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### COGNITIVE BEHAVIOURAL TREATMENT FOR YOUNG OFFENDERS

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#### **I. RATIONALE FOR APPLYING COGNITIVE BEHAVIOURAL INTERVENTIONS WITH YOUNG OFFENDERS**

More than any other intervention, Cognitive Behavioural Treatment has garnered the greatest amount of attention in relation to effective correctional treatment. In North America, CBT has become the single most identifiable treatment component in both youth and adult correctional intervention. This chapter situates CBT within the larger sphere of effective correctional practice, emphasizing the role of assessment, case formulation and planning as well as its relation to other systemic interventions. Specific aspects of social learning theory as they relate to CBT are presented along with specific examples of CBT interventions.

#### **A. General Orientation to CBT**

Cognitive behavioural treatment (CBT) is a phrase describing interventions that connect responses of an individual's behaviour to the process and content of their thinking. CBT as a general approach to describing psychological intervention became popular during the early part of the 1970's. With leading researchers such as Donald Meichenbaum and Michael Mahoney, progress in effective psychological intervention capitalized on developments from behavioural psychology, psychodynamically-oriented treatment

and cognitive science. The results of this confluence of understanding have led to, what has been called, the "fourth pillar" of understanding in psychological treatment—behavioural, person-centred and psychodynamic, being the other three orientations.

With respect to intervention, CBT has been used in many applications, extending from psychosomatically-oriented illnesses—hypertension - to emotionally based concerns - anxiety and depression - to interpersonal development - assertiveness training. Many outcome studies have reported the success of CBT compared with competing interventions of both a psychological and medical nature. While most of the academic journals in clinical psychology publish routinely on the benefits of CBT, *Cognitive Therapies* is a journal dedicated expressly to reporting progress in developing effective cognitively based interventions.

#### **B. Relevance to Child and Youth Populations**

CBT has shown itself to be effective through interventions targeting youth. In contrast to the general CBT literature, CBT interventions with young people need to be developmentally appropriate given the context of the stage at which children are able to show flexibility in concept formation and ability to generalize from one set of circumstances to another. The balance of this chapter will focus on interventions with young offenders that contribute to understanding the role that CBT plays in

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effective correctional treatment. It will include a review of; the major predictors of risk, general assessment with youthful offenders, measurement issues in the assessment of relevant cognitions, general treatment issues regarding effective correctional intervention with youth, principles of CBT with young offenders and examples of specific CBT programmes for young offenders

1. The Major Predictors of Risk.

Andrews, Leschied and Hoge (1992) provided an extensive summary of the cross-sectional and longitudinal literature related to anti-social outcomes in youth. In their review, the principle

factors that accounted for prediction included; early behavioral history, peer associates, early and current family conditions, interpersonal relationships, personal attitudes/values/beliefs and school-based risk factors. The group of factors summarized in that review contributed to the body of work that Andrews and Bonta (1998) later referred to as the *Psychology of Criminal Conduct*; a generalized term for criminogenic risk factors that reflect a psycho-social understanding of the nature of criminal conduct in general as well as pertaining to youth in particular. The complete list and descriptors are found in Table 1.

**Table 1**  
**Summary of Major Risk Factors for Adolescents**  
 (excerpted from Andrews, Leschied and Hoge, 1992)

Factor	Descriptors
<b>Behaviour</b>	early generalized misconduct, aggression, a taste of early behavioral history or risk, problem-solving ability, egocentric.
<b>Peer Associates</b>	association with anti-social others, isolation from pro-social others.
<b>Interpersonal Relationships</b>	indifference to the opinions of others, weak affective ties.
<b>Family Conditions</b>	low levels of family affection/cohesiveness, low levels of supervision, inconsistent discipline
<b>School-based risk factors</b>	below average effort,
<b>Attitudes, Values and Beliefs</b>	high tolerance for deviance, rejection of the validity of the law, applies rationalizations for law violations, thinking style and content are anti-social.

Assessment of general criminogenic risk is an important and critical first step in understanding the nature and context of individual youthful offenders. While several measures of general risk have been developed, the Risk/Need Inventory (Hoge, Andrews and Leschied, 1995) and the Youth Level of Service Inventory (Hoge and Andrews, 1994) are instruments enjoying the widest use in

Canada. Beyond the use of a general measure of risk, practitioners and administrators may want to know more detail about specific issues regarding offenders and their offences—including specific attitudes—in order to make clinical/management decisions.

