PART III

EVIDENCE-BASED CLINICAL TREATMENT MODELS

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In T. Sexton & J. Lebow (Editors) (2016), <u>Handbook of Family Therapy</u>. New York: Routledge.

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MULTIDIMENSIONAL FAMILY THERAPY

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There is little question that drug abuse results from both intraindividual and environmental factors. For this reason, unidimensional models of drug abuse are invariably inadequate and multidimensional research and intervention approaches are necessary.

(Glantz & Leshner, 2000, p. 796)

Introduction: Half full or half empty?

Adolescents occupy a noticeable place in history. Throughout the ages, teenagers have stimulated curiosity, even confusion. At one time or another, scholars, opinion leaders, politicians, policy makers, interventionists, the public at large, and surely parents themselves have taken wrong turns in attempts to make sense of adolescents. Therapists across professions and clinical orientations may squabble about many things, but generally they concur about the challenges of adolescent treatment. Working with youth is difficult and demanding in several ways. Typically youth drug use is secretive or at least hidden from family and other adults. Clinically referred adolescents are often involved in illegal and criminal activities, and can spend considerable time with drug-using peers. Other aspects, low motivation to change, compromises in functioning spanning several life domains, involvement in multiple systems of care, and treatment system factors that too often fail the youth as much as (per the literature's characterization) the youth "fails" treatment can combine to make youth drug abuse treatment an indisputably and enormously tough job.

At the same time, advances worldwide in the substance abuse and delinquency specialties offer tangible guidance and hope (Catalano et al., 2012; Henggeler & Sheidow, 2012; Rowe, 2012). We have witnessed unprecedented amounts of high-quality treatment research, at least bursts of increased funding for specialized youth services, and a continuing interest from basic research and applied prevention and treatment scientists, policy makers, clinicians and prevention programmers, professional and scientific societies, mass media and the arts, and the public at large in the health issues and problems of youth. Developmental and developmental psychopathology research adds to our understanding about factors and forces contributing to adolescent drug experimentation and abuse. The family therapy evidence-based treatment specialty has grown rapidly, if unglamorously, compared to the vibe that characterized family therapy in its glory days (Fraenkel, 2005). In the last dcade,

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for example, more and improved quality intervention studies have been published than ever before (Boustani, Henderson, & Liddle, 2015; White, Dennis, & Tims, 2002). At the same time, controversy and conflict have surfaced about realistic practice-level conclusions that can be drawn about research-supported treatments (Drug and Alcohol Findings, 2014; Kazdin, 2013; Henggeler et al., 2006; Lindstrom et al., 2013; Littell, 2008; Ogden & Hagen, 2008). Using, among other influence strategies, credible evidence, decision makers in public sector clinical services consistently include family-centered care in their service reform efforts (President's New Freedom Commission on Mental Health, 2003; Stroul, Blau, & Friedman, 2010).

Background and Foundations

This chapter describes Multidimensional Family Therapy (MDFT), a comprehensive, developmentally oriented treatment for youth substance abuse and delinquent behaviors (Liddle, 1991; Liddle, Dakof, & Diamond, 1991).1 Systematic treatment development, rigorous evaluation, and dissemination to diverse real world clinical settings are the principal objectives of MDFT (Liddle & Hogue, 2001). MDFT is identified as an evidence-based treatment in scientific reviews (Akram & Copello, 2013; Austin, Macgowan, & Wagner, 2005; Becker & Curry, 2008; Hawkins, 2009; Perepletchikova, Krystal, & Kaufman, 2008; Vaughn & Howard, 2004; Waldron & Turner, 2008), independent registries that evaluate interventions (Clark, 2011); Clearinghouse for Military Family Readiness, 2013; European Monitoring Centre on Drugs and Drug Addiction, 2014; Drug Strategies, 2003, 2006; NREPP, 2012), and government and non-government organizations in the U.S. and abroad (NIDA, 2014; NREPP, 2012; CrimeSolutions.gov, 2014; Sherman, 2010; United Nations Office on Drugs and Crime (UNODC), 2014; Compilation of Evidence-Based Family Skills Training Programmes, 2014). Evidence in evidence-based refers to the model's research program, as well as to how it uses the empirical knowledge base about positive youth, parent, family development and studies on problem development (Liddle & Rigter, 2013). As detailed in influential blueprints recommending a new kind of science and service connection (Institute of Medicine, 2001; National Research Council and Institute of Medicine, 2009), recommendations to translate existing basic science for intervention design (National Research Council, 2009), and guideline development (Brown et al., 2008; Holmbeck, Devine, & Bruno, 2010), MDFT brings research-derived content directly into treatment (Liddle et al., 2000; Liddle, Rowe, Dakof, & Lyke, 1998).

Several empirically derived frameworks can organize diverse basic science knowledge bases. They provide an overall orientation and inform clinical work directly (Liddle & Saba, 1983). The risk and protective factor framework teaches clinicians about the known determinants and buffers to dysfunction. It facilitates identification of factors from different domains of functioning (psychological, social, biological, neighborhood/community) that create problems and the forces that might help to solve them. It also helps therapists to think in interactional or process terms about the many clinically relevant dimensions of the adolescent's and family's current life circumstances (Hawkins, Catalano, & Miller, 1992). The developmental perspective, including the developmental psychology and developmental psychopathology research areas, is another useful framework. This knowledge base teaches therapists about the course of individual adaptation and dysfunction through a lens of normative development. Developmental psychopathology moves beyond considerations of symptoms only to understand a youth's capacity to cope with the developmental tasks at hand and considers the implications of stressful experiences and developmental failures in one developmental period for (mal)adaptation in future periods (Rohde et al., 2007). Because multiple pathways of adjustment and deviation may unfold from any given point, emphasis is placed equally on understanding competence and resilience in the face of significant risk. Conceptualized as a problem of development (Newcomb, Scheier, & Bentler, 1993), adolescent substance abuse is a departure







from a range of adaptive developmental pathways (Zucker et al., 2008), and represents difficulties in meeting developmental challenges (Brook, Kessler, & Cohen, 1999a). A third framework, the ecological perspective articulates the intersecting web of social influences that form the context of human development (Bronfenbrenner & Morris, 2006). Ecological theory regards the family as a principal developmental arena, and includes details on how both intrapersonal and intrafamilial processes are affected by and affect extrafamilial systems (i.e., significant others involved with the youth and family, such as the youth's peers, school, job or juvenile justice personnel). This theory is compatible with ideas about reciprocal effects in human relationships, underscores how problems nest at different levels, and how circumstances in one domain can reverberate in other areas. And finally, the dynamic systems perspective (Granic, 2005) emphasizes the importance of real-time, moment-to-moment processes as the raw material that grows developmental outcomes. Abstractions that summarize behavior in terms such as adolescent substance abuse disorder or conduct disorder provide insufficient detail to explain the individual and family developmental outcomes, and leave out important aspects such as the range of emotional tendencies and the multiple relationships and context factors in which individual tendencies are expressed.

Primus inter pares (First Among Equals)

Contextual and developmental in philosophy and clinical methodology, the family's central role in understanding and treating youth problems is well established. A thorough assessment of family functioning includes each individual's mental state, emotional functioning, history, and life activities in addition to their role as a family member. Coordinated individual and multi-person subsystem interventions are basic to MDFT (Liddle & Rigter, 2013).

Working with the inner or private world of the adolescent and the parent are essential on theory-based (developmental *and* clinical change theory), empirical (e.g., positive multiple alliances predict MDFT outcomes), strategic, and practical grounds (the value of multiple perspectives). Dichotomous, either/or thinkingabout the primacy of individuals vs. systems, emotions vs. cognitions, behavior change vs. individual reflection and personal examination, as examples—is avoided. It is not that these concepts and phenomena are incapable of definition, measurement, conceptualization, and clinical use. Individuals exist as both a whole and as a part. The foci of assessment and intervention-the adolescent, parent, family, and community or extrafamilial—are understood as holons (Koestler, 1978) as both wholes and parts. Each is a realm of life activity, offers clinical relevance, and intervention potential in and of itself, but each is also understood in relation to and in dynamic, real-time interaction with the others.

MDFT Guiding Principles

- Adolescent problems are multidimensional phenomena. Individual biological, social, cognitive, personality, interpersonal, familial, developmental, and social ecological aspects can all contribute to the development, continuation, worsening and chronicity of drug problems.
- Family functioning is instrumental in creating developmentally healthy lifestyle alternatives for adolescents. The teen's relationships with parents, siblings, and other family members are fundamental areas of assessment and change. The adolescent's day-to-day family environment offers numerous and concrete opportunities to re-track the developmental problems of youth.
- Problem situations provide essential information and opportunity. Symptoms provide assessment information about individual and family functioning and present essential intervention opportunities.
- Change is multifaceted, multidetermined, and stage-oriented. Behavioral change emerges from interaction among systems, levels of systems and people, and domains of functioning that include intrapersonal and interpersonal processes. A multivariate conception of change commits the clinician to a coordinated, sequential use of multiple





change methods and working multiple change pathways.

