol use  
Use of illicit drugs  
Violence  
Crime/Delinquency
Other behaviour outcomes
Description of programme:

Multisystemic Therapy® (MST®) is an intensive family- and community-based treatment that addresses the multiple causes of serious antisocial behaviour across key settings, or systems, within which young people are embedded (family, peers, school and neighbourhood). Because MST emphasises promoting behavioural change in the young person’s natural environment, the programme aims to empower parents with the skills and resources needed to independently address the inevitable difficulties that arise in raising teenagers, and to empower young people to cope with the problems they encounter in the family, peer, school, and neighbourhood domains.

In the context of support and skill building, the therapist places developmentally appropriate demands on adolescents and their families to reduce problem behaviour. Initial therapy sessions identify the strengths and weaknesses of the adolescent, the family and their transactions with extrafamilial systems (e.g. peers, friends, school, parental workplace). Problems identified both by family members and by the therapist are explicitly targeted for change by using the strengths in each system to facilitate such change. Treatment approaches are derived from well-validated strategies such as strategic family therapy, structural family therapy, behavioural parental training and cognitive behavioural therapy.

While MST focuses on addressing the known causes of delinquency on an individualised yet comprehensive basis, several types of interventions are typically identified for serious juvenile offenders and their families. At the family level, MST interventions aim to remove barriers to effective parenting (e.g. parental substance abuse, parental psychopathology, low social support, high stress and marital conflict), to enhance parenting competencies, and to promote affection and communication among family members. Interventions might include introducing systematic monitoring, reward and discipline systems; prompting parents to communicate effectively with each other about adolescent problems; problem solving for day-to-day conflicts; and developing social support networks. At the peer level, interventions are frequently designed to decrease affiliation with delinquent and drug-using peers and to increase affiliation with prosocial peers. Interventions in the school domain may focus on establishing positive lines of communication between parents and teachers, ensuring parental monitoring of the adolescent’s school performance and restructuring after-school hours to support academic efforts. Individual-level interventions generally involve using cognitive behavioural therapy to modify the individual’s social perspective-taking skills, belief system or motivational system, and encouraging the adolescent to deal assertively with negative peer pressure.

A master’s level therapist, with a caseload of four to six families, provides most mental health services and coordinates access to other important services (e.g. medical, educational and recreational). While the therapist is available to the family 24 hours a day, 7 days a week, the direct contact hours per family vary according to clinical need. Generally, the therapist spends more time with the family in the initial weeks of the programme (meeting daily if necessary) and gradually reduces the frequency of their meetings (to as infrequently as once a week) during a three- to five-month course of treatment.

Treatment fidelity is maintained by weekly group supervision meetings involving three to four therapists and a doctoral level or advanced master’s level clinical supervisor. The group reviews the goals of and progress in each case to ensure the multisystemic focus of the therapists’ intervention strategies, identify barriers to success and facilitate the attainment of treatment goals. In addition, an MST expert consultant reviews each case with the team weekly to promote treatment fidelity and favourable clinical outcomes.

The design and implementation of MST interventions are based on the following nine core principles of MST. An extensive description of these principles, with examples that illustrate the translation of these principles into specific intervention strategies, is provided in comprehensive clinical volumes (Henggeler et al., 1998; 2009).

- The primary purpose of assessment is to understand the ‘fit’ between the identified problems and their broader systemic context.
Therapeutic contacts emphasise the positive and use systemic strengths as levers for change. Interventions are designed to promote responsible behaviour and decrease irresponsible behaviour among family members. Interventions are present-focused and action-oriented, targeting specific and well-defined problems. Interventions target sequences of behaviour within and between multiple systems that maintain the identified problems. Interventions are developmentally appropriate and fit the developmental needs of the young person. Interventions are designed to require daily or weekly effort by family members. Intervention effectiveness is evaluated continuously from multiple perspectives, with providers assuming accountability for overcoming barriers to successful outcomes. Interventions are designed to promote treatment generalisation and long-term maintenance of therapeutic change by empowering caregivers to address family members’ needs across multiple systemic contexts.

**Intervention variation**

The study was a randomised controlled trial with participants randomly allocated either to receive multisystemic therapy (MST) or to continue with treatment as usual. Randomisation was computer-generated at a ratio of 50:50 and with sites used as a blocking variable. Over 12 months, from March 2004, young people aged 12-17 were referred to the study and screened for a clinical diagnosis of conduct disorder using the DSM-IV-TR.

A total of 256 juveniles who were referred for MST between 2006 and 2010 participated in the study. The study took place in three MST institutions in the Netherlands. Adolescents were referred by primary healthcare workers (GPs) or child social workers in 39% of cases. Of the adolescents, 51% were referred for treatment as a result of a court order and 11% were self-referred. Immediately after referral, participants were randomised using a computerised randomisation programme. This programme was executed separately for each site. The randomisation ratio was adjusted in a 1:2 ratio in favour of MST for a 6-month period, due to a low number of referrals.

