# The Society for Clinical Child and Adolescent Psychology (SCCAP): Initiative for Dissemination of Evidence-based Treatments for Childhood and Adolescent Mental Health Problems

With additional support from Florida International University and The Children's Trust.







Center for Children and Families

# **Keynote**Evidence-based School-based Violence and Prevention Programs

John E. Lochman, Ph.D., ABPP
Professor and Doddridge Saxon Chair of Clinical Psychology
The University of Alabama





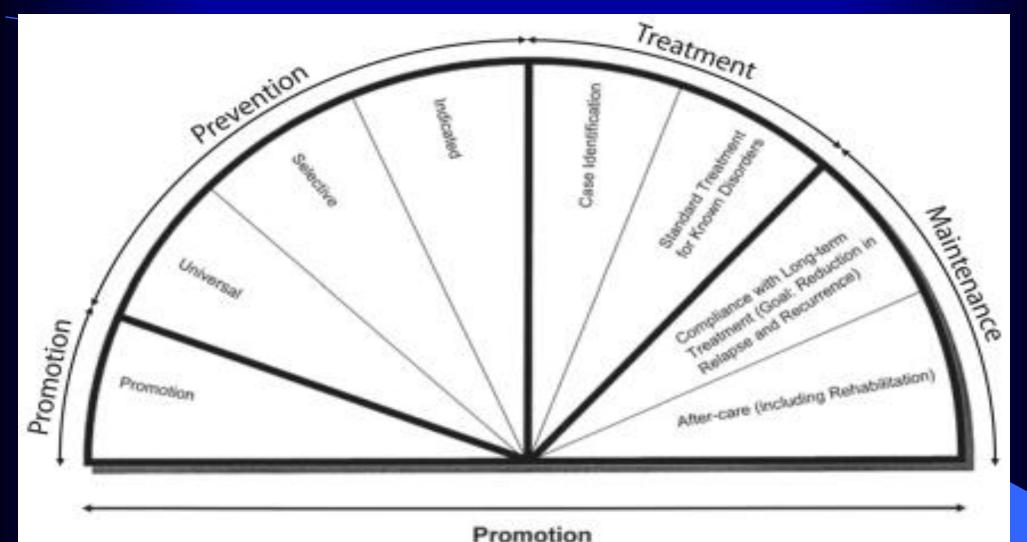


Center for Children and Families

### Topics

- Prevention and treatment
- Evidence-based programs
- Typical elements of cognitive behavioral preventive interventions
- Myths or not

## What do school-based interventions address? – The IOM Continuum



## Evidence-based prevention and treatment interventions

- Three Developmental Periods
  - Preschool and Early Childhood
  - Later Childhood
  - Early Adolescence

## Evidence-based prevention and treatment interventions in preschool and early childhood

- Universal prevention programs
  - **❖ Good Behavior Game** (Embry, 2002)
  - Promoting Alternative Thinking Strategies
    (Greenberg & Kusche, 1996)
  - \* LIFT program (Reid & Eddy, 2002; Eddy et al, 2003)
  - \* Second Step Program (Grossman et al, 1997; Taub, 2001)

## Evidence-based prevention and treatment interventions in preschool and early childhood

- Treatment and targeted prevention programs
  - ❖Incredible Years multicomponent program, with child and teacher training (Dinosaur School) and 12-20 parent training sessions (Webster-Stratton & Hammond, 1997; Webster-Stratton, 1998; Reid et al, 2007)
  - ❖ Triple P (Positive Parenting Program) is a 5-tier intervention that includes (1) media-based parent information, (2) 1-2 session parent training, (3) 4 session behavioral training for moderate problems, (4) 12 session behavioral training for more severe problems, and (5) 11 tailored sessions that includes a focus on parental dysfunction
  - \*Montreal Delinquency Prevention Program (Tremblay et al, 1996) was a multicomponent program for 2<sup>nd</sup> and 3<sup>rd</sup> graders, including parent training and social skills and self control training for children

## Evidence-based prevention and treatment interventions in preschool and early childhood

- Treatment and targeted prevention programs (continued)
  - ❖ Fast Track (Conduct Problems Prevention Research Group, 1999, 2002, 2004, 2010) is a comprehensive preventive intervention that included classroom-level PATHS lessons, parent training, friendship groups and tutoring for at-risk kindergarten-age children from 1<sup>st</sup> through 10<sup>th</sup> grades
  - ❖ Family Check-UP (Shaw et al, 2006) is a 3 session intervention based on motivational interviewing techniques
  - **Parent-Child Interaction Therapy (PCIT)**

(Brinkmeyer & Eyberg, 2003; Nixon et al, 2003) is a highly individualized 12-16 session intervention,

