Foundations
What Works Centre for Children & Families

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Intervention website: http://www.mdft.org

GUIDEBOOK INTERVENTION INFORMATION SHEET

Multidimensional Family Therapy

Please note that in the 'Intervention Summary' table below 'child age', 'level of need', and 'race and ethnicities information is **as evaluated in studies**. Information in other fields describes the intervention as **offered/supported by the intervention provider**.

Intervention summary	
Description	Multidimensional Family Therapy (MDFT) is a multicomponent therapeutic intervention for families with a young person between the ages of 13 and 18 years old with an identified behaviour or substance misuse problem. A qualified MDFT therapist meets with the young person and their parents up to three times a week to address issues occurring at the level of the adolescent, parent, family, and community. The length of the intervention is dependent on the family's needs but typically lasts four to six months.
Evidence rating	4
Cost rating	4
Child outcomes	• Preventing crime, violence and antisocial behaviour - Improved behaviour - Reduced offending. • Preventing substance misuse - Reduced use of marijuana - Reduced alcohol misuse - Reduced substance dependency.
Child age (population characteristic)	12 to 19 years old

Intervention summary	
Level of need (population characteristic)	Targeted Indicated
Race and ethnicities (population characteristic)	• African American • Hispanic • White.
Type (model characteristic)	Individual
Setting (model characteristic)	• Home • Outpatient setting.
Workforce (model characteristic)	A master's qualified social worker, family therapist, or clinical psychologist
UK available?	No
UK tested?	No

Model description

Multidimensional Family Therapy (MDFT) is a multicomponent therapeutic intervention for families with a young person between 13 and 18 years old with an identified behaviour or substance misuse problem.

A qualified MDFT therapist works with families up to three times a week over a period of four to six months to address issues occurring at the level of the adolescent, parent, family, and community. Behavioural change is facilitated through a series of conversations between the therapist and young person in individual therapy sessions, between the therapist and parents in parent sessions, in family sessions where the therapist facilitates meaningful conversations among the family members who are presented, and in sessions between the family and social systems in their community.

- The youth-focused component is typically delivered through eight to 20 individual therapy sessions (approximately 45 to 60 minutes each).

- The parent-focused component is typically delivered over the course of 4 to 10 sessions (approx. one to 1.5 hours long).
- The family-focused component of MDFT is typically delivered over the course of 4 to 10 sessions (approx. one to 1.5 hours long).
- A community-focused component can also be offered and is delivered over 4 to 10 community sessions/meetings (approx. one to 1.5 hours long).

Treatment is organised in three stages:

Stage 1 – Build a foundation for change: Therapists create an environment in which the youth and parents feel respected and understood. Therapists meet alone with each to establish a collaborative foundation for the changes to be sought. Stage 1 goals are to develop strong therapeutic relationships, achieve a shared developmental and contextual perspective on their problems, enhance motivation for individual reflection and self-examination, and begin the change process.

Stage 2 – Facilitate individual and family change: The focus of stage 2 is on behavioural and interactional change within youth and parents in their relationships. In the adolescent domain, MDFT focuses on improving youth self-awareness, self-worth, and confidence; developing meaningful short-term and long-term goals; and improving emotional regulation, coping, problem-solving, and communication skills. In the parent domain, the focus is on strengthening parental teamwork, improving parenting skills and practices, rebuilding parent–teen emotional bonds, and enhancing parent's individual functioning. In the family domain, MDFT works to improve family communication and problem-solving skills, strengthen emotional attachments and feelings of love and connection among family members, and improving everyday functioning of the family unit. In the community, the focus is on improving family members' relationships with social systems including school, court, legal workplace, and neighbourhood, and building capacity to access needed resources.

Stage 3 – Solidify changes: The last few weeks of treatment strengthen the accomplishments achieved. The therapist amplifies changes and helps families create concrete plans for responding to future problems such as substance use relapse, family arguments, or any other kinds of setbacks or disappointments. Family members reflect on the changes made in treatment, acknowledge each other for the efforts they have made, see opportunities for a brighter future, and express hope for the next phase of their lives together.

Throughout the intervention, homework is given to promote out of session changes, and phone calls to youth and parents are conducted to encourage change and problem solve through difficulties.