The programme allocated 147 young people to the intervention group and 109 to the control group. Participants in the control group received an alternative treatment that would have been offered had MST not been available. Mostly, these services included individual treatment (individual counselling or supervision by a probation officer or case manager, 21%) and family-based interventions (family therapy, parent counselling, parent groups or home-based social services, 53%). Of this group 7% received a combination of care (e.g. individual treatment and family counselling) and 4% were placed in a juvenile detention facility. For various reasons such as moving house or repeated failure to attend treatment sessions, 14% received no treatment in the end.

Implementation Experiences:
Country: Norway
Feedback date: Saturday, September 30, 2017
Contact details:
Terje Ogden
terje.ogden[a]nubu.no [1]

Number of implementations: 1
Main obstacles:
With respect to individual professionals

Some practitioners opposed the manual-driven approach, stating that it was a threat to professional autonomy and to the principle of freedom of method choice. At the clinical level, the lack of specific, explicit therapeutic skills also turned out to be a challenge. Weekly group supervision and consultation in MST, and feedback from families on the therapists’ treatment adherence were collected on a regular basis. But, to our knowledge, no trainees dropped out of training because of these requirements, and the therapists gradually adapted to the skills-oriented approach and the increased transparency of the therapy process.

With respect to social context

The MST and MST/CM programmes were not immediately accepted by the Norwegian public and practitioners. Adolescents with behavioural and substance abuse problems were placed out of home on a regular basis. Moreover, a common objection was that MST may have worked in the United States, but it won’t work here. No matter how many studies proved that evidence-based programmes worked in the United States, it was not assumed that the same results would be achieved in Norway. Norway previously had a strong tradition of incarcerating drug-abusing and criminal youth or transferring them to treatment institutions or homes. Home-based treatment of this target group was quite difficult to grasp for the public, politicians and professionals.

In RCTs, treatment-as-usual (TAU) groups in the United States are often exposed to risk factors that are both more severe and more numerous than those in Norway. The prevalence of stressors such as neighbourhoods with high rates of crime and substance abuse is more common in the United States. Moreover, the regular services to which MST was compared in Norway were likely to be more comprehensive and to have more elements of treatment than the regular services offered to comparison groups in previous MST trials in North America. In the United States, regular services? often consist of probation office visits and referral to social services when deemed necessary. In Norway, they involve a wide array of social services and mental health treatment, including placement in institutions and in-home services.

With respect to organisational and economic context

The new programme challenged the traditional strategy of placing children and youth out of home in institutions or foster homes for longer periods of time. When children and, to a greater extent, youth are treated within their family and local environment, the result can be increased pressure on their social networks, including families, schools and neighbourhoods.

Some local agency leaders were not prepared for the new demands that were put on them and their agencies to establish practical routines for recruiting and training, as well as to support the evidence-based practices of MST. There are still great variations in how much leaders of local agencies and regional services have adapted their leadership style to the needs and demands of MST. Some still claim that it would be better to incarcerate the young offenders. This is as much a policy discussion as a discussion about what works? for children who act out, and we expect this to be a part of the continuing discussion about punishment or treatment? in Norwegian society. Efforts to treat drug abuse in family-based treatment programmes such as MST and MST/CM were particularly challenging. There were several challenges and controversies in the process of implementing the evidence-based programmes, particularly in the initial phases. Critics claimed that the relation? was more important than the evidence? and that the practitioners had to be more important than the programmes.

How they overcame the obstacles:

With respect to individual professionals

In addition, to ensure that they had pragmatic appeal, the interventions were robust enough to adapt to contextual and cultural variations. Norwegian MST therapists and supervisors reported few problems in engaging ethnic minorities in treatment, stating that the highly contextual nature of the model helped to
make it possible to adapt the treatment to each family’s cultural needs.

The introduction of the new programme was considered by some to be an implicit critique of regular practice, and the implementation team had to engage in several information and negotiation activities. No systematic strategy was applied in this process, and several ad hoc countermeasures were used, such as information meetings, emails, phone calls and distribution of written information such as journal articles, newspaper articles, etc.

**With respect to social context**

The power of the RCT replication studies nonetheless influenced attitudes towards MST and MST/CM in Norway, and both are now part of regular practice in Norway.

**With respect to organisational and economic context**

The RCT replication studies made an important contribution to establishing the credibility of the programmes. MST and MST/CM developed in North America seemed to work equally well in Norway. The programmes were initially implemented with no major modification of the original model. Few adaptations were called for in order to make the programmes work in the Norwegian context, and the programmes’ ability to match the individual families’ needs and situations were indicated by the low number of dropouts from treatment, encouraging youth outcomes and positive user evaluations. ‘Core components’ were defined by both the developers and the Norwegian change agents as those with the strongest empirical underpinnings in controlled trials. They appeared to work equally well in Norway and the United States.