## Evidence-based prevention and treatment interventions in later childhood

- Universal prevention programs
  - ❖ Seattle Social Development Project (Hawkins et al, 1999; Lonczak et al, 2001) - behavior management training for teachers, parent training, child social skill training
  - \*Bullying Prevention Program (Olweus, 1993; Berryhill & Prinz, 2003) reduce acceptance by school staff of bullying
  - ❖ Positive Behavior Supports (Sugai & Horner, 2002; Todd et al, 2002) Workshops for teachers and students, outlining positive behavioral expectations

## Evidence-based prevention and treatment interventions in later childhood

- Treatment and targeted prevention programs
  - Problem Solving Skills Training & Parent Management Training (Kazdin et al, 1987; 1989; 1992)
  - \*Anger Coping, and Coping Power, Programs (Lochman, 1992; Lochman & Wells, 2002, 2003, 2004; Lochman et al, 2009)

## Evidence-based prevention and treatment interventions in early adolescence

- Universal prevention programs
  - \*Life Skills Training (Botvin & Griffin, 2004)
  - **❖ Responding in Peaceful and Positive Ways** (Farrell et al, 2001)
  - **♦ School Transitional Environment Project** (Felner et al, 2001)
  - ❖ Positive Youth Development (Caplan et al, 1992) Sessions in 6<sup>th</sup> and 7<sup>th</sup> grades address stress management,
    problem solving and assertiveness, social networks, and
    substance and health information

## Evidence-based prevention and treatment interventions in early adolescence

- Treatment and targeted prevention programs
  - \*The Art of Self-Control (Feindler & Ecton, 1986)
  - ❖Other intensive, effective, multicomponent programs are Multisystemic Therapy (Henggler & Lee, 2003) and Multidimensional Treatment
    - Foster Care (Chamberlain & Smith, 2003) are not based in schools, but typically can include therapists' direct contact with schools

- School-based interventions address reciprocal relations between children's cognitions, emotions and behavior
- To address these reciprocal processes, intervention's have both behavioral elements (using basic behavioral principles, focusing on the influence of external contingencies) and cognitive elements (internal information-processing)
- Certain common elements exist in many school-based programs for children with aggressive and conduct problem behavior

#### Goal Setting

- Children identify long-term and short-term goals for themselves in their home and school settings
- short-term goals are typically "prosocial opposites" of problem behaviors, and lead to monitoring and reinforcement
- \*Research has indicated that a goal-setting component in a CBI program can help to generalize behavioral change into school and home settings
- Likely leads children to focus more on the consequences of their daily behaviors

- Organizational and study skills, which are important for the concomitant academic problems that aggressive children have
  - Children identify useful and not-useful study skills, and then plan to use the useful ones when completing homework and long-term projects at school
  - Children and parents jointly create a homework contract which specifies when and where homework will be done, and how parents will monitor homework completion and provide contingent rewards for home work completion

- Awareness of emotions, especially anger, and of associated physiological arousal
  - Children increase their accuracy in identifying emotions in others
  - ❖ There is an initial focus on a wide range of emotions children experience, including emotions that they perceive as making them vulnerable (sadness, anxiety), and which they may not recognize in themselves
  - ❖ There is focused attention on the cognitive (ruminative "angry thoughts") and physiological correlates of anger
  - ❖ Using aids such as anger thermometers, children learn to identify different levels of anger that they experience, and they identify "triggers" that lead to each level of anger

- Anger management and self-regulation
  - ❖ Attention to anger awareness leads into a focus on how children can better manage their arousal
  - ❖ Children are taught a set of coping methods that they can use when anger-aroused, and which can aid then in recovering more quickly from an aroused state
  - ❖ The self-regulation methods typically include use of distraction techniques, relaxation training (e.g. abdominal breathing, or progressive relaxation), and use of coping internalized self-statements
  - ❖ The coping self statements are meant to lead into more deliberative processing of possible solutions to the social problem that is experienced
  - ❖ Typically a series of graded exposure activities are used to assist children in practicing their self-regulation skills first in indirect ways (e.g. through puppet role-plays) and then in direct person-to-person role-plays

- Perspective-taking and attribution retraining
  - ❖ Before children can accurately perceive the problem situations they face, they must develop an ability to accurately perceive others' perspectives and intentions
  - ❖ After a set of fun game-like tasks that illustrate how a single stimulus can be perceived in quite different ways, children can engage in role-play tasks where different people's different perceptions of events and of others' intentions are explored
  - ❖ Although the focus is primarily often on children's perceptions of their peer interactions, clinicians can also focus on adult-child interactions if warranted
  - ❖ The primary focus is on retraining the hostile attribution bias evident in reactive aggressive children, encouraging them to experience that it is sometimes hard to tell what others intend in problematic situations (rather than erroneously assuming hostile intentions in ambiguous situations)