- Motivation is not assumed but it is malleable.
 Motivation to enter treatment or to change will not always be present with adolescents or their parents. Treatment receptivity and motivation vary in individual family members and extrafamilial others. Treatment reluctance is not pathologized. Motivating teens and family members about treatment participation and change is a fundamental therapeutic task.
- Multiple therapeutic alliances are required, and they create a foundation for change. Therapists create individual working relationships with the adolescent, the subsystem of individual parent(s) or caregiver(s), and individuals outside of the family who are or should be involved with the youth.
- Individualized interventions foster developmental competencies. Interventions have generic or universal aspects. For instance, creating opportunities to build teen and parental competence during and between sessions is generic—applicable to all cases. But development- or competence-enhancing interventions must be personalized—tailored or individualized to each person and situation. The family's background, history, interactional style, culture, language and experiences are dimensions on which interventions are customized. Structure and flexibility are two sides of the same therapeutic coin.
- Treatment occurs in stages; continuity is stressed. Particular standard operations (e.g., adolescent or parent treatment engagement and theme formation), the parts of a session, whole sessions, stages of therapy, and therapy overall are conceived and organized in stages.
- Continuity—linking pieces of therapeutic work together—is critical. Each session is one piece that combines with others as thematic work proceeds over time (again, wholes and parts). Similarly, the parts of treatment are woven together in an active attempt by the therapist to maintain continuity and build linkages between sessions

- to deepen and solidify the change that starts small but is nurtured over the weeks.
- Therapist responsibility is emphasized. Therapists are responsible for: a) promoting participation and enhancing motivation of all relevant persons; b) creating a workable agenda and clinical focus; c) providing thematic focus and consistency throughout treatment; d) prompting behavior change; e) evaluating, with the family and extrafamilial others, the ongoing success of interventions; and on this basis, f) collaboratively revising focus and interventions as necessary.
- Therapist attitude is fundamental to success. Therapists advocate for adolescents and parents. They are neither "child savers" nor unidimensional "tough love" proponents. Therapists are optimistic but not naive or Pollyannaish about change. Their sensitivity to environmental or societal influences stimulates ideas about interventions rather than reasons for how problems began or excuses for why change is not occurring. As instruments of change their personal functioning facilitates or handicaps their work.

Clinical Theory

Clinicians and trainers report that using MDFT offers repertoire-expanding opportunities for creativity (Godley, White, Diamond, Passetti, & Titus, 2001). Individual sessions with the youth, for instance, focus on current pressures, complaints, drug-taking motivation and settings, as well as big picture issues of developing identity, and the youth's hopes and dreams. Sessions also focus on thoughts, feelings and behaviors that have next-day or next-session relevance for the parents, and for the youth's environment in any number of ways. A full session or a brief phone conversation with a parent that follows the youth's session can yield details from the parent about her response to the youth's day-to-day behavior around the house. Parents are advised or coached about a revised response to what has just been learned or experienced. An individual parent session may focus on parenting practices such as the details of monitoring or other house rules, or the parent-youth relationship per se,







but it may also include a deep discussion of the mother's despair about parenting. Treatment can stimulate feelings about a parent's family of origin—experiences a parent believes is handicapping her capacity to feel compassion for or even love her child. MDFT is not a traditional family therapy according to the early incarnations of the term. MDFT could be described as a family-based subsystem therapy, a treatment that works not only with and inside the various "constituent parts" of individuals (i.e., reflecting, deliberating, coaching) and broader systems but also at their intersections in shaping interactions and creating growth oriented individual experiences directly in sessions.

A first task is to understand fully and concretely the current life events of each family member. Clinicians think about how they receive and interpret the clinical presentation that includes diagnoses, previous history, individual functioning, and the present circumstances in the family's and youth's multiple environments. These activities preempt a therapist's becoming preoccupied with or moving to problem-solving interventions prematurely. Clinicians see and speak to the family with a developmentalist's orientation. Family members are quite able to indicate what's important, what's urgent, and what the priorities should be. A launching pad for all interventions, the developmental orientation has attitudinal and belief system aspects, and, of course, a factual basis as well (Offer & Schonert-Reichl, 1992). Accurate knowledge about adolescent development, a parent's development, family development, all from a dynamic systems, or a developmental-contextual frame, infuses therapist training and ongoing supervision. Problem-solving activities are attempts to offer, through an instrumental and close partnership with the youth and parents, as well as outsiders who are involved with the youth in one way or another, a time-bounded relationship with unique features. This relationship and activities-in essence multiple conversations (usually called sessions)-take into account many perspectives and agendas. Shaped and accentuated in several individual and multiperson conversations, therapeutic attention and participation coheres around a central objective-significant and demonstrated improvement of the health and well-being of the youth and family. Skills and communication training are needed frequently and included flexibly, and we aim to sponsor a more profound promotive process within the youth and family. Treatment participation yields an increased caring about and investment in family members' own and each other's lives. Adolescents and parents find enhanced reasons to go on, try again, and develop alternatives to present circumstances.

Logic Model

These processes include renewed day-to-day motivation. But they also include articulating and discussing a Big Picture that encompasses individual and family plans. Focusing on and using emotion is one means of materializing the desired processes. For instance, we watch a film, read a novel, view a work of art-each of these can stimulate emotion, create certain experiences, and surely work on humans in various ways or at different levels. Therapy—conversations about important things and with significant others—can evidence multiplicity in terms of its experience and impact. MDFT develops and uses what individuals consider larger life themes (Markus & Nurius, 1986), braiding these with behaviorally oriented detailed work in skills training and problem solving. The youth, parents, and even outsiders become engaged at both broader, thematic levels (i.e., join together to stop the youth's slide into deeper drug use and delinquent behavior, or listen to the youth's experiences and reflections on his life). The therapist's collaboration in theme articulation has generic and idiosyncratic elements—the "culture of the streets" or "culture of drug use," "having the kind of family I always wanted to have," "doing better with my children than my parents were able to do with me." Themes come to life through the real-life stories of family members. While serving motivational purposes, this kind of work also creates continuity in the treatment. Meaningful conversations offer participants personally relevant and practically useful touchstones as all move through the multiple discussions of treatment.





Overview of Core Aspects—Alliances and Engagement

Since adolescents enter treatment under coercion frequently, our aim is create an environment of respect, curiosity, and potential for the youth to, as we say, "get something out of this for yourself." We do not expect the adolescent to have enthusiasm or motivation about starting therapy. Shame, stigma, overwhelming legal troubles, and no experience in understanding what treatment can do, and even negative therapy experiences, are among the many issues that may be at play. We reach out directly to the youth and to the parents as well to build motivation and establish a practically oriented definition for what treatment might accomplish. While therapy resistance is a recurring topic in the adolescent literature, we find most adolescents respond well to the aforementioned strategies. An interaction seems to operate. In a punitive, moralistic, system-mandated, parent-centered therapy that presents no or insufficient opportunity for the youth's voice be cultivated and responded to, resistance is understandable. Treatment with adolescents can attend to individual youth, parent and family, and others' demands and needs. And, when treatment of this nature is offered skillfully, adolescents do more than comply, they participate.

Effective therapy creates positive feedback spirals. When adolescents show themselves to be reasonable responders to therapy's demands, adults experience new aspects of their teenager. The issues, stresses, unhappiness, gripes, and the pressures as felt by a youth are all topics for exploration and expression in MDFT. Developmentally framed and discussed individual developmental milestones, identity, sexuality, changing family relations at this developmental stage, desire for more freedom and a say in how their everyday life goes are included. The youth's sincerely felt life experiences are elaborated in individual sessions. Therapist and youth also discuss what to discuss in family sessions and what to hold on to.

Parents themselves need individual attention, per previous remarks. A parent's functioning as an adult, outside of their caregiving roles and responsibilities, must be covered. Relationship difficulties, health concerns, money problems and stresses, and individual developmental challenges are grist for the mill of the individual work with a parent. The multiple therapeutic alliances, where each person buys into treatment in their own way, as well as in a collective way, are foundational structures and processes that begin behavioral change.