Knowledge of the general literature of risk is critical in the development of

broad-based strategies to assess criminogenic potential in adolescents. Following from the risk principle of case classification (See Andrews, Bonta & Hoge, 1990 for a more complete review of the risk-based concept of classification), knowledge and measurement of risk can assist in case planning and selection of appropriate targets for service to be effective. Hoge and Andrews (1998) make the point that for assessment to be effective for case planning with young offenders, the assessor must make meaningful assumptions about the general *level of risk* to guide the *intensity* of intervention, and specific statements of *areas of risk* to provide *relevance in case planning and targeting* for appropriate treatment to take place. Knowledge with respect to the major predictors of youth at risk have led to the means by which assessment strategies can reflect the degree and nature of risk that a particular youth may be presenting.

### C. Measures of General Risk

#### 1. The Risk/Need Inventory

While several general measures of risk with young offenders exist, in order to meet the requirements of *accuracy* and *functionality*, Andrews et. al. developed the Risk/Need Inventory for use in Ontario to classify young offenders age 12-15 years. This assessment and classification system includes a summary of items based on the major risk factors. Each item is weighted and scored using a 0, 1 system based on file reviews or interviews with the youth or key informant(s). Totals are then taken to reflect an over-all risk score with summaries also provided for each risk category. Informed individuals can override the total score and categorization in certain cases. Planning with respect to the extent of supervision and specific case planning decisions related to targets for

intervention can be determined by information in each category. The R/N Inventory has been evaluated in several studies related to prediction (Hoge, Andrews & Leschied, 1996; Simourd, Hoge, Andrews & Leschied, 1994).

#### 2. The Youth Level of Service Inventory.

An analogous system of classification, referred to as the *The Youth Level of Service Inventory* is also available that provides summaries and classifications for individual offenders. The YLSI is used with older adolescents age 17-18.

### D. Some Promising Assessment Measures for Specific Purposes

There are a variety of measures in use that are relevant to the question(s) being asked of the assessor. Personality assessment continues to be actively pursued in relating adjustment patterns to an individual youth's programme need. The Basic Personality Inventory (Jackson, 1989; Austin, Jaffe, Leschied, Smiley and Sas, 1988) provides an assessment of youth related to factors of depression, psychiatric stability, interpersonal maturity and socialization. The Millon Adolescent Personality Inventory is another measure in widespread use. Similar to the BPI, the MAPI provides useful information about a wide range of concerns related to emotional, cognitive and behavioural adjustment. Similarly, the Child/Adolescent Behavior Checklists developed by Thomas Achenbach and his colleagues are useful since their assessment contents relate scales that are meaningful to overall youth adjustment. The CBCL has forms that can be completed by the youth, their parents as well as teacher rating forms. Lastly, assessment of psychopathy with young offenders, while not attracting the same degree of interest that is currently displayed in the adult literature, has still

generated some interest (Hare, 1991; Simourd et.al., 1994). The Hare Psychopathy Checklist, is the standard measure in this area. Of additional interest is the use of measures for investigating anxiety — the State/Trait Anxiety Inventory (STAXI); nature of family adjustment in the use of the Family Adjustment Measure or the FACES; and offense-specific measures such as in the use of assessment with adolescent male sex offenders, The Abel and Baker Sexual Interest Card Sort and Cognitions Scale.

Lastly, the choice to be made of the appropriateness of an assessment battery will be dictated by the nature of the decisions to be made. There are many points along the continuum of juvenile justice processing that may/will require input relevant to the needs of both the youth and of the justice system. These decisions may include the decision to find a youth: not fit to stand trial, to query the youth's understanding of the nature of the proceedings or to consider a youth for transfer to ordinary court.

#### **E. Specific Measurement Issues in the Assessment of Cognitions**

General measures of risk and personality will be helpful in the overall case planning and formulation of youth. However in leading to specific programme formulations for cognitive intervention, there is further necessity to specify the style and content of thinking that a particular youth may present. The following two examples of attitude inventories are commonly used to assess thinking styles and content.

#### **F. Criminal Sentiments Scale**

Assessors will want to address general issues of thinking style and content that is consistent with a pro or antisocial orientation. The development of the

Criminal Sentiments Scale (Simourd, 1997) is a good example of such a measure that relates attitudes to issues relevant to youth who may be involved with the criminal justice system.