#### Social problem-solving skills

- ❖ Along with anger management, problem solving skill training is the most common CBI technique used with aggressive children
- Children learn a step-wise approach to thinking about problem resolution, typically including steps for problem identification, generation of choices or solutions to resolve the problem, consideration of consequences for each solution, and a method for making a decision about which choice to enact
- ❖ Problem solving can be more successful when a positive goal to be achieved is identified, and when the child initially tries to resolve problems which trigger low to moderate levels of anger
- ❖ Brainstorming about consequences (perceived as positive and negative; short and long term) is likely one of the most important aspects of the problem-solving process
- ❖ A series of activities is again used, ranging from discussion, to game-like tasks, to roleplaying, to video or audio recording an enactment of the problem solving process

- Social skills, dealing with peer pressure, and involvement in less-deviant peer groups
  - ❖ Because of the associated social skills deficits of many (but not all) aggressive children, training in social skills with peers is often an element of CBI
  - ❖ As children get closer to adolescence, there is often a focus on handling developmentally-appropriate risks, such as peer pressure to engage in antisocial behavior
  - ❖ CBI can explicitly focus on children's current involvement in potentially deviant peer groups, and can address how to move to other peer groups that are somewhat less risky

- Multicomponent interventions are more useful than simpler single component intervention
- Booster sessions are necessary
- Interventions have differing effectiveness in neighborhoods that vary socioeconomically
- Group interventions with aggressive children are iatrogenic
- Parent engagement in preventive intervention is only a function of parent characteristics
- A good workshop is sufficient training for school staff to implement prevention programs
- The characteristics of schools and school staff affect the implementation of programs

 Multicomponent interventions are more useful than simpler single component interventions

### Multicomponent interventions

 Overall, multicomponent intervention programs that involve child and parent components have stronger outcomes than do single components for children and for parents

• There are few universal prevention multicomponent programs that have been to be effective, although the LIFT program is an exception

## Effect Sizes of Contrasts of Coping Power with Control Cell: Outcomes at 1 Year Follow-up

Lochman & Wells (2004), Journal of Consulting and Clinical Psychology, 72, 571-578

	CP Child Component Only	CP Child + Parent Components
	<u>versus</u> Control	versus Control
Delinquency	<u>-</u>	.37*
Substance Use (Parent-rated)	<u>-</u>	.66*
School Behavioral Improvement	.42*	.34*

### So, myth or not?

- Not a myth for important outcomes in the community
- BUT IS a myth for school-based behavioral problems; child-only preventive interventions can be as effective as multicomponent intervention

Booster sessions are necessary

- A remarkably understudied assumption, with few randomized tests of whether boosters promote long-term maintenance or produce long-term preventive effects, as assumed
- Have been positive effects of a brief booster to the Anger Coping program in maintaining observed classroom disruptive off-task behaviors at a 3 year follow-up (Lochman, 1992), and of a booster for a family-focused prevention program on child aggression at a 1 year follow-up (Tolan et al, 2009)
- However, boosters have not produced additional effects in a treatment for adults with impulse-control problems (Hodgins et al, 2009) nor for a classroom social problem solving program to reduce aggression (Daunic et al, 2006)

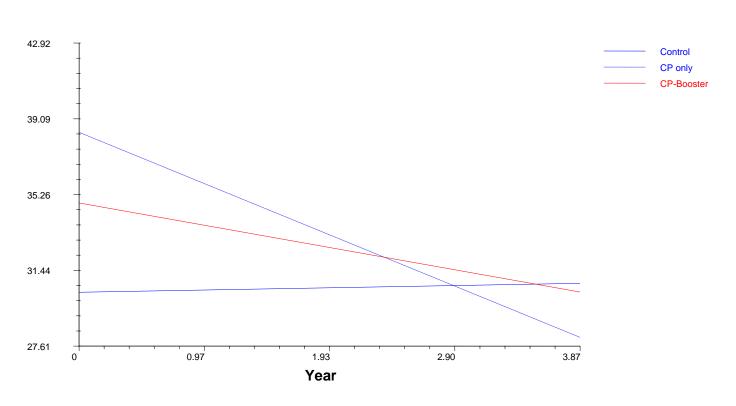
# Brief Coping Power – Growth Curve Analyses Time 1-5 – on Teachers' BASC Ratings of Externalizing Behavior Problems

	COEFFICIENT	p VALUE
CP-Only vs Control	-2.79	.016
CP-Booster vs Control	-1.28	ns

- Coping Power delivered during 5<sup>th</sup> grade (24 child sessions, 10 parent sessions)
- CP Booster monthly individual sessions in grade 6
- CP-Only:60: CP-Booster:60; Control:120

## Teacher BASC Externalizing Ratings by Condition





### So, myth or not?

- Not a myth for preventive family interventions
- BUT may be a myth for school-based interventions