Target population

Age of child	13 to 18 years old
Target population	Adolescents who have substance misuse, behavioural, antisocial behaviour, mental health, educational/school, family mental health problems, or disorders.

Please note that the information in this section on target population is as **offered/supported by the intervention provider**.

Theory of change

Why		Who	How	What		
Science-based assumption	**Science-based assumption**	**Science-based assumption**	**Intervention**	**Short-term outcomes**	**Medium-term outcomes**	**Long-term outcomes**
Behavioural problems, substance misuse, and mental health issues during adolescence often persist into adult.	Behavioural and substance misuse problems in adolescence are often multi-determined by processes occurring at the level of the child, parent, family, and community resources (e.g. peers, school, recreation).	Adolescents who have substance misuse, behavioural, antisocial behaviour mental health, educational/school, family mental health problems or disorders.	• The young person and parents receive individual and joint therapy sessions up to three times a week. • The therapist creates a safe environment in which family members can consider the processes contributing to the young person's issues and identify solutions and goals addressing them.	• Parenting behaviours improved • Family communication improves • The young person's behaviour improves • The young person has more hope and optimism • Family relationships improve.	• The young person is more engaged with school • The young person reduces or stops their substance misuse • There is reduced likelihood of an out-of-home placement • The young person has improved mental health.	• Reduced risk of the young person having future behavioural, mental health, and substance misuse problems • Improved academic performance at school • Greater life satisfaction.

Implementation requirements

Who is eligible?	Adolescents who have substance misuse, behavioural, antisocial behaviour, mental health, educational/school, family mental health problems or disorders.
How is it delivered?	MDFT is delivered by a qualified MDFT therapist. The youth-focused component of MDFT is typically delivered over the course of eight to 20 individual therapy sessions (approx. 45 to 60 minutes long). The parent-focused component of MDFT is typically delivered over the course of four to 10 sessions (approx. one to 1.5 hours long). The family-focused component of MDFT is typically delivered over the course of four to 10 sessions (approx. one to 1.5 hours long). In addition, there is a community-focused component which is delivered over four to 10 community sessions/meetings (approx. one to 1.5 hours long). Families work with the therapist for a period typically lasting four to six months.
What happens during the intervention?	A therapist works individually and jointly with the young person and parents to address issues occurring at the level of the adolescent, parent, family, and community: • The youth-focused component is typically delivered through eight to 20 individual therapy sessions (approx. 45 to 60 minutes each). • The parent-focused component is typically delivered over the course of four to 10 sessions (approx. one to 1.5 hours long). • The family-focused component of MDFT is typically delivered over the course of four to 10 sessions (approx. one to 1.5 hours long). • A community-focused component can also be offered and is delivered over four to 10 community sessions/meetings (approx. one to 1.5 hours long). See model description for further information.
Who can deliver it?	This intervention is delivered by an MDFT Therapist with a master's qualification or higher in family therapy, social work, or psychology.
What are the training requirements?	Therapists have 65 hours of intervention training. Booster training of practitioners is recommended.
How are practitioners supervised?	It is recommended that practitioners are supervised by a host-agency supervisor with 15 to 20 hours of intervention training.

What are the systems for maintaining fidelity?	Intervention fidelity is maintained through the following processes: • Training manual • Other printed material • Other online material • Video or DVD training • Face-to-face training Fidelity monitoring.
Is there a licensing requirement?	No
***Contact details**	Contact person: Gayle A. Dakof Email address: info@mdft.org Website: http://www.mdft.org *Please note that this information may not be up to date. In this case, please visit the listed intervention website for up to date contact details.

Evidence summary

MDFT's most rigorous evidence comes from three RCTs consistent with Foundations' Level 3 evidence strength criteria. One of these studies has evidence of a long-term impact, meaning that MDFT has evidence consistent with Foundations' Level 4 criteria.

The first study was conducted in the United States and observed statistically significant reductions in MDFT young persons' reports of substance misuse and cannabis dependence a year after treatment compared to young people not receiving the intervention.