Program Features

Multidimensional Assessment

Assessment yields a therapeutic blueprint. The blueprint directs therapists about where to intervene across multiple domains and settings of the teen's life. A comprehensive, multidimensional assessment process identifies risk and protective factors in relevant areas, and prioritizes and points to specific areas for change. Information about functioning in each target area comes from referral source information, circumstances, and dynamics, individual and family interviews, observations of both spontaneous and instigated family interactions, and observation of family member interactions with influential others outside of the family as well. Four interdependent domains are covered with every case: 1) adolescent, 2) parent(s), 3) family interaction, and 4) extrafamilial social systems. Attending to deficits and hidden areas of strength, we obtain a picture of the unique combination of assets and weaknesses in the adolescent, family, and ecosystem. This portrait includes a multiple systems formulation of how the current situation and behaviors are adaptations, understandable and "make sense," given the adolescent's and family's developmental history and current risk and protection profile. Interventions decrease risk processes known to be related to dysfunction development or progression (parenting problems, affiliation with drug-using peers, disengagement from and poor outcomes in school), and enhance protection, first within areas of urgent need, and in consideration of the most accessible and malleable domains. An ongoing process rather than a single event, assessment continues throughout therapy as new information emerges. In this sense, assessments, and therapeutic planning overall, are







never disconnected from change plans, and they are modified according to ongoing events and feedback from interventions.

A home-based or clinic-based family session generally starts treatment. Therapists stimulate family interaction on important topics, noting to themselves how individuals contribute differentially to the adolescent's life and current circumstances. We also meet alone with the adolescent, the parent(s), and other members of the family within the first session or two. Individual meetings reveal the unique perspective of each family member, how events have transpired (e.g., legal and drug problems, neighborhood and peer influences, school and family relationship difficulties), what they have done to address the problems, what they believe needs to change with the youth and family, as well a parent's own concerns and problems, perhaps only indirectly related to the youth.

Therapists elicit the adolescent's life story during early individual sessions. Sharing life experiences contributes to the teen's engagement. It provides a detailed picture of the severity and nature of the youth's drug use and circumstances, individual beliefs and attitude about drugs, trajectory of drug use over time, family history, peer relationships, school and legal problems, any other social context factors and important life events. A therapist must get to know, in practical terms, what is important to the youth—what are the things that he or she values. Therapeutic conversations sketch out an eco-map-the adolescent's current life space. This includes the neighborhood, indicating where the teen hangs or buys or uses drugs, where friends live, school or work location, and, in general, where the action is in the youth's environment. Therapists inquire about health and lifestyle issues, including sexual behavior. Comorbid mental health problems are assessed through the review of previous records and reports, the clinical interview process, and psychiatric evaluations. Adolescent substance abuse screening devices, including urine drug screens which we use extensively in therapy, are invaluable in obtaining a full, dynamic picture of the teen's and family's circumstances.

Assessment with the parent(s) includes functioning as parents and as adults, apart from

the parenting role, with individual, unique history and concerns. We assess the parents' strengths and weaknesses in terms of parenting knowledge, skills and parenting style, parenting beliefs, and emotional connection to their child. We inquire in detail about parenting practices, house rules, curfew, and expectations about family issues in individual sessions with the parent(s) as well as with the youth. In family sessions, clinicians observe and take part in parent-youth discussions, listening for point of view, critical incidents, references to significant past events, problem solving, and relationship indicators such as supportive or critical expressions. In discussing parenting style and beliefs, therapists ask parents about their own experiences, including family life when they were growing up. A parent's mental health status and substance use are also evaluated as potential challenges to improved parenting. On occasion we make referrals for individual adjunctive treatment of drug or alcohol abuse or serious mental health problems, but these are rare.

Information on extrafamilial influences is combined with the adolescent's and family's reports to compile the fullest possible picture of individual and family functioning relative to external systems. One component of this focus on-site includes educational academic tutoring that integrates with core MDFT work. We assess school- and job-related issues thoroughly. Therapists build relationships and work closely and collaboratively with juvenile court and probation officers regarding the youth's legal charges and supervision requirements. Clinicians help parents understand the potential harm of continued negative or deepening legal outcomes. Using a non-punitive tone, we help teens face and deal with their legal predicament. Friendship network assessment involves encouraging teens to talk about peers, school, and neighborhood contexts in a detailed and forthright manner. Friends may be asked to join a session, may be phoned during a session with the youth, and can be met during sessions in the family's home. The creation of concrete alternatives that provide prosocial, development-enhancing day-to-day activities using family, community or other resources is a driving force in MDFT.





Adolescent Module

Establishing therapeutic alliances and creating a therapeutic foundation are two sides of the same coin. The therapeutic alliance with the teenager is a working relationship that is distinct from but related to parallel efforts with the parent. We present therapy as a collaborative process, following through on this proposition by collaboratively defining therapeutic goals that are personally meaningful to the adolescent. Goals become apparent as the teen expresses his or her experience and discusses his or her life so far. Treatment aims to attend to these Big Picture dimensions. Problem solving, creating practical and reachable alternatives to a drug using and delinquent lifestyle, all of these remediation efforts exist within work that connects to a teen's conception of his or her own life, values, and life's direction and meaning.

Success in one's alliance with the teenager does not go unnoticed to parents. Although it can cut both ways, we find that parents both expect and appreciate a therapist's reaching out to form a distinct relationship and therapeutic focus with the teen. Individual sessions are indispensable; their purpose is defined in "both/and" terms. These conversations allow access and therapeutic focus on individual and parent–teen and other relationship issues through the methods that are available to an individual therapist. Additionally, individual parent and teen meetings prepare (motivate, rehearse, coach) each to come together to discuss matters needing improvement.

Parent Module

We focus on reaching the caregiver(s) as an adult with individual issues and needs, and as a parent who may have declining motivation or faith in her or his ability to influence their child. Interventions include enhancing feelings of parental love and emotional connection, underscoring parents' past efforts, acknowledging difficult past and present circumstances, and generating hope. When parents enter into, think, talk about and experience these processes, their emotional and behavioral investment in their adolescent grows. This process, the expansion of a parent's commitment

and investment to their child's welfare, is basic to the MDFT change model. Achieving these therapeutic tasks sets the stage for later changes. Taking the first step toward change with the parent, these interventions grow parents' motivation and, gradually, their willingness to address relationship improvement and parenting strategies. Increasing parental involvement with one's adolescent (e.g., showing an interest, initiating conversations, creating a new interpersonal environment in day-to-day transactions), provides a new foundation for attitudinal shifts and behavioral and change in parenting. Parental competence is fostered by teaching and coaching about normative characteristics of parent-adolescent relationships, consistent and age-appropriate limit setting, monitoring, and emotional supportall research-established parental behaviors that enhance relationships, individual and family development.

Cooperation is achieved and motivation is grown by underscoring the serious, often life-threatening circumstances of the youth's life, and establishing an overt, discussable connection (i.e., a logic model) between that caregiver's involvement and creating behavioral and relational alternatives for the adolescent. This follows the general procedure used with the parents—the attempt to promote caring and connection through several means, first through an intense focusing and detailing of the youth's difficult and sometimes dire circumstances and the need for his or her family to help.

Parent-Adolescent Interaction Module

MDFT interventions also change development-impeding interaction directly. Shaping changes in parent-adolescent interaction are made in sessions through variations in the structural family therapy method of enactment. A clinical method *and* a mini-change theory (Liddle, 1999), enactment elicits topics, relationship events, and themes that are important in the everyday life of the family. Upon discussion relationship strengths and problems become apparent. Therapists then assist family members to discuss and to solve problems in new ways. The method expands behavioral alternatives as the therapist







actively guides, coaches, and shapes increasingly positive and constructive family interactions. In order for discussions between parent and adolescent to involve problem solving and relationship healing, parents and adolescents must be able to experience a daily back and forth without excessive blame, defensiveness, or recrimination. Treatment helps teens and parents to pull back from extreme, inflexible stances as these actions create poor problem solving, hurt feelings, and erode motivation and hope for change. This work may be done in individual sessions that gently cover important issues and prepare family members for family sessions where the issues will be discussed forthrightly and better ways of relating are tried. Skilled therapists direct with respect in-session conversations on touchy topics in a patient, sensitive way.

Module on Interactions and Outcomes with Social Systems External to the Family

MDFT also facilitates change in how the family and adolescent interact with involved extrafamilial systems (Liddle, 2014). The teen and their family may be involved in multiple social systems. Success or failure in negotiating these systems has considerable impact on short-term and in some cases longer-term life course. Close collaboration with the school, legal, employment, mental health, and health systems influencing the youth's life is critical for initial and durable change. For an overwhelmed parent, aid in dealing with complex bureaucracies or in obtaining needed adjunctive services not only increases engagement, but also improves his or her ability to parent effectively by reducing stress and burden. Therapists help to set up meetings at school or with juvenile probation officers, and these relationships play an integral role in creating positive youth change (Liddle, Dakof, Henderson, & Rowe, 2011). They regularly prepare the family for and attend youth's juvenile justice disposition hearings, understanding that successful compliance with the supervision requirements is a core therapeutic focus and task (Liddle, 2014). School or job skills are also basic aspects of the therapeutic program since they represent real-world settings in which youth develop competence, succeed, and build pathways away from drug using peers and antisocial behavior. In some cases, legal, medical, housing, social service agency, immigration issues, or financial problems may be urgent areas of need. Therapists think through the interconnection of these life circumstances in specifying a flexible and dynamic case conceptualization, and they know that these arenas of everyday life are influential in improving family life, parenting, and a teen's reclaiming of his or her life from the perils of the streets. Not all multisystem problems can be solved, but in every case our rule of thumb is to assess all of them, establish priorities collaboratively and overtly, and, as much as possible, work actively to help the family achieve better day-to-day outcomes relative to the most malleable and consequential areas.