#### **G. Beliefs and Attitude Scale**

The beliefs and attitudes scale was developed by Butler and Leschied. While similar to the CSS, the BAS has a vocabulary geared to youth with questions that are pertinent to issues that relate to the major attitude predictors of risk including tolerance toward law violation, attitudes toward authority and help seeking behaviour.

## **II. GENERAL TREATMENT ISSUES REGARDING EFFECTIVE CORRECTIONAL INTERVENTION WITH YOUNG OFFENDERS**

Decisions with respect to CBT will be made in the general context of appropriate correctional interventions that may include a community or residential context, family or individual intervention. The following sections summarize the general context in which CBT may be offered.

### **A. Overview of the Treatment Literature**

Similar to the assessment literature, increasing knowledge with respect to young offender management and treatment has also been witnessed over the past decade. Progress in this area has capitalized not only on the specific effects of young offender programmes, but from the general knowledge base regarding child and adolescent intervention. Kazdin and Weisz (1998) recently noted in their review of child and adolescent interventions, that expressions such as *knowledge-based, data-driven and empirically-supported* now routinely appear in selections made regarding

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treatment options for specific client groups. Knowledge with respect to successful programmes for conduct-disordered and anti-social youth has progressed not only in the description of successful *components* of intervention (i.e. cognitive-behavioral) but also in the method of *service delivery* (custody versus community). Meta-analysis is the term used to report *quantitative* summaries of the literature. It represents a significant advancement over earlier qualitative reviews (Wells, 1991). Meta-analysis statistically compares the types of treatments that are offered, to whom they are directed and with what outcomes. The meaningfulness of meta-analysis is only limited by the number and quality of the studies that are included in the review. Fortunately, adequate quality and quantity of studies now exist to make interpretations of the treatment literature in youth justice with confidence, although Losel (1997) has offered up some reservations with respect to limiting the generalizability of such findings. The limitations along with the major outcomes will be summarized in the following section.

1. Major Findings from the Meta-analysis

Mark Lipsey's reporting of two separate analyses (Lipsey, 1992; Lipsey & Wilson, 1997) suggested that the overall effect size linking treatment with reductions in re-offending lie between 20-40 per cent as contrasted with no treatment comparison groups, and only slightly less when compared to groups receiving some type of 'usual service'. As stated in the Andrews, Leschied and Hoge (1992) review, "Thanks to the meta-analyses, the evidence favouring treatment services is now undeniable." (p.148) Stronger effect sizes were found in the Lipsey studies in the following variables; higher risk cases, longer

duration of treatment and behavioral-oriented multimodal treatment with a stronger emphasis on 'sociological' than psychological orientation of service delivery.

Effect sizes accounting for total programme outcome across both institutional and non-institutional programmes suggested that the three factors comprising the highest ranking were; interpersonal skills training, individual counselling and behavioral programmes. The second grouping of lesser, yet significant contribution were the two programme factors consisting of multimodal services and restitution for youths on probation.

2. Institutional Versus Non-Institutional Placement for Treatment

Lipsey and Wilson's (1997) subsequent review distinguished placement of treatment, residential versus community, in differentiating characteristics of effective programmes. This is a critical differentiation since much of the debate regarding effective youth justice policies centres on the importance of incarceration as a relevant factor in community safety. Lipsey and Wilson noted in their analysis that different contributions are made for various components of service as a function of the placement for treatment. Table 2 summarizes factors relevant for effective programmes in institutional and non-institutional placements.

**Table 2**  
**Programme Factors Contributing to Effectiveness for Institutionalized and Non-Institutionalized Young Offenders**

<b>Institutional-Based Components</b>
Interpersonal Skills Teaching Family Model Multiple Services Behavioural Programmes Individual/Group Programmes
<b>Non-Institutional-Based Components</b>
Interpersonal Skills Individual/Group Programmes Multiple Services Restitution/Probation Employment/Academic Programmes

**III. GENERAL TREATMENT APPROACHES**

The meta-analyses have directed attention to the importance of interventions that look at the multi-determined nature of youthful chronic offending. Two general principles apply. The first is that much of youthful offending is accounted for by the context in which the youth experiences systems of influence, the primary ones being family, peers and school (Henggeler, 1989). Systemically-based interventions have therefore taken on new meaning as the prediction literature continues to reinforce the importance of seeing youths in context and treating them in their natural environments. The second principle, again taken from the meta-analysis on prediction, reinforces the importance of cognitions as appropriate targets for intervention. Cognitive-behaviourally oriented interventions have shown themselves to be more effective than traditional psychotherapeutic or medical

interventions (Gendreau, 1998). A number of cognitive-behavioural interventions sensitive to client need and the nature of offending have been developed. These two themes of intervention will be discussed along with promising approaches with youths of particular concern, those being sex offender, substance abusing and violent youths.