The second study was conducted with young people across Belgium, France, Germany, Netherlands and Switzerland, and observed statistically significant reductions in MDFT young persons' use of cannabis and other substances, as well as improvements in their behaviour a year following treatment in comparison to youth who did not receive the intervention.

The third study was conducted in the United States and observed statistically significant reductions in MDFT young persons' reports of antisocial behaviour, as well as fewer felony arrests 18 months following intervention completion in comparison to young people not receiving the intervention.

MDFT can be described as evidence-based: it has evidence from at least two rigorously conducted evaluations (RCT/QED) demonstrating positive impacts across populations and environments lasting a year or longer.

Child outcomes			
Outcome	**Improvement index**	**Interpretation**	**Study**
Reduced externalising symptoms	+10	0.48-point improvement on the Youth Self-Report (externalising subscale) (A year later)	2b
Reduced externalising symptoms	+15	1.18-point improvement on the Youth Self-Report (externalising subscale) (A year and a half later)	3
Reduced delinquency	+15	0.22-point improvement on the National Youth Survey Self-Report Delinquency Scale (general delinquency and index offences subscales) (A year and a half later)	3
Reduced felony arrests	+33	0.45-point reduction in felony arrests (administrative data from a justice system database maintained by the State of Florida) (A year and a half later)	3
Reduced substance use problem severity	+15	1.47-point improvement on the Personal Experience Inventory (Personal Involvement with Chemicals Scale) (Six months later)	1
Reduced substance use problem severity	+22	7.77-point improvement on the Personal Experience Inventory (Personal Involvement with Chemicals Scale) (A year later)	1
Reduced other drug use	+13	0.86-point improvement on the Timeline Follow-back Method (A year later)	1
Increased drug abstinence	+19	20-percentage point increase in proportion of participants reporting only minimal substance use (measured using	1

Child outcomes			
Outcome	**Improvement index**	**Interpretation**	**Study**
		the Timeline Follow-back Method) (A year later)	
Reduced cannabis dependence symptoms	+45	0.6-point reduction in number of symptoms of cannabis dependence (Adolescent Diagnostic Interview-Light) (A year later)	2a

Search and review

	Number of studies
Identified in search	15
Studies reviewed	15
Meeting the L2 threshold	0
Meeting the L3 threshold	3
Contributing to the L4 threshold	0
Ineligible	12

Individual study summary: Study 1

Study 1	
Study design	RCT
Country	United States
Sample characteristics	224 drug-using adolescents between the ages of 12 and 17.5 years old (mean = 15).
Race, ethnicities, and nationalities	• 72% African American • 18% White, non-Hispanic • 10% Hispanic.
Population risk factors	• Youth were mainly from low-income homes • 61% youth were on probation.
Timing	• Baseline • Post-intervention • Six-month follow-up • 12-month follow-up.
Child outcomes	• Reduced drug use problem severity (youth report) • Reduced other drug use (youth report) • Increased alcohol and drug abstinence (youth report).
Other outcomes	None
Study Rating	3
Citation	Liddle, H. A., Dakof, G. A., Turner, T. M., Henderson, C. E., Greenbaum & P. E. (2008) Treating adolescent drug abuse: A randomized trial comparing multidimensional family therapy and cognitive behavior Therapy. *Addiction*. 103, 1660–1670.

Brief summary

Population characteristics

This study was conducted in the United States with a sample of 224 adolescents between the ages of 12 and 17.5 years old (mean = 15) who were using drugs.

Youth were mainly male, African American, 15 years old, and from low-income homes. Most youths (58%) came from single-parent households. 61% youth were on probation.

All youths were drug users, with 75% meeting DSM-IV criteria for cannabis dependence, 20% alcohol dependence, and 13% other drug dependence, and 13%, 4%, and 2% for cannabis, alcohol, and other drug abuse, respectively. (Participants could meet diagnostic criteria for more than one substance use disorder.)

Study design

112 children were randomly allocated to an MDFT group, and 112 children were allocated to an individual cognitive behavioural therapy (CBT) group. A block randomisation procedure was used. Each block consisted of a random ordering of each treatment twice (four slots per block, two for MDFT and two for CBT for a total of 56 blocks), to allocate adolescents randomly to two groups.