Decision Rules about Individual, Family or Extrafamilial Sessions

As a therapy of subsystems, MDFT consists of working with parts (subsystems) to larger wholes (systems) and then from wholes (family unit) back down to smaller units (individuals). Any given session's composition depends on stage of treatment and session goals. The interview's goals can exist in one or more categories. For example, there may be strategic goals that suggest who should be present for all or part of an interview. For example, the first interview, given its strategic, information-gathering, and foundation-building objectives, suggests that all family members are present for at least a large part of the session. Later in the treatment, individual meetings with parents and the teen may be needed because of estrangement or high conflict. Individual sessions build relationships, acquire information, and also prepare for joint sessions (working parts to a larger whole). Session composition may be dictated by therapeutic needs pertaining to certain kinds of therapeutically essential information. Individual sessions are often required to uncover aspects of relationships or circumstances that may be impossible to learn about in joint interviews. Therapeutic goals about working a particular relationship theme in vivo, via enactment for instance, may





be another rationale for decisions about session composition.

MDFT works in four interdependent and mutually influencing subsystems with each case. The rationale for this multiperson focus is theory based and practical. While other family-based interventions might address parenting practices by working alone with the parent for much of the therapy, MDFT is unique in its way of not only working with the parents alone but also focusing significantly on the teen alone, apart from the parent sessions, and apart from the family sessions. These individual sessions have enormous strategic, substantive, and relationship-building value. They provide point of view information and reveal feeling states and historical events, not always forthcoming in family sessions. The individual meetings establish one-on-one relationships. Family-based treatment means establishing multiple therapeutic relationships rather than single therapeutic alliances as is the case in individual treatment. If individual therapeutic alliances are basic to individual therapy's success, multiple therapeutic alliances, and success in those relationships, seem equally fundamental to success in our version of family-based therapy. They actualize the kinds of therapeutic processes from which positive clinical outcomes emerge. A therapist's relationships with different people in the mosaic that forms the teen's and family's lives are the starting place for inviting and instigating change attempts. The strategic aspects of these actions are probably obvious by now. There is a leveraging, a shuttle diplomacy that occurs in the individual sessions as they are worked to create content, motivation, and readiness to address other family members in joint sessions.

Training: It's Impossible to Learn to Plow by Reading Books (Linklater, 1988)

As the film title above suggests, MDFT training is about *learning by doing*. The training framework (Breunlin, Liddle, & Schwartz, 1988; Liddle & Saba, 1983; Liddle, 1988), clinical training methods, including live supervision (Liddle & Schwartz, 1983; Liddle, Davidson, & Barrett, 1988) and videotape review (e.g., Liddle,

Breunlin, Schwartz, & Constantine, 1984) remain relevant. At the same time, they have been revised over the years to reflect current training goals and settings (e.g., creating an MDFT team of clinicians and supervisors in community clinics and residential treatment settings). The manual used in one of the MDFT multisite studies is available online (Liddle, 2002), and the current MDFT manual with core sessions, clinical and supervision protocols is forthcoming (Liddle, in press). A competency-based trainingto-certification procedure includes clinical site readiness preparation, step-by-step clinical and supervision training procedures including training of supervisors/trainers protocols. Teams of MDFT therapists are trained through the MDFT dissemination organization. The several day introduction phase of training consists of presentations by a senior MDFT trainer, discussion of readings, manual and protocol mastery, role plays, and video examples.2 But the majority of the training period, approximately six months, is the application of MDFT ideas and methods with regular program cases. DVD review, case conceptualization practice, weekly planning sheets for each case, and feedback from MDFT experts according to MDFT fidelity and clinical skill enhancement feedback predominate. Training evaluations demonstrate its acceptability and feasibility with practicing clinicians (Godley et al., 2001; Rowe et al., 2013).

Research Evidence

The MDFT research program has accumulated evidence supporting the intervention's effectiveness for adolescent substance abuse and delinquent behaviors. Studies included efficacy/ effectiveness RCTs, studies on therapeutic processes or mechanisms of action, economic analyses, and implementation/dissemination. The projects have been conducted at community clinics across the United States, among diverse samples of adolescents (African American, Hispanic/Latino, and Caucasian youth between the ages of 11 and 18) of varying socioeconomic backgrounds. A five-country, multisite, MDFT-controlled trial, funded by the health ministries of Germany, France, Switzerland, Belgium, and







The Netherlands, demonstrated consistent clinical outcomes in substance abuse (Rigter et al., 2012) and behavior problems (Schaub et al., 2014). This same study also speaks to the dissemination potential of the approach, since the treatment was implemented in real world treatment settings with fidelity, clinical skill, and crosscultural competence (Rowe et al., 2013). Study participants across MDFT-controlled trials met diagnostic criteria for adolescent substance abuse disorder and included teens with serious drug abuse and delinquency. MDFT has demonstrated efficacy in direct comparisons with state-ofthe-art, active treatments, including a psychoeducational multifamily group intervention, peer group treatment, individual cognitive-behavioral therapy (CBT), and residential treatment.

Clinical Outcomes. When referred to MDFT, youth and families engage and complete the program between 80% and 97% of the time. Substance use is significantly reduced and more youths achieve abstinence from illicit drugs in MDFT to a greater extent than comparison treatments (examples include 41% to 82% reduction from intake to end of treatment) (Liddle & Dakof, 2002; Liddle et al., 2001; Liddle, Dakof, Turner, Henderson, & Greenbaum, 2008; Liddle, Rowe, Dakof, Henderson, & Greenbaum, 2009). After treatment and at one-year follow-up, MDFT participants had higher drug abstinence rates than comparison youths (64% for MDFT vs. 44% for CBT, and 93% for MDFT vs. 67% for group treatment) (Liddle et al., 2008; also see Dennis et al., 2004). Additionally, substance-abuse-related problems, including antisocial, delinquent, and externalizing behaviors, are significantly reduced in MDFT to a greater extent than comparison interventions, including manual-guided, active treatments. In controlled trials that integrated MDFT with juvenile detention and juvenile drug court programs, MDFT showed added and stable benefits, with significant decreases in substance use problems, and arrest records for outcomes such as felony arrests (Liddle et al, 2011; Dakof et al., 2015). School functioning improves more in MDFT than comparison treatments (MDFT clients return to school and receive passing grades at higher rates) (Liddle et al., 2001). Family functioning improves (reduces family conflict, increases in family cohesion) to a greater extent in MDFT than family group therapy or peer group therapy (observational measures), and these gains retain at one-year follow-up (Liddle et al., 2001). MDFT has performed effectively as a community-based drug prevention program and has successfully treated younger adolescents who recently initiated drug use (Hogue, Liddle, Becker, & Johnson-Leckrone, 2002). Psychiatric symptoms show greater reductions during treatment in MDFT than comparison treatments (30% to 85% within-treatment reductions in behavior problems, including delinquent acts and other mental health problems such as anxiety and depression). Compared with individual CBT, MDFT had better drug abuse outcomes for teens with cooccurring problems, decreased externalizing and internalizing symptoms, and demonstrated superior and stable outcomes with the more difficult cases (Liddle et al., 2008; Rowe, 2010). Delinquent behavior and association with delinquent peers decreases with MDFT youth, whereas youth receiving peer group treatment reported increases in delinquent behavior and affiliation with delinquent peers; these changes maintain at one-year followup (Liddle, Rowe, Dakof, Ungaro, & Henderson, 2004; Liddle et al., 2009). Juvenile justice records indicate that MDFT participants are less likely to be arrested or placed on probation, and had fewer findings of wrongdoing during the study period. MDFT transportation studies show that association with delinquent peers decreases more rapidly after therapists have received MDFT training (Liddle et al., 2006). MDFT has demonstrated reductions in youths' high-risk sexual behavior, HIV and STD risk reductions (laboratory-confirmed STDs) (Liddle, Dakof, Henderson, & Rowe, 2011; also see Marvel, Rowe, Colon, DiClemente, & Liddle, 2009). MDFT outcome studies have been evaluated in comparative reviews, independent scientific appraisals, reports by private foundations, and government entities.3 Outcomes are consistent with heterogeneous (Greenbaum et al., 2015), comorbid samples (Henderson et al., 2010), stable at eighteen month and longer follow-up assessments.