**A. Systemically-oriented Interventions**

Both of the meta-analyses reported by Andrews (1998) and Lipsey and Wilson, (1997) suggested that effect sizes linked to more effective outcomes were characteristic of programmes delivered in the community as contrasted to those delivered in residence. Henggeler (1989) suggests in part this is accounted for by the type and quality of interactions adolescents experience with the social influences that surround them. To be effective, programmes need to be in a position to influence those *social* factors that may in turn be interacting with a particular youth's competencies (e.g. problem-solving skills, beliefs and attitudes). Hence, particular attention is now being paid to interventions that influence the systems that are consistent with the major predictors of delinquency risk, namely, families, peers and schools. This section will focus on *multi-systemic therapy*, an intervention with considerable empirical support in reducing reoffending rates with high risk youth.

Scott Henggeler and his colleagues at the Family Services Research Centre at the Medical University of South Carolina can be credited with developing what is being consistently identified as one of the more promising approaches to effective service with high risk youth. Multi-systemic Therapy (MST) refers to the

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consistent application of principles that reflect what is known in the young offender literature. While some reviewers may suggest that MST does not represent 'anything new under the sun', it is in the method of service delivery that MST has shown itself to be effective with high risk youth. Leschied and Cuningham (1999) summarize MST as "... a home-based, family-based, present-oriented therapeutic intervention using family strengths to attenuate risk factors and improve family relations, peer relations and school influence". Consistent with the risk principle of case classification, MST attempts to influence the major criminogenic risk factors through the application of appropriate strategies in a multi-determined, multi-modal fashion.

In addition to reflecting the knowledge-base in the offender literature, MST has been evaluated with a series of randomized clinical trials that have included appropriate follow-up periods. Cost-savings and service utilization rates have also served as part of the evaluation process. In one randomized evaluation study, Borduin, Mann, Cone, Henggeler, Fucci, Blaske and Williams (1995) reported after a four year follow-up, MST completers reflected a 22% recidivism rate, compared to the MST non-completers who demonstrated 47%, completers from individual counselling reported a 71% and treatment refusers reported an 88% reoffending rate. Recently the State of Washington's (1998) review of young offender services suggested that MST was not only more effective in reducing reoffending rates, but also distinguished itself in being *most cost effective* when compared to other interventions which included boot camps and generalized prevention strategies. An overall review of the MST approach can be found in the recently published *Multisystemic Therapy of Antisocial*

*Behavior in Children and Adolescents* by Henggeler and his colleagues (1998).

While MST reflects interventions that have shown themselves to be effective, it is in the method of service delivery *within a specified set of principles* that MST distinguishes itself. The nine principles against which MST adherence is measured consist of the following:

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

## B. Cognitive-Behavioural Interventions

Cognitive-behavioural treatment (CBT) with young offenders has received considerable attention. This can be attributed to at least three influences:

- the general literature regarding effective interventions with children and adolescents has been supportive of CBT;
- risk factors regarding attitudes, beliefs and values have shown themselves to be particularly strongly related to anti-social behaviour, and
- recent meta-analyses have shown CBT to be the treatment of choice related to effectiveness over and above the traditional influences of psychodynamic, medical and behavioural interventions.

CBT refers to interventions that connect thoughts to behaviour. Hollin (1990) describes it this way; "... The cognitive-behavioural position acknowledges the importance of environmental influences while seeking to incorporate the role of cognitions in understanding behaviour. Cognitions are given a mediation role between the outside world and overt behavior; cognitions are seen as determining what environmental influences are attended to, how they are perceived, and whether they might affect future behavior".