Interventions are most effective in higher socoieconomic neighborhoods

### Neighborhood Effects

- Exposure to neighborhood problems increases children's aggressive behaviors (Colder, Mott, Levy & Flay, 2000; Guerra, Huesmann & Spindler, 2003), with heightened effects during middle childhood (Ingoldsby & Shaw, 2002).
- Neighborhood problems contribute to poor parenting
   (Pinderhughes, Nix, Foster, Jones & Conduct Problems Prevention Research Group, 2001),
   although the neighborhood effects continue to add to the effects of poor parenting on children's aggressive behaviors
   (Greenberg, Lengua, Coie, Pinderhughes & CPPRG, 1999; Schwab-Stone et al, 1995)
- In addition to these direct and mediated effects, community contextual factors may influence the ability of preventive interventions to affect later parenting processes and children's behavior

## TOCA Aggression: Coping Power and Neighborhood Disadvantage (Lochman et al, 2007, SRCD)

#### Level 2 Time Slope

- ❖ TRT,G110
- ❖ TRT,G210

- Level 3
- Neighborhood Intercept, G001
- Neigh X Time Slope, G101
- Neigh X TRT X Time, G111
- Neigh X SQTime, G201
- Neigh X TRT X SQTime, G211

- ns (sig w/out neigh predictors)
- ns

- .207418 (.001\*\*\*)
- ns
- ns
- -.015370 (.05\*)
- .035886 (.03\*)

### TOCA Aggression: Coping Power X Neighborhood Disadvantage

CPOWER = 0.00CONDIS2 = -0.5

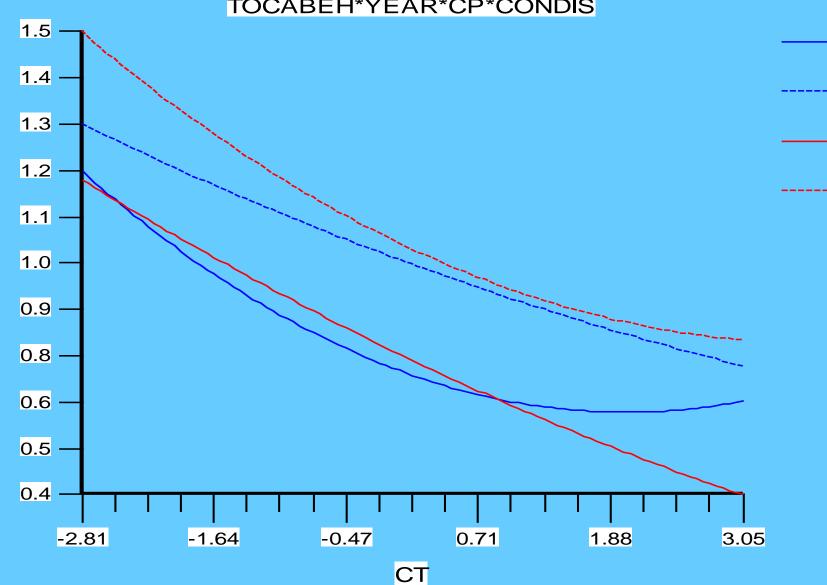
CPOWER = 0.00CONDIS2 = 0.75

CPOWER = 1.00CONDIS2 = -0.5

CPOWER = 1.00

CONDIS2 = 0.75





A G C

#### Conclusion

- Neighborhood disadvantage, as measured by census data, have an effect on the Rx X Time Slope:
  - On children's aggressive behavior, with intervention children and parents in the better neighborhoods showing most improvement

#### So, myth or not?

 NOT a myth - Is support for the assumption that school-based interventions fare better with children from higher SES neighborhoods through a 3 year follow-up

#### Myths – or Not

Group interventions with aggressive children are iatrogenic

#### **Group Formats**

- Although overall Coping Power program effects have significantly reduced children's problem behavior, it is plausible that the degree of positive effects may be reduced or truncated to some degree by deviant peer effects and other behavioral management problems with groups of children.
  - The steepest growth of substance use occurs among adolescents with drug-using peers (Chassin et al., 1996; Curran et al., 1997).
  - Similarly, aggressive children within classrooms with high rates of other aggressive children are more likely to increase their aggression during that academic year (Barth et al., 2004).