Studies on therapeutic process and change mechanisms. Two overarching organizers of the MDFT





approach are stages of treatment and the four domains, in which a therapist seeks to foster competence and change. MDFT studies have demonstrated how to improve family interactions by targeting family interaction (Diamond & Liddle, 1996) and how therapists build successful therapeutic alliances with teens and parents (Diamond, Liddle, Hogue, & Dakof, 1999). Adolescents are more likely to complete treatment and decrease their drug use when therapists have solid relationships with their parents (Hogue et al., 2005) and with the teens (Robbins et al., 2006). Stronger therapeutic alliances with adolescents predict greater decreases in their drug use (Shelef, Diamond, Diamond, & Liddle, 2005). Another process study found a linear adherence-outcome relation for drug use and externalizing symptoms (Hogue, Dauber, Samuolis, & Liddle, 2006). MDFT process studies found that parents' skills are improved during therapy (Henderson, Rowe, Dakof, Hawes, & Liddle, 2009), parent changes predict teen symptom reduction (Schmidt, Liddle, & Dakof, 1996) and that a connection exists between systematically addressing cultural and racial/ethnic themes and increases in adolescent treatment participation (Jackson-Gilfort, Liddle, Tejeda, & Dakof, 2001). Finally, MDFT interventions that targeted family interactions related to changes in drug use and emotional and behavioral problems (Hogue, Liddle, Dauber, & Samuolis, 2004).

Economic analyses. The average weekly costs of treatment are significantly less for MDFT (\$164) than standard treatment (\$365). An intensive version of MDFT designed as an alternative to residential treatment provides superior clinical outcomes at significantly less cost (average weekly costs of \$384 versus \$1,068) (French et al., 2003).

Implementation outcomes. MDFT moved successfully into a representative day treatment program for adolescent drug abusers (Liddle et al., 2006). There were several important outcomes. Therapists delivered the MDFT according to protocol following training (e.g., broadened treatment focus post-training, addressed more MDFT content themes, focused

more on adolescents' thoughts and feelings about themselves and extrafamilial systems) and these changes were retained over time. Clients' outcomes were significantly better, and these gains maintain at follow-up. After staff training in MDFT, youth decreased drug use by 25% before MDFT compared to a reduction of 50% after MDFT training and organizational intervention. And, program or system-level factors improved dramatically, according to dimensions such as adolescents' perceptions of increased program organization and clarity of program expectations. MDFT clinicians collaborate effectively with other professionals in working with the youth and family (Liddle et al., 2011), MDFT training methods have been endorsed by clinicians (Godley et al., 2001), and therapists from diverse cultural contexts evidence benefit from MDFT training by showing outstanding mastery of the approach in regular community settings (Rowe et al., 2013).

Summary

MDFT development and research began three decades ago. In those days, family therapy's funded research potential was unclear. But the pioneers work of researchers such as Michael Newcomb (Newcomb & Bentler, 1988) established a developmental and contextual understanding of youth drug taking and its consequences. The scientific and popular acceptance (Blakeslee, 1988) of this work did much to influence NIDA of the worthwhileness and need to expand this research area. Other highly influential researchers, including Baumrind (Baumrind & Moselle, 1985), Brook and colleagues (Brook et al., 1999), and Kandel (Kandell, Kessler, & Margulies, 1978) conducted seminal studies that established a developmental and family-oriented perspective on youth substance misuse. Some believed that family therapy would have "little direct influence" on adolescent drug use (Oetting & Beauvais, 1987, p. 215). The first family therapy Request for Applications led to the funding of three research projects (NIDA, 1983). In discussing a study on peer cluster theory, Oetting and Beauvais (1987), said that these family therapy studies "may fail because the drug-using youth will have already established







peer clusters that encourage and maintain drug use and, unless family therapy can also change those peer associations, it is not likely to influence drug use" (p. 210). But these projects did not fail, and together, they established the feasibility, potential for future, and what would become programmatic work on family therapy with clinically referred youth substance abusers (Joanning, Quinn, Thomas, & Mullen, 1992: Lewis, Piercy, Sprenkle, & Trepper, 1990; Liddle, et al., 2001; also see reviews by Williams & Chang, 2000; Weinberg, Rahdert, Colliver, & Glantz, 1998).

MDFT has involved hundreds of collaborators, including researchers, research assistants, students, clinicians, state and community agency administrators, federal agency representatives, private foundation board members, and by now thousands of youths and family members. In one or more ways, all of these individuals have participated in the scientific testing, dissemination, and implementation of the approach in the United States and abroad. This mighty team has contributed to the creation of a treatment with demonstrated strengths as identified in independent evaluations. The treatment is well defined, teachable to clinicians in regular care settings, capable of being sustained in these settings, and able to achieve clinically meaningful outcomes with the most complex clinically-referred youths in the various care sectors. MDFT is seen as culturally responsive, and therapeutic process studies have continued to evaluate and tailor the treatment not just according to diverse adolescent and family backgrounds, but also to the requirements of substance abuse, mental health, juvenile justice, and child welfare clinical settings. The clinical outcomes have been described as noteworthy for their variety, practical relevance (improvements in practical, day-to-day outcomes), stability at follow up (1-4 year follow-ups), and consistency across studies.

Pressing future issues for MDFT, or any of the evidence-supported therapies, concern dissemination and use of effective treatments in routine care environments. The prevailing dissemination approach, where a full version of a standalone evidence-based treatment is brought to a non-research setting, is effective but inefficient (Hogue, Henderson, Ozechowski, & Robbins,

2014). Progress in applying alternative influence models, such as module-based approaches (e.g., MDFT, Rowe et al., 2012; MATCH, Weisz et al., 2012) is promising, but it is too early to ascertain widespread dissemination and uptake outcomes (Barth et al., 2011). The relevance of evidencesupported therapies for MFT training programs deserves more attention (Patterson et al., 2004), given the minor contributions these therapies make to MFT training at present, or professional preparation in other specialties for that matter (Weissman et al., 2006). Another pressing issue, probably more fundamental than dissemination, concerns how the family therapy field will deal with the evidence-based therapies. New ways of evaluating treatments have been offered (Sexton et al., 2008), and some in psychotherapy suggest that a focus on fundamental or cross-cutting change dynamics and principles (vs. models or schools) is preferred (Rosen & Davison, 2003). But in family therapy circles, at least, the reception so far has been mixed. Some express a qualified optimism (Datillio, Piercy, & Davis, 2014; Sprenkle, 2012), others wonder about the meaning, usefulness, or even the validity of evidencebased therapies (Bean, 2012; Eisler, 2007; Gateley, 2014; Imber-Black, 2014). Perhaps these frank appraisals represent progress-better to specify and discuss perceived conclusions than not (Lebow, 2014). Advances in any field are routinely ignored, found impractical, or take decades to incorporate (Gawande, 2013). Conclusions about family therapy's evidence-based approaches depend on where you look, what you believe and know, and who you ask. In its inclusiveness and scope, the current edition of the Handbook of Family Therapy surely offers readers a chance to assess these matters for themselves.

Acknowledgments

MDFT development and evaluation has been supported by funding from the National Institute on Drug Abuse and other federal agencies since 1985. Over the years, many NIH Project officials, including Liz Rahdert, Jerry Flanzer, Redonna Chandler, Bennett Fletcher, Lisa Onken, Meyer Glantz, and Wilson Compton, have supported research in the area of family-centered treatment





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of adolescent substance abuse, and this support is gratefully acknowledged. Finally, I thank my special collaborators, Gayle Dakof, Cindy Rowe, and Craig Henderson for many years of good ideas and heavy lifting.

Notes

- MDFT publications and resources are available at www.mdft.org.
- Multidimensional Family Therapy (American Psychological Association DVD, 2008), Adolescent Drug Abuse: A Multidimensional Approach (Hazelden Publishing, Center City MN, 2009), Multidimensional Family Therapy: A Research Proven Approach for Adolescent Substance Abuse and Delinquency (Alexander Street Press, 2014).
- Reviews, reports, and evidence-based therapy registry evaluations are available at www.mdft.org/ Proven-Success/Awards-and-recognition and www. mdft.org/Proven-Success/Independent-scientific-and-scholarly-reviews.