Interest in CBT has been based not only on disappointing results from medically-based interventions (lack of empirical support generally) and behaviourally-based interventions (lack of support for sustainable gains and generalization) but as well on the general theoretical assumptions about the *social-psychological* understanding of the etiological research on the development of delinquency. This body of theoretical

work suggests that the interaction of the individual with systems that can influence attitudes and subsequent behaviour may improve the explanatory value of the studies on prediction and assessment. Hence, the importance of understanding how children/adolescents mediate their experience may not only assist in explaining the behaviour, but may also contribute meaningfully in how to alter behavioural outcomes. Such outcomes can encourage youths to shift their thinking away from attitudes that support antisocial behaviour and towards the development of thinking styles and content that promote pro-social behaviour. Finch, Nelson and Ott (1993) suggest that the general expanded influence of CBT in the child/adolescent literature can be attributed to factors such as:

- Increasing evidence that thought processes influence behaviour.
- Traditional stimulus-response explanations cannot account for all outcomes
- Thought processes can account for behavioural change
- Operant approaches have not provided convincing evidence that S-R theories can account for generalization and maintenance.

Andrews et.al. discuss the important aspect of *clinical relevance* in decision - making when important case management decisions arise. Clinically relevant decisions can be considered as those that link the decision to correctly prioritize or target certain behaviours/systems for change with the particular risk profile of the individual. Given the importance placed on attitudes from the prediction literature with young offenders, targeting cognitions makes considerable sense as an important focus for service providers.

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Not only has CBT made inroads in the promotion of effective intervention with children/adolescents generally, but numerous programmes now exist to train workers in the youth corrections field in both residential and community contexts. Examples include: the Choices Programme developed by Elizabeth Fabiano and Robert Ross that targets general offending patterns; Aggression Replacement Training developed by Arnold Goldstein (Goldstein, Glick, Reiner, Zimmerman and Coultry, 1987) that combines psychoeducational intervention, skill streaming and moral education to reduce aggression in high risk youth; and sex offender treatment controlling inappropriate arousal through cognitive restructuring, a programme summarized in the work of Ryan and Lane (1991). CBT interventions are typically delivered as part of an overall strategy that frequently also includes systems involvement through family therapy and can be delivered either while a youth is in the community or in residential care.

1. Specific Concepts in CBT<sup>1</sup>

The specific aspects of CBT include a knowledge of various concepts generally attributed to social learning theory (SLT). The following section provides definitions of the most relevant concepts of SLT that relate to CBT. Following this outline, specific examples of CBT in relation to young offender intervention are offered.

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<sup>1</sup> This section is based largely on the work completed by the author and Dr. Linda Baker of the Centre for Research for Children and Families in the Justice System of the Family Court Clinic. The financial support of the Ontario Ministry of Community and Social Services is once again gratefully acknowledged.

(i) *Fundamentals of Social Learning Theory*

Social learning theory, a theoretical understanding of behaviour popularized through research by Albert Bandura in the late 1950's and early 1960's is a way to describe the means by which individuals develop behaviour as a function of their interaction with the social influences that they encounter. As a result, attitudes are considered learned behaviours much the same way as behaviours are considered the product of the repeated experience with reinforces. In this context SLT considers attitudes to be:

- relatively consistent ways of reacting to a variety of contexts
- the product of experience with socializing agents (e.g. parents, peers)

(ii) *Inter-relatedness of Thoughts, Feelings And Behaviour*

Not only are cognitions and behaviours assumed to be related or *linked* in a meaningful way, but feelings can also mediate the bidirectional effect of thoughts and behaviour. This assumption includes:

- An increased awareness of the link between thoughts, cognitions and behaviour
- Rewards for linking attitudes with behaviours that are pro-social
- The increasing ability to link thoughts/attitudes and behaviour

Specific examples of applying CBT principles in programme development include, social skills training, reduced aggression and programmes targeting sexually assaultive adolescents. Programmes have also been found to be effective both within the community as well as in residential settings.