An large amount of MST training material has been translated, but it could not be translated back and forth in a rigorous way without totally altering the clinical meaning of the texts. Therefore, English sentences had to be rewritten to make sense in Norwegian. It was considered clinically important that the translation be done by the staff members at the Department for Adolescents, who were all bilingual and specialists in clinical psychology.

To a very small extent, the local services had to transfer funding from existing resources. Long-term financial support from the ministries through the Norwegian Centre for Child Behavioural Development (NCCBD) has been crucial for the sustainability of the fidelity of the programmes and to handle turnover of therapists.

Lessons learnt:

**With respect to individual professionals**

The turning point for many of the therapists happened when the parents receiving PMTO (Parent Management Training ? Oregon mode) and MST expressed their satisfaction with the positive changes in their families and in their children’s behaviour. Moreover, the objections and resistance did not reduce the number of practitioners volunteering to learn and practise the programmes.

**With respect to social context**

The experiences from Norway could serve as a model and inspiration for large-scale implementation of MST in other nations. It is possible to have clear standards for training and evaluation of competence that ensure implementation fidelity and support local efforts.

**With respect to organisational and economic context**
Federal funding of training and technical support, combined with allowing agency employees to volunteer to participate, is a promising strategy. Moreover, research should be an integrated part of the implementation of MST.

Among the factors that may have contributed to the long-term sustainability and effectiveness of MST in Norway, the following seem to be most important: (1) a genuine interest in and commitment to the national implementation of evidence-based practices at the political and administrative levels, (2) increased interest in evidence-based practices among practitioners, (3) establishing a self-sustaining national centre for implementation and research, (4) the ability of the programme developers to support the implementation and research efforts, and (5) positive evaluations from families and positive media feedback.

Strengths:
Home-based treatment, a national centre for training, quality assurance and research, long-term funding, support at the policy level and from the public.

Weaknesses:
Expensive, not in accordance with the theoretical orientation of most practitioners in the field (who are eclectic or psychodynamically oriented), competition from non-evidence-based interventions, including treatment institutions and group homes.

Opportunities:
Increased capacity and competence in the treatment of serious behavioural problems, including crime and drug abuse; early interventions for adolescents at risk of entering a drug abuse trajectory; and empowering parents, families and networks.

Recommendations:

**With respect to organisational and economic context**

Implement several evidence-based programmes, for instance MST, functional family therapy and Treatment Foster Care Oregon, so that there are opportunities to choose from among them.

**Country**

Country: Norway
Feedback date: Saturday, September 30, 2017
Contact details:
Terje Ogden
terje.ogden@nubu.no [1]

Number of implementations: 1
Main obstacles:
With respect to individual professionals

Some practitioners opposed the manual-driven approach, stating that it was a threat to professional autonomy and to the principle of freedom of method choice. At the clinical level, the lack of specific, explicit therapeutic skills also turned out to be a challenge. Weekly group supervision and consultation in MST, and feedback from families on the therapists’ treatment adherence were collected on a regular basis. But, to our knowledge, no trainees dropped out of training because of these requirements, and the therapists gradually adapted to the skills-oriented approach and the increased transparency of the therapy process.

With respect to social context

The MST and MST/CM programmes were not immediately accepted by the Norwegian public and practitioners. Adolescents with behavioural and substance abuse problems were placed out of home on a regular basis. Moreover, a common objection was that MST may have worked in the United States, but it won’t work here. No matter how many studies proved that evidence-based programmes worked in the United States, it was not assumed that the same results would be achieved in Norway. Norway previously had a strong tradition of incarcerating drug-abusing and criminal youth or transferring them to treatment institutions or homes. Home-based treatment of this target group was quite difficult to grasp for the public, politicians and professionals.

In RCTs, treatment-as-usual (TAU) groups in the United States are often exposed to risk factors that are both more severe and more numerous than those in Norway. The prevalence of stressors such as neighbourhoods with high rates of crime and substance abuse is more common in the United States. Moreover, the regular services to which MST was compared in Norway were likely to be more comprehensive and to have more elements of treatment than the regular services offered to comparison groups in previous MST trials in North America. In the United States, regular services? often consist of probation office visits and referral to social services when deemed necessary. In Norway, they involve a wide array of social services and mental health treatment, including placement in institutions and in-home services.

With respect to organisational and economic context

The new programme challenged the traditional strategy of placing children and youth out of home in institutions or foster homes for longer periods of time. When children and, to a greater extent, youth are treated within their family and local environment, the result can be increased pressure on their social networks, including families, schools and neighbourhoods.