References

- Akram, Y., & Copello, A. (2013). Family-based interventions for substance misuse: A systematic review of reviews. *The Lancet*, 382, S24.
- Austin, A. M., Macgowan, M. J., & Wagner, E. F. (2005). Effective family-based interventions for adolescents with substance use problems: A systematic review. *Research on Social Work Practice*, 15, 67–83.
- Barth, R. P., Lee, B. R., Lindsey, M. A., Collins, K. S., Strieder, F., Chorpita, B. F., . . . & Sparks, J. A. (2011). Evidence-based practice at a crossroads: The emergence of common elements and factors. *Research on Social Work Practice*, 22(1) 108–119.
- Baumrind, D., & Moselle, K. A. (1985). A developmental perspective on adolescent drug abuse. Advances in Alcohol and Substance Abuse: Alcohol and Substance Abuse in Adolescence, 4, 41–67.
- Bean, R. A. (2012). Clinician response: The good, bad, and good news. *Journal of Marital and Family Therapy*, 38(1), 298–301.
- Becker, S. J., & Curry, J. F. (2008). Outpatient interventions for adolescent substance abuse: A quality of evidence review. *Journal of Consulting and Clinical Psychology*, 76(4), 531–543.
- Blakeshee, S. (1988). 8-year study finds 2 sides to teenage drug use. *New York Times*, July 21. Retrieved from www.nytimes.com/1988/07/21/us/8-year-study-finds-2-sides-to-teen-age-drug-use.html.
- Boustani, M., Henderson, C., & Liddle, H. A. (2015). Family based treatments for adolescent substance abuse. In S. Brown, & R. Zucker (Eds.), The Oxford Handbook of Adolescent Substance Abuse. Oxford: Oxford University Press.

- Breunlin, D. C., Liddle, H. A., & Schwartz, R. C. (1988).
 Concurrent training of supervisors and therapists.
 In H. A. Liddle, D. C. Breunlin, & R. C. Schwartz (Eds.), Handbook of family therapy training and supervision (pp. 207–224). New York: Guilford Press.
- Bronfenbrenner, U., & Morris, P. A. (2006). The Bioecological Model of Human Development. In W. Damon & R. M. Lerner (Eds.). *Handbook of child psychology* (6th ed.). New York: Wiley.
- Brook, J. S., Kessler, R. C., & Cohen, P. (1999a). The onset of marijuana use from preadolescence and early adolescence to young adulthood. *Developmental Psychopathology*, 11, 901–914.
- Brown, S. A., McGue, M., Maggs, J., Schulenberg, J., Hingson, R., Swartzwelder, S., . . . & Murphy, S. (2008). A developmental perspective on alcohol and youths 16 to 20 years of age. *Pediatrics*, *121*(s4), 290–310.
- Burkhart, G. (2013). North American drug prevention programmes: Are they feasible in European cultures and contexts? EMCDDA Papers, Publications Office of the European Union, Luxembourg.
- Catalano, R. F., Fagan, A. A., Gavin, L. E., Greenberg, M. T., Irwin, C. E., Ross, D. A., & Shek, D. T. (2012). Worldwide application of prevention science in adolescent health. *The Lancet*, 379 (9826), 1653– 1664. doi:10.1016/S0140-6736(12)60238-4.
- Clark, L. (2011). California Evidence Based Clearing house for Child Welfare. *Multidimensional Family Therapy*. Retrieved from http://www.cebc4cw. org/program/multidimensional-family-therapy/ detailed
- Clearinghouse for Military Family Readiness (2013). Retrieved September 4, 2010, from www.military families.psu.edu/programs/multidimensionalfamily-therapy.
- Dakof, G. A., Henderson, C., Rowe, C., Boustani, M., Linares, C., Greenbaum, P., Wang, W., Hawes, S., & Liddle, H. A. (in press). A controlled trial of multi-dimensional family therapy in juvenile drug court: Substance abuse and criminal behavior outcomes, *Journal of Family Psychology*.
- Dattilio F. M., Piercy F. P., & Davis S. D. (2014). *Journal of Marital and Family Therapy*, 40(1), 5–16.
- 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(3), 197–213.
- Diamond, G. M., & Liddle, H. A. (1996). Resolving a therapeutic impasse between parents and adolescents in Multidimensional Family Therapy. *Journal of Consulting and Clinical Psychology*, 64(3), 481–488.
- Diamond, G. M., Liddle, H. A., Hogue, A., & Dakof, G. A. (1999). Alliance-building interventions with adolescents in family therapy: A process study. *Psychotherapy: Theory, Research, Practice, Training*, 36(4), 355–368. doi:10.1037/h0087729.







- Drug and Alcohol Findings. (2014). The effects of family therapies for adolescent delinquency and substance abuse: A meta-analysis. May 30. Retrieved May 30, 2014 from http://findings.org.uk/docs/bulletins/Bull_30_05_14.php.
- Drug Strategies. (2003). Treating Teens: A Guide to Adolescent Drug Programs. Washington, DC: Drug Strategies.
- Drug Strategies (2006). Bridging the Gap: A Guide to Treatment in the Juvenile Justice System. Washington, DC: Drug Strategies.
- Eisler, I. (2007). Treatment models, brand names, acronyms and evidence-based practice. *Journal of Family Therapy*, 29(3), 183–185.
- European Monitoring Centre on Drugs and Drug Addiction (in press). Multidimensional Family Therapy for adolescent illicit drug measures: A review. EMCDDA Thematic Paper, Faggiano, F., Molinar, R. et al. (authors). Publications office of the European Union, Luxembourg. Retrieved February 7, 2014 from http://euspr.org/emcddapaper-multidimensional-family-therapy-for-adolescent-drug-users-a-systematic-review/
- Fraenkel, P. (2005). Whatever happened to family therapy. *Psychotherapy Networker*, 29, 30–39.
- French, M. T., Roebuck, M. C., Dennis, M. L., Godley, S. H., Liddle, H. A., & Tims, F. M. (2003). Outpatient marijuana treatment for adolescents: Economic evaluation of a multisite field experiment. Evaluation Review, 27(4), 421–459.
- Gambrill, E., & Littell, J. H. (2010). Do haphazard reviews provide sound directions for dissemination efforts? American Psychologist, 65(9), 927.
- Gately, G. (2014). Evidence-based "gold standard": Coveted, yet controversial. Juvenile Justice Information Exchange. August 13. Retrieved September 4, 2014 from http://jjie.org/evidence-based-gold-standard-coveted-yet-controversial/107409/.
- Gawande, A. (2013). Slow Ideas, The New Yorker, July 29. Retrieved from http://www.newyorker.com/ magazine/2013/07/29/slow-ideas
- Glantz, M. D., & Leshner, A. I. (2000). Drug abuse and developmental psychopathology. *Development and Psychopathology*, 12(4), 795–814.
- Godley, S. H., White, W. L., Diamond, G., Passetti, L., & Titus, J. C. (2001). Therapist reactions to manualguided therapies for the treatment of adolescent marijuana users. *Clinical Psychology: Science-and-Practice*, 8(4), 405–417.
- Granic, I. (2005). Timing is everything: Developmental psychopathology from a dynamic systems perspective. *Developmental Review*, 25(3), 386–407.
- 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. Advance online publication. http:// dx.doi.org/10.1037/fam0000127

- Hawkins, E. H. (2009). A tale of two systems: Co-occurring mental health and substance abuse disorders treatment for adolescents. *Annual Review of Psychology*, 60, 197–227.
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112, 64–105.
- 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. doi: 10.1080/00952990903005890.
- Henggeler, S. W., Schoenwald, S. K., Borduin, C. M., & Swenson, C. C. (2006). Methodological critique and meta-analysis as trojan horse. *Children and Youth Services Review*, 28(4), 447–457.
- Henggeler, S. W., & Sheidow, A. J. (2012). Empirically supported family-based treatments for conduct disorder and delinquency in adolescents. *Journal of Marital and Family Therapy*, 38(1), 30–58. doi:10.1111/j.1752-0606.2011.00244.x.
- Hogue, A., Dauber, S., Henderson, C. E., & Liddle, H. A. (2013). The reliability of therapist self-report on treatment targets and focus on family-based intervention. Administration and Policy in Mental Health and Mental Health Services Research, 1–9.
- Hogue, A., Dauber, S., Samuolis, J., & Liddle, H. A. (2006). Treatment techniques and outcomes in Multidimensional Family Therapy for adolescent behavior problems. *Journal of Family Psychology*, 20(4), 535–543. doi:2006–22333–001.
- Hogue, A., Henderson, C. E., Ozechowski, T. J., & Robbins, M. S. (2014). Evidence base on outpatient behavioral treatments for adolescent substance use: Updates and recommendations 2007–2013. *Journal of Clinical Child & Adolescent Psychology*, 43(5), 697–720. doi:10.1080/15374416.2014.915550.
- Hogue, A., Liddle, H. A., Becker, D., & Johnson-Leckrone, J. (2002). Family-based prevention counseling for high-risk young adolescents: Immediate outcomes. *Journal of Community Psychology*, 30(1), 1–22. doi:10.1002/jcop.1047.
- Hogue, A., Liddle, H. A., Dauber, S., & Samuolis, J. (2004). Linking session focus to treatment outcome in evidence-based treatments for adolescent substance abuse. *Psychotherapy: Theory, Research, Practice, & Training*, 41(2), 83–96.
- Hogue, A., Liddle, H. A., Singer, A., & Leckrone, J. (2005). Intervention fidelity in family-based prevention counseling for adolescent problem behaviors. *Journal of Community Psychology*, 33(2), 191–211.
- Holmbeck, G. N., Devine, K. A., & Bruno, E. F. (2010). Developmental issues and considerations in research and practice. In J. R. Weisz, & A. E. Kazdin (Eds.), Evidence-based psychotherapies for children