REFERENCES

- Andrews, D.A. & Bonta, J. (1998) *The psychology of criminal conduct. Second Edition*. Andersen Publishing, Cincinnati, OH.
- Andrews, D.A., Bonta, J. & Hoge, R.D. (1990). Classification for effective rehabilitation: Rediscovering psychology, *Criminal Justice and Behavior*, 17, 19-52.
- Andrews, D.A., Leschied, A.W. & Hoge, R.D. (1992). *Review of the profile, classification and treatment literature with young offenders: A social psychological approach*. Ministry of Community and Social Services. Toronto, ON.
- Austin, G.A., Jaffe, P.G., Leschied, A.W., Smiley, C. & Sas, L. (1986). Factor structure and construct validity of the Basic Personality Inventory with young offenders. *Canadian Journal of Behavioural Science*, 18, 238-247.
- Andrews, D.A. *Effective community-based treatment for offenders*. Beyond prisons conference. (1998). Proceedings. Queen's University and Correctional Services Canada, Kingston, Ontario.
- Borduin, C.M., Mann, B.J., Cone, L.T., Henggeler, S.W., Fucci, B.R., Blaske, D.M. and Williams, R.A. (1995). Multisystemic treatment of serious juvenile offenders: Long term prevention of criminality and violence. *Journal of Consulting and Clinical Psychology*, 1995, 623, 569-578.
- Finch, A.J., Nelson, W.M. & Ott, E.S. (eds.) (1993). *Cognitive-behavioral procedures with children and adolescents: A practical guide*. Allyn and Bacon. Boston, MA.
- Gendreau, P. (1998). Rational policies for reforming offenders. Presentation to the International Community Corrections Association, Arlington, VA.
- Hare, R. D. (1991). *The Hare Psychopathy Checklist*. MultiHealth Systems, Toronto, ON.
- Henggeler, S.W. (1989). *Delinquency in adolescence*. Sage Press, Newbury Park, CA.
- Henggeler, S.W., Schoenwald, S.K., Bourduin, C.M., Rowland, M.D. and Cunningham, P.B.(1998). *Multisystemic treatment of antisocial behavior in children and adolescents*. The Guildford Press, New York, NY.
- Hoge, R.D. & Andrews, D.A. (1996). *Assessing the youthful offender: Issues and technique*. Plenum Press: New York, NY.
- Hoge, R.D., Andrews, D.A. & Leschied, A.W. (1995). An investigation of factors associated with probation and custody dispositions in a sample of juveniles. *Journal of Clinical Child Psychology*, 24, 279-286.
- Hoge, R.D. & Andrews, D.A. (1994). *The Youth Level of Service Inventory*. Carleton University, Ottawa, ON.
- Hoge, R.D., Andrews, D.A. & Leschied, A.W. (1995). *The Risk/Need Inventory*. The Ministry of Community and Social Services, Toronto, ON.
- Hollin, C.R. (1990). *Cognitive-behavioral interventions with young offenders*. Pergamon Press. Oxford, UK.
- Jackson, D. (1989). *The Basic Personality Inventory Manual*. London, ON. Research Psychologist Press.

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VISITING EXPERTS' PAPERS

- Kazdin, A.E. & Weisz, J.R. (1998). Identifying and developing empirically supported child and adolescent treatments. *Journal of Consulting and Clinical Psychology*, 66,1, 19-36
- Leschied, A.W. and Cunningham, A. (1998a). *Clinical trials of multisystemic therapy with high risk phase I young offenders, 1997 to 2001*, Year end report 1997-1998. The Family Court Clinic, London, Ontario.
- Leschied, A.W. and Cunningham, A. (1999). *Clinical trials of multi-systemic therapy in Ontario, 1997-2001: Evaluation update*. Family Court Clinic, London, Ontario.
- Lipsey, M.W. (1992). *Juvenile delinquency treatment: A meta-analytic inquiry into the variability of effects*. In T.D. Cook, H. Coopwer, D.S. Corday, Hartman, L.V.
- Hedges, R.J. Light, T.A. Louis & F. Mosteller (eds.) *Meta-analysis: A casebook*. Russell Sage Foundation, New York, NY.
- Lipsey, M. & Wilson, D.B. (1997). *Effective intervention for serious juvenile offenders: A synthesis of research*. Russell Sage Foundation. New York, NY.
- Losel, F. (1997). The efficacy of correctional treatment: A review and synthesis of meta-analytic evaluations. In J. McGuire (ed.) *What works: Reducing reoffending guidelines from research and practice*. John Wiley and Sons. Chichester, UK.
- Ryan, G.D. & Lane, S.L. (1991). *Juvenile sexual offending: Causes, consequences, and correction*. Lexington Books, Lexington, MA.
- Simourd, D., Hoge, R.D., Andrews, D.A. & Leschied, A.W. (1994). An empirically-based typology of youthful offenders. *Canadian Journal of Criminology*, 36, 447-461.
- Simourd, D., The criminal sentiments scale-modified and pride in delinquency scale: Psychometric properties and construct validity of two measures of criminal attitudes. *Criminal Justice and Behavior*, 24, 52-70.
- Washington State Social Policy Centre. *A cost-effectiveness review of major young offender interventions*. Seattle WA.
- Wells, L.E. (1991). *The utility of meta-analysis in criminal justice research*. Paper presented at the Academy of Criminal Justice Sciences Meetings, Nashville, TN.