# Intervention Research on Deviant Group Effects

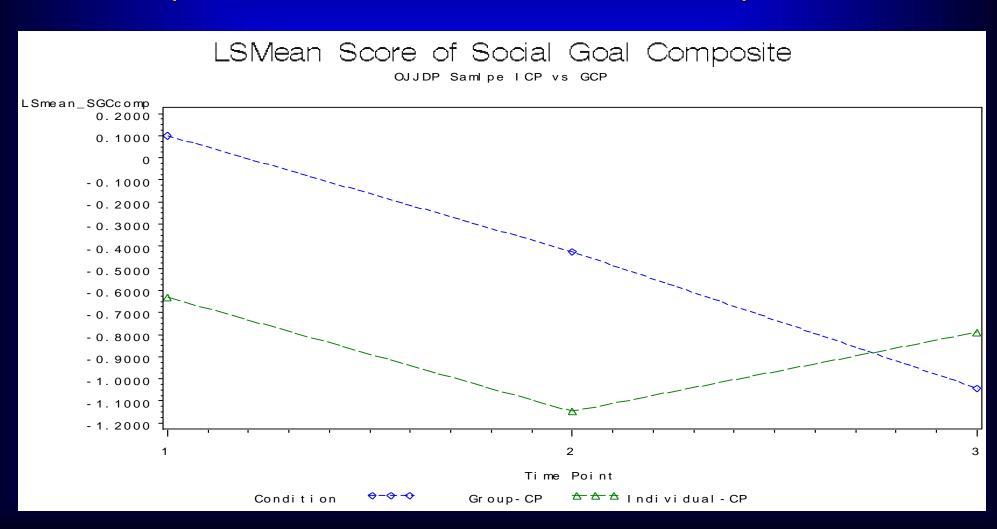
- By a 1-year follow-up, Dishion and Andrews (1995) found that youth who had received youth ATP sessions had higher rates of tobacco use and of teacher-rated delinquent behaviors than did the control children, and these iatrogenic effects were evident even if the parents had also received intervention in the combined condition.
  - At a 3-year follow-up, the teen intervention conditions continued to have more tobacco use and delinquency (Poulin et al., 2001).
  - Analyses of the iatrogenic group conditions revealed that subtle dynamics of deviancy training during unstructured transitions in the groups predicted growth in self reported smoking and teacher ratings of delinquency (Dishion et al., 2001).

## Pilot Study of Individual vs Group format for Coping Power

- 11 schools randomly assigned to either the ICP (individually delivered Coping Power) or GCP (group delivered Coping Power) condition (ICP: 30; GCP: 30)
- abbreviated CP intervention: 24 child sessions and 10 parent sessions during the 4<sup>th</sup> grade year
- Assessments: T1, T2 (after 5 sessions), T3 (post; 98% retention)

#### Baseline-Post (T1-T3)

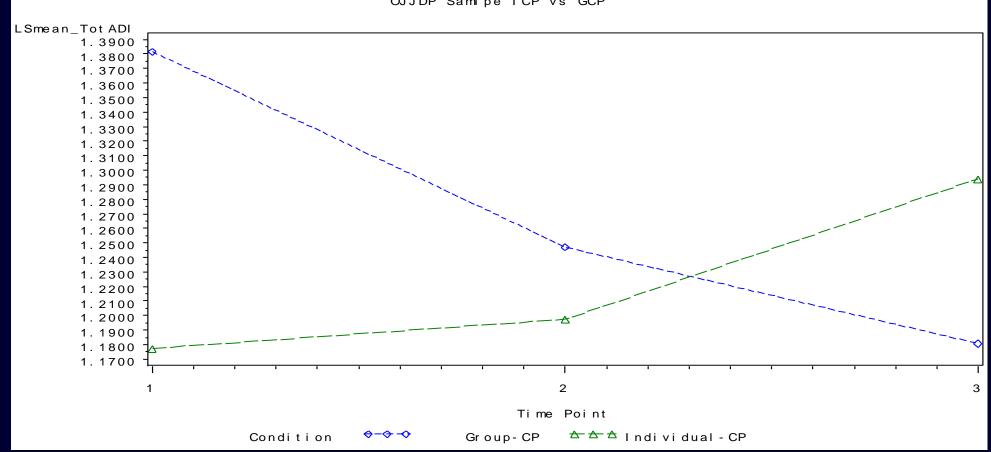
Dominance/Revenge Social Goals – <u>ICP vs GCP contrast</u> Repeated Measures Anova: Time X Cond: p= **01**\*\*



#### Baseline-Post (T1-T3)

Self-Dysregulation – <u>ICP vs GCP contrast</u> Repeated Measures Anova: Time X Cond: p=.03\*