- **(**
- and adolescents (2nd ed.) (pp. 28-39). New York: Guilford
- Imber-Black, E. (2014). Eschewing certainties: The creation of family therapists in the 21st century. *Family Process*, 50(3), 267–279. doi: 10.1111/famp.12091
- Institute of Medicine and National Research Council. (2001) *Juvenile crime, juvenile justice*. Washington DC: National Academies Press.
- Jackson-Gilfort, A., Liddle, H. A., Tejeda, M. J., & Dakof, G. A. (2001). Facilitating engagement of African American male adolescents in family therapy: A cultural theme process study. *Journal of Black Psychology*, 27(3), 321–340.
- Joanning, H., Quinn, Q., Thomas, F., & Mullen, R. (1992) Treating adolescent drug abuse: A comparison of family systems therapy, group therapy, and family drug education. *Journal of Marital and Family Therapy*, 18, 345–356.
- Kandel, D. B., Kessler, R. C., & Margulies, R. Z. (1978). Antecedents of adolescent initiation into stages of drug use: A developmental analysis. In D. B. Kandel (Ed.), Longitudinal research on drug use (pp. 13–40). New York: Wiley.
- Kazdin, A. E. (2013). Evidence-based treatment and usual care: Cautions and qualifications. *JAMA psychiatry*, 70(7), 666–667.
- Koestler, A. (1978). *Janus: A summing up*. New York: Random House.
- Lebow, J. L. (2014). Editorial: Overselling our findings. *Family Process*, 53(2), 175–178.
- Lewis, R. A., Piercy, F. P., Sprenkle, D. H., & Trepper, T. S. (1990) Family-based interventions for helping drug-abusing adolescents. *Journal of Adolescent Research*, 5, 82–95.
- Liddle, H. A. (1988). Systemic supervision: Conceptual overlays and pragmatic guidelines. In H. A. Liddle,
 D. C. Breunlin, & R. C. Schwartz (Eds.), Handbook of family therapy training and supervision (pp. 153–171). New York: Guilford Press.
- Liddle, H. A. (1991). A multidimensional model for treating the adolescent who is abusing alcohol and other drugs. In W. Snyder, & T. Ooms (Eds.), Empowering families, helping adolescents: Family-centered treatment of adolescents with alcohol, drug abuse and other mental health problems (pp. 91–100). Washington, DC: United States Public Health Service.
- Liddle, H. A. (1999). Theory development in a family-based therapy for adolescent drug abuse. *Journal of Clinical Child Psychology*, 28(4), 521–532. doi:10.1207/S15374424JCCP2804 12.
- Liddle, H. A. (2002). Multidimensional Family Therapy for adolescent cannabis users. Cannabis Youth Treatment (CYT) Series (Volume 5 ed.). Rockville, MD: Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.
- Liddle, H. A. (2014). Adapting and implementing an evidence-based treatment with justice-involved

- adolescents: The example of Multidimensional Family Therapy. *Family Process*, 53(3), 516–528. doi: 10.1111/famp.12094.
- Liddle, H. A. (in press). Multidimensional Family Therapy for adolescent drug abuse and delinquency. New York: Guilford.
- Liddle, H. A. Breunlin, D. C., Schwartz, R. C., & Constantine, J. A. (1984). Training family therapy supervisors: Issues of content, form and context. *Journal of Marital and Family Therapy*, 10(2), 139–150.
- Liddle, H. A., & Dakof, G. A. (2002). A randomized controlled trial of intensive outpatient, family based therapy vs. residential drug treatment for comorbid adolescent drug abusers. *Drug and Alcohol Dependence*, 66, S2–S202 (#385), S103.
- Liddle, H. A., Dakof, G. A., & Diamond, G. (1991). Adolescent substance abuse: Multidimensional Family Therapy in action. In E. Kaufman and P. Kaufmann (Eds.), Family therapy of drug and alcohol abuse (2nd ed.) (pp. 120–171). Needham Hts., MA: Allyn and Bacon.
- Liddle, H. A., Dakof, G. A., Henderson, C. E., & Rowe, C. L. (2011). Implementation outcomes of Multidimensional Family Therapy-Detention to Community: A reintegration program for drug-using juvenile detainees. *International Journal of Offender Therapy and Comparative Criminology*, 55, 587–604. doi: 10.1177/0306624 X10366960.
- 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., Dakof, G. A., Turner, R. 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(10), 1660–1670. doi:10.1111/j.1360-0443.2008.02274.x.
- Liddle, H. A., Davidson, G. S., & Barrett, M. J. (1988).
 Outcomes of live supervision: Trainee perspectives.
 In H. A. Liddle, D. C. Breunlin, & R. C. Schwartz
 (Eds.), Handbook of family therapy training and supervision (pp. 368–398). New York: Guilford Press.
- Liddle, H. A., & Hogue, A. (2001). Multidimensional Family Therapy for adolescent substance abuse. In E. F. Wagner, & H. B. Waldron (Eds.), *Innovations in adolescent substance abuse interventions* (pp. 227–236) London: Pergamon/Elsevier Science.
- Liddle, H., & Rigter, H. (2013). How developmental research and contextual theory drive clinical work with adolescents with addiction. *Harvard Review of Psychiatry*, 21(4), 200–204. doi:10.1097/HRP.0b013e31829aaa6b.
- 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), 12–25. doi:10.1037/a0014160.
- Liddle, H. A., Rowe, C., Dakof, G., & Lyke, J. (1998). Translating parenting research into clinical interventions for families of adolescents. *Clinical Child Psychology and Psychiatry*, 3(3), 419–443. doi: 10.1177/1359104598033007.
- Liddle, H. A., Rowe, C. L., Dakof, G. A., Ungaro, R. A., & Henderson, C. E. (2004). Early intervention for adolescent substance abuse: Pretreatment to post-treatment outcomes of a randomized clinical trial comparing Multidimensional Family Therapy and Peer Group Treatment. *Journal of Psychoactive Drugs*, 36(1), 49–63. doi:10.1080/02791072.2004.1 0399723.
- Liddle, H. A., Rowe, C., Diamond, G. M., Sessa, F. M., Schmidt, S., & Ettinger, D. (2000). Toward a developmental family therapy: The clinical utility of research on adolescence. *Journal of Marital and Family Therapy*, 26(4), 485–499.
- 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 on Addictions*, 15(s1), 102–112. doi:Q751 U5328K48XH56.
- Liddle, H. A., & Saba, G. W. (1983). Clinical use of the family life cycle: Some cautionary guidelines. In H. A. Liddle, & J. C. Hansen (Eds.), Clinical implications of the family life cycle (pp. 161–176). Rockville, MD: Aspen Systems Corp.
- Liddle, H. A., & Schwartz, R. C. (1983). Live supervision/consultation: Conceptual and pragmatic guidelines for family therapy trainers. Family Process, 22(4), 477–490.
- Lindstrøm, M., Saidj, M., Kowalski, K., Filges, T., Rasmussen, P. S., & Jørgensen, A. K. (2013). Brief Strategic Family Therapy (BSFT) for young people in treatment for non-opioid drug use. Oslo, Norway: The Campbell Collaboration.
- Linklater, R. (Director). (1988). It's Impossible to Learn to Plow by Reading Books (Motion picture). United States: Detour Filmproduction.
- Littell, J. H. (2006). The case for multisystemic therapy: Evidence or orthodoxy? Children and Youth Services Review, 28(4), 458–472.
- Littell, J. H. (2008). Evidence-based or biased? The quality of published reviews of evidence-based practices. Children and Youth Services Review, 30(11), 1299–1317.
- Littell, J., Popa, M., & Burnee, Forsythe. (2005). Multisystemic Therapy for social, emotional, and behavioural problems in youth aged 10–17. New York: Wiley. Retrieved July 1, 2013, from http://

- onlinelibrary.wiley.com/.doi/10.1002/14651858.CD 004797.pub4/abstract.
- Markus, H., & Nurius, P. (1986). Possible selves. *American psychologist*, 41(9), 954–969.
- Marvel, F. A., Rowe, C. R., Colon, L., DiClemente, R., & Liddle, H. A. (2009). Multidimensional Family Therapy HIV/STD Risk-Reduction Intervention: An integrative family-based model for druginvolved juvenile offenders. Family Process, 48(1), 69–84.
- National Institute on Drugs Abuse (NIDA). (1983).