Measurement

Data was collected at post-intervention, six-, and 12-month follow-up.

- **Youth reported** measured included Personal experience inventory (PEI) and Timeline follow-back method (TLFB).

Study retention

Post-intervention 55% (124) of participants completed the post-intervention assessment, representing 55% (47) of the MDFT group and 55% (53) of the CBT group. At the 6-month follow-up, 54% (104) of participants completed the assessment, with 54% (45) from the MDFT group and 51% (59) from the CBT group. At the 12-month follow-up, 61% (88) of participants completed the assessment, comprising 61% (39) from the MDFT group and 61% (49) from the CBT group.

Results

Data-analytic strategy

The aim of the study was to determine the efficacy of MDFT versus individual CBT using a 2 (treatment condition) X 4 (time) repeated-measures intent-to-treat design. Individual client change was analysed using latent growth curve modelling (LGM). Missing data was addressed by using all available data through full information maximum likelihood (FIML) estimation and the expectation-maximisation algorithm.

Findings

The study found a statistically significant greater reduction in substance use problem severity for the MDFT group. Starting from six-month follow-up through 12-month follow-up. The study also found that the MDFT group had a significant reduction in other drug use, and a significant increase in alcohol and drug abstinence.

In addition, it was found that both interventions were equally effective in significantly reducing frequency of cannabis use over time.

Study 1: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Drug use problem severity	Personal experience inventory (PEI), (youth report)	d = 0.39	Yes	224	Six-month follow-up
Drug use problem severity	Personal experience inventory (PEI), (youth report)	d = 0.59	Yes	224	12-month follow-up
Cannabis use	Timeline follow-back method (TLFB), (youth report)	Not reported	No	224	N/A
Alcohol use	Timeline follow-back method (TLFB) (youth report)	Not reported	No	224	N/A
Other drug use	Timeline follow-back method (TLFB) (youth report)	d = 0.32	Yes	224	12-month follow-up
Abstinence or minimal alcohol and drug use	Timeline follow-back method (TLFB) (youth report)	Not reported	Yes	224	12-month follow-up

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Complete abstinence	Timeline follow-back method (TLFB) (youth report)	Not reported	Yes	224	12-month follow-up

Individual study summary: Study 2

Study 2	
Study design	RCT
Country	Belgium, France, Germany, Netherlands, Switzerland
Sample characteristics	450 adolescents between ages of 13 and 18 years old, all with recently diagnosed cannabis use disorder.
Race, ethnicities, and nationalities	Not reported
Population risk factors	• In total, 84% dependent on cannabis. • Four in 10 had an alcohol use disorder. • Substance use disorders for drugs other than cannabis were rare (<5%). • One in three adolescents had been arrested in the past three months, mostly for drug offences, property crimes, and violence.
Timing	• 3-months post-baseline • 6-months post-baseline • 12-months post-baseline.
Child outcomes	**Study 2a:** • Reduced cannabis dependence (youth report) • Reduced cannabis dependence symptoms (youth report). **Study 2b:** • Reduced externalising behaviour (youth report).
Other outcomes	None

Study 2	
Study Rating	3
Citations	**Study 2a:** Rigter, H., Henderson, C. E., Pelc, I., Tossmann, P., Phan, O., Hendriks, V. & Rowe, C. L. (2013) Multidimensional family therapy lowers the rate of cannabis dependence in adolescents: A randomised controlled trial in Western European outpatient settings. *Drug and Alcohol Dependence*. 130, 85–93. **Study 2b:** Schaub, M. M., Henderson, C. E., Pelc, I., Tossmann, P., Phan, O., Hendricks V., Rowe, C. L. & Rigter, H. (2014) Multidimensional family therapy decreases the rate of externalising behavioural disorders symptoms in cannabis abusing adolescents: Outcomes of the INCANT trial. *BMC Psychiatry*. 14, 26.

Brief summary

Population characteristics

This study was conducted across five western European countries (Belgium, Germany, France, Netherlands, Switzerland) with a sample of 450 adolescents between the ages of 13 and 18 years old, all with recently diagnosed cannabis use disorder (dependence or abuse).