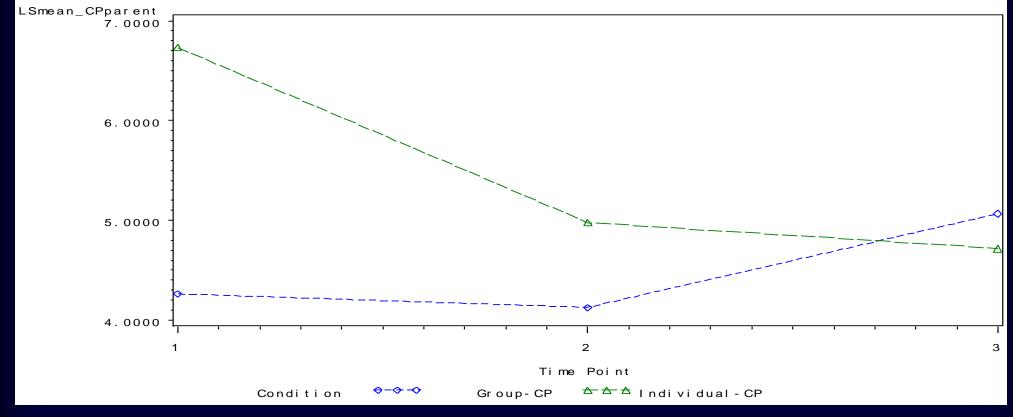


#### Baseline-Post (T1-T3)

parent-rated BASC Conduct Problems – <u>ICP vs GCP contrast</u>

Repeated Measures Anova: Time X Cond: p=.008\*

LSMean Score of Parent Rating Conduct Problems



#### Conclusion

- Individual format (ICP) is more effective than Group Format (GCP) in reducing parent-rated children's conduct problems
- GCP was more effective than ICP in reducing children's dominance/revenge-oriented social goals and in improving their self-regulation
- Thus, group and individual delivery of programs may affect different types of outcomes

### So, myth or not?

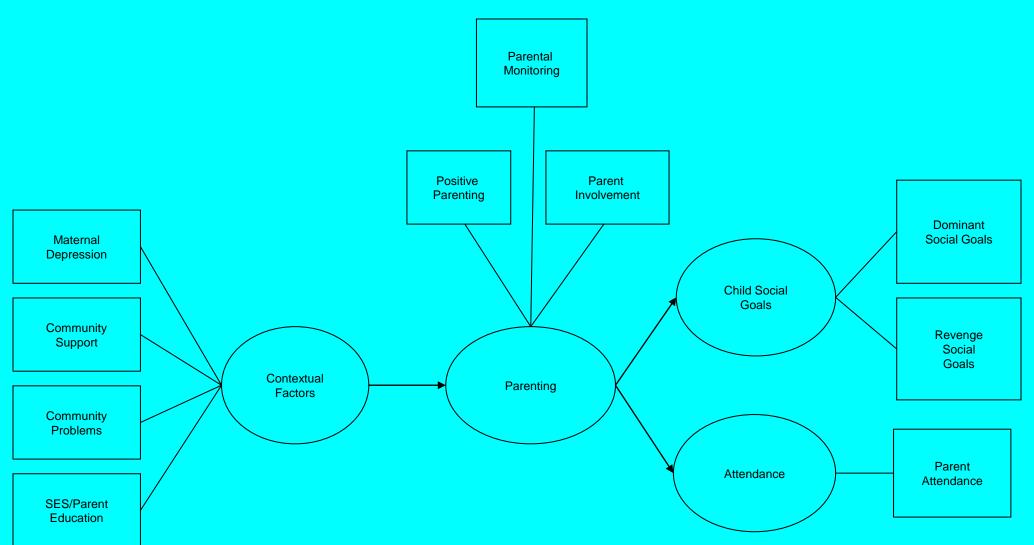
- NOT a myth for child behavior outcome an individually delivered intervention did better than a group intervention
- HOWEVER, other outcomes are better with a group format than with an individual format, so mixed.....

#### Myths – or Not

 Parent engagement in preventive intervention is only a function of parent characteristics

### Parenting Practices Mediate Effect of Family Context on Parent Attendance at CP Parent Sessions

Ryan, Boxmeyer & Lochman, Behavioral Disorders, 2009



## Enhancing parent engagement: through parents

 Dishion and Kavanagh (2003) have used a 3session family check-up to enhance parent motivation and parent engagement in intervention Feedback
Form: Tool
to
communicate
and connect
family
strength and
areas of
concerns.

Profile for:	Child's Ag	ge: Date:
		Youth Adjustment
Problem Behavior: Defiance		Touth Adjustment
Problem Behavior: Conduct		
Problem Behavior: Attention		
Emotional Adjust-Anxiety		
Emotional Adjust-Depression		
Coping Skills		
Interpersonal Relationships		
Other:		
	Strength	Needs Attention
n		Family Adjustment
Relationship Quality		
Use of Encouragement		
Clear Expectations		
Limit Setting		
Supervision		
Academic Supports at Home		
Stress Management Other:		
Otner:		
	Strength	Needs Attention
		School Adjustment
Attendance		Sensorrajustmen
Academic Performance		
Study Skills		
Attitude about School		
Home-School Communication		
Problem Behavior: Rule Violation		
Problem Behavior: Aggressive		
Problem Behavior: Disruptive		
Other:		
	Strength	Needs Attention

Family: Those things going well for my child and family: Areas I would like to focus on improving: Specifically, my goal is to: What actions will I take to meet this goal? Task: What needs to be done? Description of Plan Resources: What is needed to Timeline get it done?

Date:

Child:

Action **Planning** Form combines goal setting and MI strategies.