Some local agency leaders were not prepared for the new demands that were put on them and their agencies to establish practical routines for recruiting and training, as well as to support the evidence-based practices of MST. There are still great variations in how much leaders of local agencies and regional services have adapted their leadership style to the needs and demands of MST. Some still claim that it would be better to incarcerate the young offenders. This is as much a policy discussion as a discussion about what works? for children who act out, and we expect this to be a part of the continuing discussion about punishment or treatment? in Norwegian society. Efforts to treat drug abuse in family-based treatment programmes such as MST and MST/CM were particularly challenging. There were several challenges and controversies in the process of implementing the evidence-based programmes, particularly in the initial phases. Critics claimed that the relation? was more important than the evidence? and that the practitioners had to be more important than the programmes.

How they overcame the obstacles:

With respect to individual professionals

In addition, to ensure that they had pragmatic appeal, the interventions were robust enough to adapt to contextual and cultural variations. Norwegian MST therapists and supervisors reported few problems in engaging ethnic minorities in treatment, stating that the highly contextual nature of the model helped to
make it possible to adapt the treatment to each family’s cultural needs.

The introduction of the new programme was considered by some to be an implicit critique of regular practice, and the implementation team had to engage in several information and negotiation activities. No systematic strategy was applied in this process, and several ad hoc countermeasures were used, such as information meetings, emails, phone calls and distribution of written information such as journal articles, newspaper articles, etc.

**With respect to social context**

The power of the RCT replication studies nonetheless influenced attitudes towards MST and MST/CM in Norway, and both are now part of regular practice in Norway.

**With respect to organisational and economic context**

The RCT replication studies made an important contribution to establishing the credibility of the programmes. MST and MST/CM developed in North America seemed to work equally well in Norway. The programmes were initially implemented with no major modification of the original model. Few adaptations were called for in order to make the programmes work in the Norwegian context, and the programmes’ ability to match the individual families’ needs and situations were indicated by the low number of dropouts from treatment, encouraging youth outcomes and positive user evaluations. ‘Core components’ were defined by both the developers and the Norwegian change agents as those with the strongest empirical underpinnings in controlled trials. They appeared to work equally well in Norway and the United States.

An large amount of MST training material has been translated, but it could not be translated back and forth in a rigorous way without totally altering the clinical meaning of the texts. Therefore, English sentences had to be rewritten to make sense in Norwegian. It was considered clinically important that the translation be done by the staff members at the Department for Adolescents, who were all bilingual and specialists in clinical psychology.

To a very small extent, the local services had to transfer funding from existing resources. Long-term financial support from the ministries through the Norwegian Centre for Child Behavioural Development (NCCBD) has been crucial for the sustainability of the fidelity of the programmes and to handle turnover of therapists.

Lessons learnt:

**With respect to individual professionals**

The turning point for many of the therapists happened when the parents receiving PMTO (Parent Management Training ? Oregon mode) and MST expressed their satisfaction with the positive changes in their families and in their children’s behaviour. Moreover, the objections and resistance did not reduce the number of practitioners volunteering to learn and practise the programmes.

**With respect to social context**

The experiences from Norway could serve as a model and inspiration for large-scale implementation of MST in other nations. It is possible to have clear standards for training and evaluation of competence that ensure implementation fidelity and support local efforts.

**With respect to organisational and economic context**
Federal funding of training and technical support, combined with allowing agency employees to volunteer to participate, is a promising strategy. Moreover, research should be an integrated part of the implementation of MST.

Among the factors that may have contributed to the long-term sustainability and effectiveness of MST in Norway, the following seem to be most important: (1) a genuine interest in and commitment to the national implementation of evidence-based practices at the political and administrative levels, (2) increased interest in evidence-based practices among practitioners, (3) establishing a self-sustaining national centre for implementation and research, (4) the ability of the programme developers to support the implementation and research efforts, and (5) positive evaluations from families and positive media feedback.

Strengths:
Home-based treatment, a national centre for training, quality assurance and research, long-term funding, support at the policy level and from the public.

Weaknesses:
Expensive, not in accordance with the theoretical orientation of most practitioners in the field (who are eclectic or psychodynamically oriented), competition from non-evidence-based interventions, including treatment institutions and group homes.

Opportunities:
Increased capacity and competence in the treatment of serious behavioural problems, including crime and drug abuse; early interventions for adolescents at risk of entering a drug abuse trajectory; and empowering parents, families and networks.

Recommendations:

With respect to organisational and economic context
Implement several evidence-based programmes, for instance MST, functional family therapy and Treatment Foster Care Oregon, so that there are opportunities to choose from among them.


Links
[1] mailto:terje.ogden@nubu.no