 Request for applications: Family therapy approaches for adolescent drug abuse. Rockville, MD:

 NIDA
- National Institute on Drug Abuse (NIDA). (2014). Principles of adolescent substance use disorder treatment: A research-based guide. Rockville, MD: NIDA.
- National Research Council & Institute of Medicine Committee on the Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions. (2009). Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities. Washington DC: National Academies Press.
- National Research Council. (2009). Adolescent health services: Missing opportunities by committee on adolescent health care services and models of care for treatment, prevention, and healthy development. Washington, DC: Institute of Medicine.
- Newcomb, M. D., & Bentler, P. M. (1988). Consequences of adolescent drug use. Impact on the lives of young adults. Newbury Park, CA: Sage.
- Newcomb, M. D., Scheier, L. M., & Bentler, P. M. (1993). Effects of adolescent drug use on adult mental health: A prospective study of a community sample. Experimental and Clinical Psychopharmacology, 1(1-4), 215-241.
- NREPP (2012). SAMHSA's National Registry of Evidence-based Programs and Practices. Available at www.nrepp.samhsa.gov.
- Oetting, E., & Beauvais, F. (1987). Peer cluster theory, socialization characteristics, and adolescent drug use: A path analysis. *Journal of Counseling Psychology*, 34(2), 205–213.
- Ogden, T., & Hagen, K. A. (2006). Does MST work? Comments on a systemic review and meta-analysis of MST. *Nordic Journal of Social Work*, 26(3), 222–233.
- Offer, D., & Schonert-Reichl, K. A. (1992). Debunking the myths of adolescence: Findings from recent research. *Journal of the American Academy of Child* & Adolescent Psychiatry, 31(6), 1003–1014.
- Office of Justice Programs. CrimeSolutions.gov. (n.d.)

 Program Profile Multidimensional Family Therapy.

 Retrieved from www.crimesolutions.gov/Program
 Details.aspx?ID=267.





- Patterson, J. E., Miller, R. B., Carnes, S., & Wilson, S. (2004). Evidence-based practice for marriage and family therapists. *Journal of Marital and Family Therapy*, 30(2), 183–195.
- Perepletchikova, F., Krystal, J. H., & Kaufman, J. (2008).
 Practitioner review: Adolescent alcohol use disorders: Assessment and treatment issues. *Journal of Child Psychology and Psychiatry*, 49(11), 1131–1154.
- President's New Freedom Commission on Mental Health. (2003). Subcommittee on Children and Families Summary Report. Retrieved March 2005 from www.mentalhealthcommission.gov/subcommittee/children family020703.
- Rigter, H., Henderson, C. E., Pelc, I., Tossmann, P., Phan, O., Hendriks, V.... & Rowe, C. L. (2012). 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(1–3), 85–93. doi:10.1016/j.drugalcdep.2012.10.013.
- Robbins, M. S., Liddle, H. A., Turner, C. W., Dakof, G. A., Alexander, J. F., & Kogan, S. M. (2006). Adolescent and parent therapeutic alliances as predictors of dropout in Multidimensional Family Therapy. *Journal of Family Psychology*, 20(1), 108–116. doi:2006-03561-012.
- Rohde, P., Lewinsohn, P. M., Seeley, J. R., Klein, D. N., Andrews, J. A., & Small, J. W. (2007). Psychosocial functioning of adults who experienced substance use disorders as adolescents. *Psychology of Addictive Behaviors*, 21(2), 155.
- Rosen, G., & Davison G. (2003). Psychology should list empirically supported principles of change (ESPs) and not credential trademarked therapies or other treatment packages. *Behavior Modification*, 27(3), 300–312.
- Rowe, C. L. (2010). Multidimensional family therapy: Addressing co-occurring substance abuse and other problems among adolescents with comprehensive family-based treatment. *Child and Adolescent Psychiatric Clinics of North America*, 19(3), 563– 576. doi:10.1016/j.chc.2010.03.008.
- Rowe, C. L. (2012). Family therapy for drug abuse: Review and updates 2003–2010. *Journal of Marital and Family Therapy*, 38(1), 221–243. doi: 10.1111/j.1752-0606.2011.00280.
- Rowe, C., Rigter, H., Henderson, C., Gantner, A., Mos, K., Nielsen, P., & Phan, O. (2013). Implementation fidelity of Multidimensional Family Therapy in an international trial. *Journal of Substance Abuse Treatment*, 44(4), 391–399. doi:10.1016/j. jsat.2012.08.225.
- Schaub, M. P., Henderson, C. E., Pelc, I., Tossmann, P., Phan, O., Hendriks, V.... & Rigter, H. (2014). Multidimensional Family Therapy decreases the rate of externalising behavioural disorder symptoms in cannabis abusing adolescents: Outcomes of the INCANT trial. BMC Psychiatry, 14(1), 1–16.

- 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(1), 12–27. doi:0893–3200/96.
- Sexton, T. L., Ridley, C. R., & Kleiner, A. J. (2004). Beyond common factors: multilevel-process models of therapeutic change in marriage and family therapy. *Journal* of Marital and Family Therapy, 30(2), 131–149.
- Shelef, K., Diamond, G. M., Diamond, G. S., & Liddle, H. A. (2005). Adolescent and parent alliance and treatment outcome in Multidimensional Family Therapy. *Journal of Consulting and Clinical Psychology*, 73(4), 689–698. doi:2005–11147–012.
- Sherman, C. (2010). Multidimensional Family Therapy for adolescent drug abuse offers broad, lasting benefits: An approach that integrates individual, family, and community interventions outperformed other treatments. *NIDA Notes*, 23(3), 13–15.
- Sprenkle, D. H. (2012). Intervention research in couple and family therapy: A methodological and substantive review and an introduction to the special issue. *Journal of Marital and Family Therapy*, 38(1), 3–29.
- Stroul, B., Blau, G., & Friedman, R. (2010). Updating the system of care concept and Philosophy. Washington, DC: Georgetown University Center for Child and Human Development National Technical Assistance Center for Children's Mental Health.
- The California Evidence-Based Clearinghouse (2006–2014). Retrieved from www.cebc4cw.org.
- United Nations Office on Drugs and Crime (2014). Compilation of evidence-based family skills training programmes. Retrieved from www.unodc.org/unodc/en/prevention/familyskillstraining.html.
- van der Stouwe, T., Asscher, J. J., Stams, G. J. J., Deković, M., & van der Laan, P. H. (2014). The effectiveness of Multisystemic Therapy (MST): A meta-analysis. *Clinical Psychology Review*, 34(6), 468–481.
- Vaughn, M. G., & Howard, M. O. (2004). Adolescent substance abuse treatment: A synthesis of controlled evaluations. Research on Social Work Practice, 14, 325—335.
- Waldron, H. B., & Turner, C. W. (2008). Evidence-based psychosocial treatments for adolescent substance abuse. Journal of Clinical Child Weinberg, N., Rahdert, E., Colliver, J. D., & Glantz, M. D. (1998). Adolescent substance abuse: A review of the past 10 years. Journal of the American Academy of Child & Adolescent Psychiatry, 37, 252–261.
- Weissman, M. M., Verdeli, H., Gameroff, M. J., Bledsoe, S. E., Betts, K., Mufson, L., . . . & Wickramaratne, P. (2006). National survey of psychotherapy training in psychiatry, psychology, and social work. *Archives* of General Psychiatry, 63(8), 925–934.
- Weisz, J., Chorpita, B., Palinkas, L. A., Schoenwald, S.K., Miranda, J., Bearman, S.K., . . . Gibbons, R.D., &







the Research Network on Youth Mental Health (2012). Testing standard and modular designs for psychotherapy treating depression, anxiety, and conduct problems in youth: A randomized effectiveness trial. *Arch Gen Psychiatry*, 69(3), 274–282. doi: 10.1001/archgenpsychiatry.2011.147.

White, W., Dennis, M., & Tims, E (2002). Adolescent treatment: Its history and current renaissance. *Counselor*, 3(2), 20–23.

Williams, R.J. & Chang, S.Y. (2000). A comprehensive and comparative review of adolescent substance abuse treatment outcome. *Clinical Psychology: Science and Practice*, 7, 138–166.

Zucker, R. A., Donovan, J. E., Masten, A. S., Mattson, M. E., & Moss, H. B. (2008). Early developmental processes and the continuity of risk for underage drinking and problem drinking. *Pediatrics*, 121(s4), 252–272.