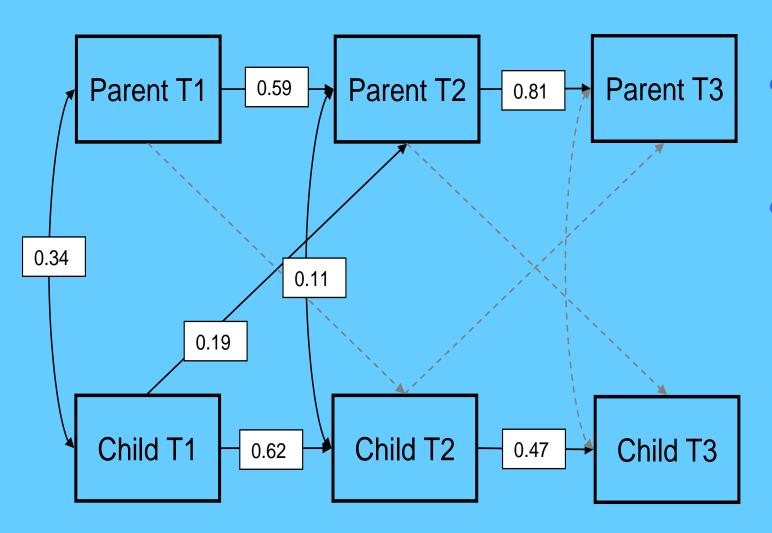
How important is it for your family to make	e this change?	The most important reasons for making this change and meeting this goal is:
1 2 3 4 5 6 7 Not Important At All	8 9 10 Very Important	
How confident are you that your family can a	make this change?	Some reasons that I am confident:
1 2 3 4 5 6 7 Not Comfident At All	8 9 10 Very Confident	
Is there anything that could get in the way of meeting this goal?		

## Enhancing parent engagement: through children

 Lag effects of child engagement and parent engagement during Coping Power sessions

### Parent and Child Engagement Across early, Middle and Late Intervention

Ellis, Lindsey, Barker, Boxmeyer & Lochman, under review



- Parent engagement: attendance
- Child
   engagement:
   attendance,
   goal points
   earned, group
   points earned

#### So, myth or not?

- Parent engagement is affected by parent characteristics, such as their parenting patterns
- However, it is a myth that parenting characteristics such as motivation can not be changed (e.g. with the Family Check-up), and that child characteristics, such as children's initial engagement in their own sessions, can not directly affect parent engagement

#### Myths – or Not

 A good basic workshop is sufficient training for school staff to implement prevention programs

#### Coping Power Field Trial in 57 Schools

Lochman, Boxmeyer, Powell, Qu, Wells, & Windle (2009). Journal of Consulting and Clinical Psychology

Training process for school counselors (randomly assigned to receive Basic Training or Intensive Training):

- (1) 3 days of workshop training
- (2) Monthly meetings (2 hours) while intervention underway

#### For CP-IT counselors only:

- (3) Individualized feedback on audiotaped sessions
- (4) Technical assistance from trainers via telephone and email contacts

**p<.01, *p<.05,	CP-Intensive vs Control Estimate (SE)
Behavior Problems	
BASC Externalizing (teacher-report)	41* (.11)
BASC Externalizing (parent-report)	23*(.12)
NYS Minor Assault (child-report)	25** (.12)
Targeted Processes	
BASC Social/Academic (teacher)	.35* (.13)
BASC Social (parent)	
Outcome Expectations (child)	24* (.08)
APQ Inconsistent Discipline (parent)	

	CP-Intensive vs	CP-Basic
**p<.01, *p<.05, +p=.06	Control	vs Control:
	Estimate (SE)	Estimate (SE)
Behavior Problems		
BASC Externalizing (teacher-report)	41* (.11)	
BASC Externalizing (parent-report)	23*(.12)	
NYS Minor Assault (child-report)	25** (.12)	
Targeted Processes		
BASC Social/Academic (teacher)	.35* (.13)	.24+ (.13)
BASC Social (parent)		
Outcome Expectations (child)	24* (.08)	
APQ Inconsistent Discipline (parent)		

#### Conclusions/Implications for Training

- Evidence-based prevention programs such as Coping Power can be disseminated effectively to counselors in real-world settings, although:
  - The intensity of training makes a difference in whether improvements in children's outcomes and mediating processes occur
  - Ongoing supervisory feedback about program implementation (particularly to foster client engagement) may be critical to promoting positive outcomes

### So, myth or not?

 It is a myth that training intensity will not influence the implementation of new prevention programs

#### Myths – or Not

 The characteristics of schools and school staff affect the implementation of programs

# Counselor and School Characteristics Predicting Program Delivery

\*p<.05, +p<.10

Lochman, Powell, Boxmeyer, Qu, Wells, & Windle. (2009). Professional Psychology: Research and Practice