The mean age of the adolescents was 16.3 years; 85% were boys. 40% was of first- or second-generation foreign descent. Most adolescents lived with their family (87%) and attended school (75%). Parents were divorced or separated in 56% of cases.

In total, 84% were dependent on cannabis. Four in 10 had an alcohol use disorder. Substance use disorders for drugs other than cannabis were rare (<5%). One in three adolescents had been arrested in the past three months, mostly for drug offences, property crimes, and violence.

Study design

212 participants were randomly allocated to a Multidimensional Family Therapy (MDFT) group, and 238 to an Individual Psychotherapy (IP) group. Across the sites, 60 participants were randomised from Belgium (30 MDFT, 30 IP), 101 from France (38 MDFT, 63 in IP), 120 from Germany (59 MDFT, 61 IP), 109 from the Netherlands (55 MDFT, 54 IP), and 60 from Switzerland (30 MDFT, 30 IP). Study sample was stratified per site using three dichotomous variables (gender, age [13 to 14 years vs 15 to 18 years], and level of cannabis use in the past 90 days [74 or fewer days of cannabis consumption vs 75 or more]). For each stratum, the database computer generated 50 independent randomisations. The allocation ratio for MDFT and IP was 1:1, except in Paris (1:2) where manualised and a non-manualised IP were examined (collapsed in this paper into one IP condition).

Measurement

Measurement occurred at three-, six-, nine-, and 12-months post-baseline.

Study 2a included the following measures:

- **Interviews** included Adolescent Diagnostic Interview-Light (ADI-Light for cannabis).
- **Youth report** measures included Timeline follow-back method (TLFB).

Study 2b collected data on the following:

- **Youth report** measures included Youth Self Report (YSR) and Family Environment Scale (FES).
- **Parent report** measures included Child Behaviour Checklist (CBCL).

Study retention

At the 12-month follow-up, 89.1% (401) of families participated in the post-intervention assessment, representing 89.6% (190) of the MDFT group and 88.7% (211) of the IP group.

Results

Data-analytic strategy

The study utilised an intent-to-treat approach and employed latent growth curve modelling to analyse treatment effects. The model included site and referral source as covariates. Missing data were handled with full information maximum likelihood estimation, under the missing at random assumption. Therefore, data from all the 450 cases was analysed in the study.

Findings

The study found statistically significant positive outcomes favouring MDFT. MDFT participants were found to have reduced cannabis dependence and cannabis dependence symptoms in comparison to the IP group. They were also found to have reduced externalising behaviour.

In addition, significant positive changes before and after participants received interventions in both MDFT and IP groups, indicating that all study participants had reduced internalising and externalising behaviour as well as family conflicts over time was found. Family cohesion also increased over time in both groups.

Study 2a: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Cannabis dependence	Adolescent Diagnostic Interview-Light (ADI-Light for cannabis), Youth report	d = 0.65	Yes	450	12-month follow-up
Cannabis dependence symptoms	Adolescent Diagnostic Interview-Light (ADI-Light for cannabis), Youth report	d = 1.27	Yes	450	12-month follow-up
Frequency of cannabis use	Timeline follow-back method (TLFB), Youth report	d = 0.25	No	450	12-month follow-up

Study 2b: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Internalising behaviour	Youth Self Report (YSR), Youth report	Not reported	No	450	12-month follow-up
Externalising behaviour	Youth Self Report (YSR), Youth report	d = 0.26	Yes	450	12-month follow-up
Internalising behaviour	Child Behaviour Checklist (CBCL), Parent report	Not reported	No	450	12-month follow-up

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Externalising behaviour	Child Behaviour Checklist (CBCL), Parent report	Not reported	No	450	12-month follow-up
Family conflict	Family Environment Scale (FES), Youth report	Not reported	No	450	12-month follow-up
Family cohesion	Family Environment Scale (FES), Youth report	Not reported	No	450	12-month follow-up

Individual study summary: Study 3

Study 3	
Study design	RCT
Country	United States
Sample characteristics	112 adolescents between the ages of 13 and 19 years old diagnosed with substance abuse problems or dependency.
Race, ethnicities, and nationalities	• 58.93% Hispanic • 35.71% African American • 5.56% Other.
Population risk factors	• 60.71% abused Cannabis and 30.36% suffered from Cannabis dependence • 16.07% abused alcohol and 4.46% suffered from alcohol dependence • 16.96% abused other drugs and 7.14% suffered from other drug dependence • 41.07% suffered from anxiety disorder • 8.04% major depressive disorder • 51.79% conduct disorder • 22.32% oppositional defiant disorder • 17.86% ADHD.

Study 3	
Timing	• Baseline • Six-month post-baseline • 12-month post-baseline • 18-month post-baseline • 24-month post-baseline.
Child outcomes	• Reduced index offences (youth report) • Reduced externalising behaviour (youth report) • Reduced felonies (court records).
Other outcomes	None
Study Rating	3
Citation	Dakof, G. A., Henderson, C. S., Rowe, C. L, Boustani, M., Greenbaum, P., Wang, W., Hawes, S., Linares, C. & Liddle, H. A. (2015) A randomized controlled trial of multidimensional family therapy in juvenile drug court. *Journal of Family Psychology*. 29, 232–241.

Brief summary

Population characteristics

This study was conducted in the United States with a sample of 112 adolescents between the ages of 13 and 19 (mean = 16.1) diagnosed with substance abuse problems or dependency. 35.71% were African American; 58.93% were Hispanic; and 5.56% belonged to the 'Other' category. 54.46% came from single-parent households.

60.71% abused Cannabis and 30.36% suffered from Cannabis dependence. 16.07% abused alcohol and 4.46% suffered from alcohol dependence. 16.96% abused other drugs and 7.14% suffered from other drug dependence.

41.07% suffered from anxiety disorder, 8.04% major depressive disorder, 51.79% conduct disorder, 22.32% oppositional defiant disorder, 17.86% ADHD.

Study design

55 children were randomly assigned to an MDFT group and 57 children to an adolescent group therapy group (AGT). An urn randomisation procedure was used to ensure equivalence on the following established risk factors: gender, age, ethnicity, and family income.

Measurement

Measurement took place at baseline and six-, 12-, 18-, and 24-month post-baseline. Arrest data were extracted from juvenile justice records beginning 12 months prior to baseline and then continuing for 24 months after baseline.

- **Youth report** measures included Timeline Follow-Back Method (TLFB), Personal Experience Inventory (PEI), National Youth Survey Self-Report Delinquency Scale (NYS-SRD), and Youth Self-Report (YSR).
- **Administrative** measures included Juvenile Court Records.

Study retention

Six-month post-baseline

94.6% (106) of families participated, representing 98.2% (54) of the MDFT group and 91.2% (52) of the control group.

12-month post-baseline

81.3% (91) of families participated, including 83.6% (46) of the MDFT group and 79.0% (45) of the control group.

18-month post-baseline

83.0% (93) of families participated, with 85.5% (47) from the MDFT group and 80.7% (46) from the control group.

24-month post-baseline

83.9% (94) of families participated, comprising 92.7% (51) of the MDFT group and 75.4% (43) of the control group.

Results

Data-analytic strategy

Latent growth curve (LGC) modelling using robust maximum likelihood estimation was used to analyse individual client change. The model included gender, age, ethnicity, and number of previous arrests as covariates. All 112 participants randomised were included and analysed in the intent-to-treat analyses. Missing data were handled with full information maximum likelihood (FIML) estimation, under the assumption that the data were missing at random.

Findings

The study found significant positive outcomes favouring MDFT. MDFT children were found to have reduced index offences and felonies from seven to 24 months after baseline in comparison to the adolescent group therapy group (AGT). They were also found to have reduced externalising behaviour.

Study 3: Outcomes table

Outcome	Measure	Effect size	Statistical significance	Number of participants	Measurement time point
Child outcomes					
Index offences	National Youth Survey Self-Report Delinquency Scale (NYS-SRD), (Youth report)	d = 0.38	Yes	112	Seven to 24 months after intake
Externalising behaviour	Youth Self-Report (YSR) (Youth report)	d = 0.39	Yes	112	Seven to 24 months after intake
Arrests	Juvenile Court Records, (court records)	Not reported	No	112	N/A
Felonies	Juvenile Court Records, (court records)	d = 96	Yes	112	Seven to 24 months after intake
Misdemeanours	Juvenile Court Records, (court records)	Not reported	No	112	N/A

Other studies

The following studies were identified for this intervention but did not count towards the intervention's overall evidence rating. An intervention receives the same rating as its most robust study or studies.