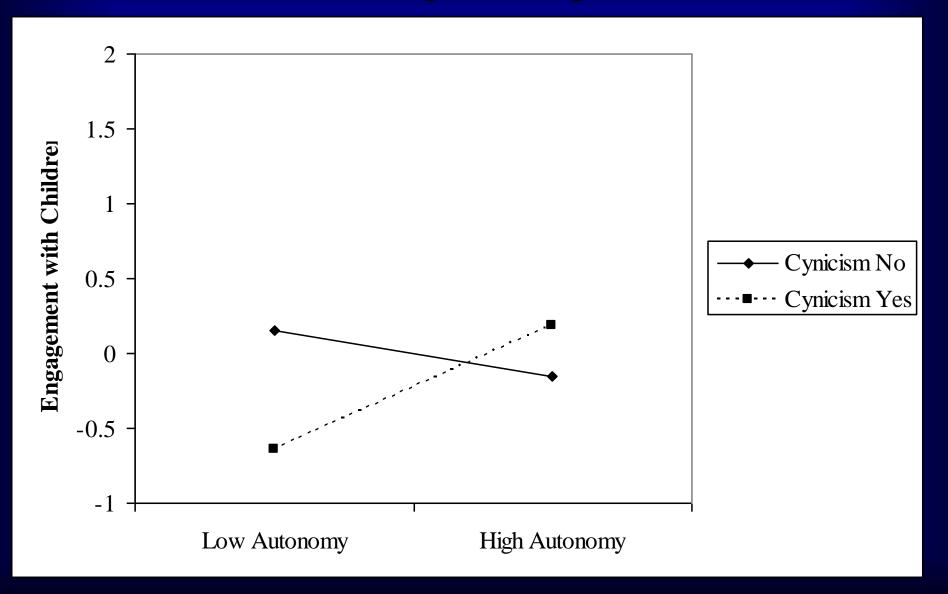
	Objectives Completed	
Agreeableness	.086* (.042)	.185+ (.103)
Managerial Control	286+ (.149)	

#### Counselor and School Characteristics Predicting Counselor Engagement

\*\*p<.01, \*p<.05

	With	With
	Children	<b>Parents</b>
Conscientiousness	.068* (.032)	
Agreeableness		.112** (.039)
Managerial Control X Cynicism		734** (.200)
Autonomy X Cynicism	.674** (.173)	

### Autonomy X Cynicism



## Conclusions About Counselor and School Characteristics

- The GOOD NEWS: It is ok to be neurotic, not particularly open-minded, not particularly extraverted, and cynical if you are in the right work environment
- Degree and quality of implementation can be influenced by agreeableness and conscientiousness of counselors and by characteristics of the school setting which interact with counselor characteristics (counselor cynicism in interaction with school autonomy and rigid managerial control)

### So, myth or not?

 It is not a myth that counselor and school characteristics can influence the implementation of new programs For more information, please go to the main website and browse for workshops on this topic or check out our additional resources.

#### **Additional Resources**

#### **Online resources:**

- 1. Coping Power website: http://www.rfts.ca/cope/index.html
- 2. Society of Clinical Child and Adolescent Psychology website: http://effective childtherapy.com
- 3. Olweus Bullying Prevention Program: http://www.clemson.edu/olweus/history.htm

#### **Books:**

- 1. Larson J., & Lochman J.E. (2002). *Helping Schoolchildren Cope With Anger: A Cognitive Behavioral Intervention*. New York: Guilford Press.
- 2. Murrihy, R.C., Kidman, A.D., & Ollendick, T.H. (2010). The Fast Track Project: Preventing Severe Conduct Problems in School-Age Youth. New York: Springer.

#### **Selected Peer-reviewed Journal Articles:**

- 1. Embry, D. (2002). The good behavior game: A best practice candidate as a universal behavioral vaccine. *Clinical Child and Family Psychology Review 5(4)*, 273-297.
- 2. Farrell, A.D., Meyer, A.L., Kung, E.M., & Sullivan, T.N. (2001). Development and evaluation of school-based violence prevention programs. *Journal of Clinical Child Psychology, 30 (1),* 207-220.
- 3. Ingoldsby, E.M. & Shaw, D.S. (2002). Neighborhood contextual factors and early-starting antisocial pathways. *Clinical Child and Family Psychology Review, 5 (1),* 21-55.
- 4. Lochman J.E., Boxmeyer C., Powell N., Qu L., Wells K., & Windle M. (2009) Dissemination of the Coping Power program: Importance of intensity of counselor training. *Journal of Consulting and Clinical Psychology*, 77, 397–409.
- 5. Sugai, G., & Horner, R.R. (2006). A promising approach for expanding and sustaining school-wide positive behavior support. *School Psychology Review, 35 (2)*, 245-259.





Center for Children and