Dennis, M., Godley, S. H., Diamond, G., Tims, F. M., Babor, T., Donaldson, J. & Funk, R. (2004) The Cannabis Youth Treatment (CYT) study: Main findings from two randomized trials. Journal of Substance Abuse Treatment. 27, 197–213.

Greenbaum, P. E., Wang, W., Henderson, C. E., Kan, L., Hall, K., Dakof, G. A. & Liddle, H. A. (2015) Gender and ethnicity as moderators: Integrative data analysis of multidimensional family therapy randomized clinical trials. *Journal of Family Psychology*. 29(6), 919.

Henderson, C. E., Dakof, G. A., Greenbaum, P. E. & Liddle, H. A. (2010) Effectiveness of multidimensional family therapy with higher severity substance abusing adolescents: Report from two randomized controlled trials. *Journal of Consulting and Clinical Psychology*. 78, 885–897.

Henderson, C. E., Rowe, C. L., Dakof, G. A., Hawes, S. W. & Liddle, H. A. (2009) Parenting practices as mediators of treatment effects in an early-intervention trial of multidimensional family therapy. *American Journal of Drug and Alcohol Abuse*. 35, 220–226.

Liddle, H. A., Dakof, G. A., Henderson, C. E. & Rowe, C. L. (2011) Implementation outcomes of multidimensional family therapy detention to community (DTC): A re-entry program for drug using juvenile detainees. *International Journal of Offender Therapy and Comparative Criminology*. 55, 587–604.

Liddle, H. A., Dakof, G. A., Parker, K., Diamond, G. S., Barrett, K. & Tejeda, M. (2001) Multidimensional Family Therapy for adolescent drug abuse: Results of a randomized clinical trial. *American Journal of Drug and Alcohol Abuse*. 27 (4), 651–688.

Liddle, H. A., Rowe, C. L., Dakof, G. A., Henderson, C. E. & Greenbaum, P. E. (2009) Multidimensional family therapy for young adolescent substance abuse: twelve-month outcomes of a randomized controlled trial. *Journal of Consulting and Clinical Psychology*. 77 (1), 12.

Liddle, H. A., Rowe, C. L., Dakof, G. A., Ungaro, R. A. & Henderson, C. E. (2004) Early intervention for adolescent substance abuse: Pretreatment to posttreatment outcomes of a randomized clinical trial comparing multidimensional family therapy and peer group treatment. *Journal of Psychoactive Drugs*. 36, 49–63.

Liddle, H. A., Rowe, C. L., Gonzalez, A., Henderson, C. E., Dakof, G. A. & Greenbaum, P.E. (2006) Changing provider practices, program environment and improving outcomes by transporting Multidimensional Family Therapy to an adolescent drug treatment setting. *The American Journal of Addictions*. 15, 102–112.

Marvel, F., Rowe, C. L., Colon-Perez, L., DiClemente, R. J. & Liddle, H. A. (2009) Multidimensional Family Therapy HIV/STD risk-reduction intervention: An integrative family-based model for drug-involved juvenile offenders. *Family Process*. 48 (1), 69–84.

Rowe, C. L., Alberga, L., Dakof, G. A., Henderson, C. E., Ungaro, R. & Liddle, H. A. (2016) Family-based HIV and sexually transmitted infection risk reduction for drug-involved young offenders: 42-month outcomes. *Family Process*. 55 (2), 305–320.

Schmidt, S. E., Liddle, H. A. & Dakof, G. A. (1996) Changes in parenting practices and adolescent drug abuse during Multidimensional Family Therapy. *Journal of Family Psychology*. 10, 12–27.

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Note on provider involvement: This provider has agreed to Foundations' terms of reference (or the Early Intervention Foundation's terms of reference), and the assessment has been conducted and published with the full cooperation of the intervention provider.