

# **Automatic and Deliberative Problem-Solving: Teaching Aggressive Youth to *Think Slow***

Jim Larson, Ph.D.

Professor Emeritus

Department of Psychology

University of Wisconsin-Whitewater

Scientific Board, The Melissa Institute for Violence Prevention and Treatment

Contact: [larsonj@uww.edu](mailto:larsonj@uww.edu)

# Students Inclined to Proactive Aggression

- goal-oriented aggressive behaviors; want something
- cool-headed, mean, bully-type
- often see little reason to change
- tend to do poorly in counseling therapy
- Managed best through adult supervision



# Students Inclined to Reactive Aggression

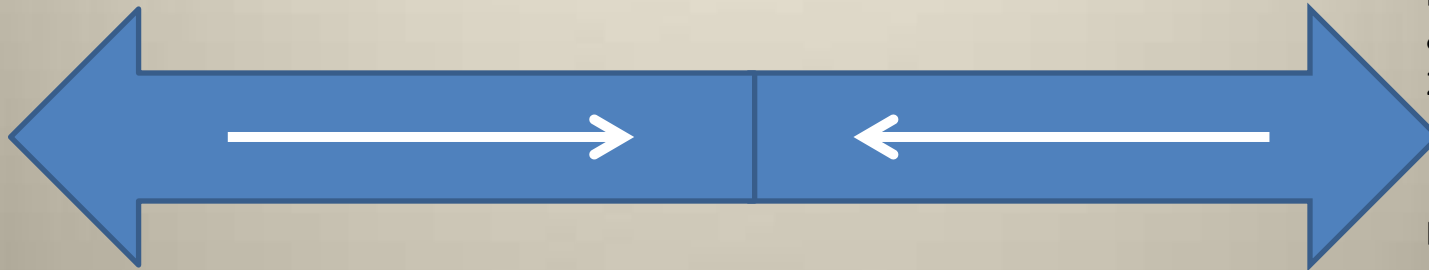
- Show unplanned, impulsive, reactive anger and aggression
- Typically not mean, but hot tempered, easily riled to aggressive behavior by others
- Often chronic and serious discipline problems
- Numerous social-cognitive deficits and distortions



# Continuum v. Dichotomous?

**Reactive**

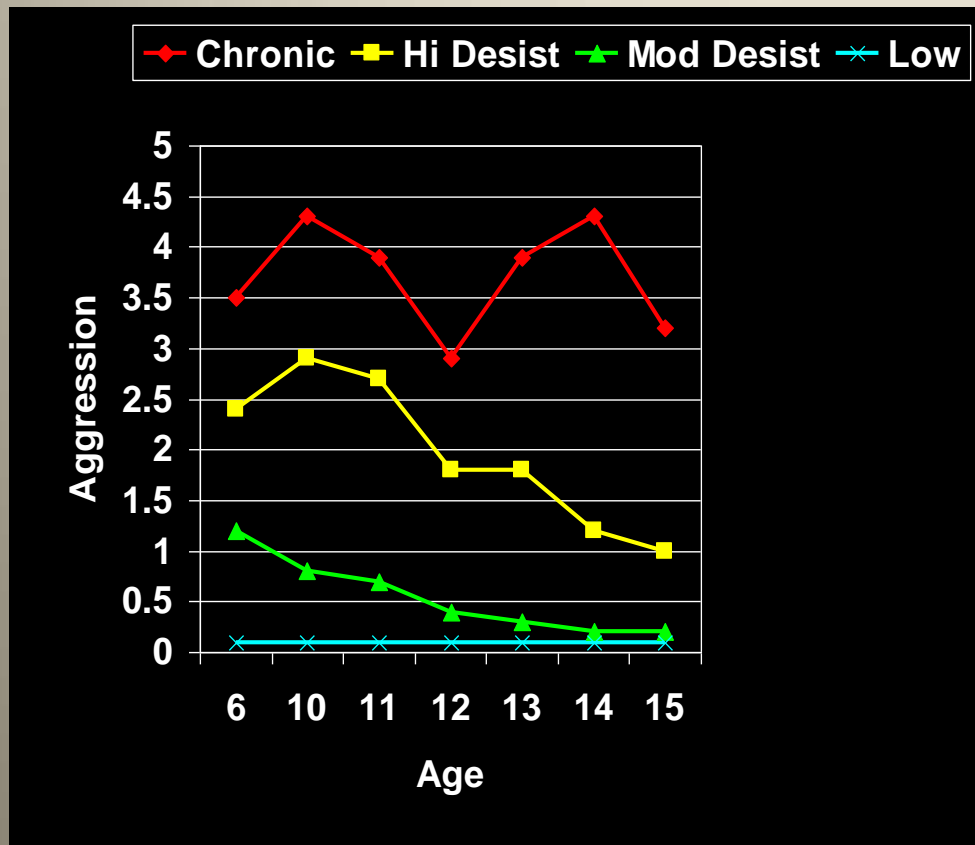
**Proactive**



**Most have  
elements of  
both**



# Is Aggressive Behavior a Stable Pattern?



Subgroup of chronic aggressive children are at risk of most physical violence during adolescence (Nagin & Tremblay, 1999)

**Chronic** tended to be those with ADHD, oppositional behavior, and low verbal skills

# Contributions of Home Life to Chronic Reactive Aggression

(There are many, but three important ones...)

- Missing or inadequate training in emotional understanding or regulation
- Poor modeling of emotional regulation and non-aggressive problem solving
- Predominance of “**The Parent Child Coercive Cycle**” in parent-child interaction

(Ref. Gerald Patterson)



# The Parent Child Coercive Cycle

Parent makes a compliance demand

*"Stop hitting your sister!"*



*"No! She started it!!"*



*"All right! All Right! Take it easy! Just keep the noise down, okay?"*



Mother's *escape behavior* is reinforced & child's *antisocial behavior* is reinforced

Repeat....



# The contributions of school...

## Kindergarten - Elementary

- Peer rejection
- Co-morbid ADHD, ODD, possible trauma reaction
- Academic difficulties, retention, and/or special education
- Inadequate or missing interventions
- Negative school schemata begin to predominate

## Middle and High

- Exposure to similarly high risk peers
- Community problems may surface or increase
- Bully victimization escalates, peaking usually at 7<sup>th</sup> grade. Frequently “bully-victims.”
- Substance abuse may begin or increase
- Dropout behaviors may start to dominate



These risk factors and school experiences can produce young people...

- ...with **pro-aggression schema** and negative affiliation schema
- ...who lack an adequate sense of **academic self-efficacy** and possess accompanying counter-productive learning habits
- ...who possess problematic **cognitive deficits and distortions**
- ...who “**think fast**” far too much

# Daniel Kahneman, Ph.D.

- *Thinking, Fast and Slow* (2011) Farrar, Straus and Giroux, Pubs.
- **System I (FAST)** – Automatic, quick, little or no effort, and no sense of voluntary control
- **System II (SLOW)** – Allocates attention to selected mental activities, including complex computations

# Librarian or Farmer?

- Please assume that Steve was selected at random from a representative sample. This individual has been described by a neighbor as follows: *“Steve is very shy and withdrawn, invariably helpful but with little interest in people or in the world of reality. A meek and tidy soul, he has a need for order and structure, and a passion for detail.”*
- *Is Steve more likely to be a librarian or a farmer?*

# Majority of people answer...



# Effects of Automatic Processing on Problem Solving

*Stimulus*

*Memory  
Bin*

*Response  
Enactment*

Perceived Threat

Direct Action

Direct Action

Verbal Assertion

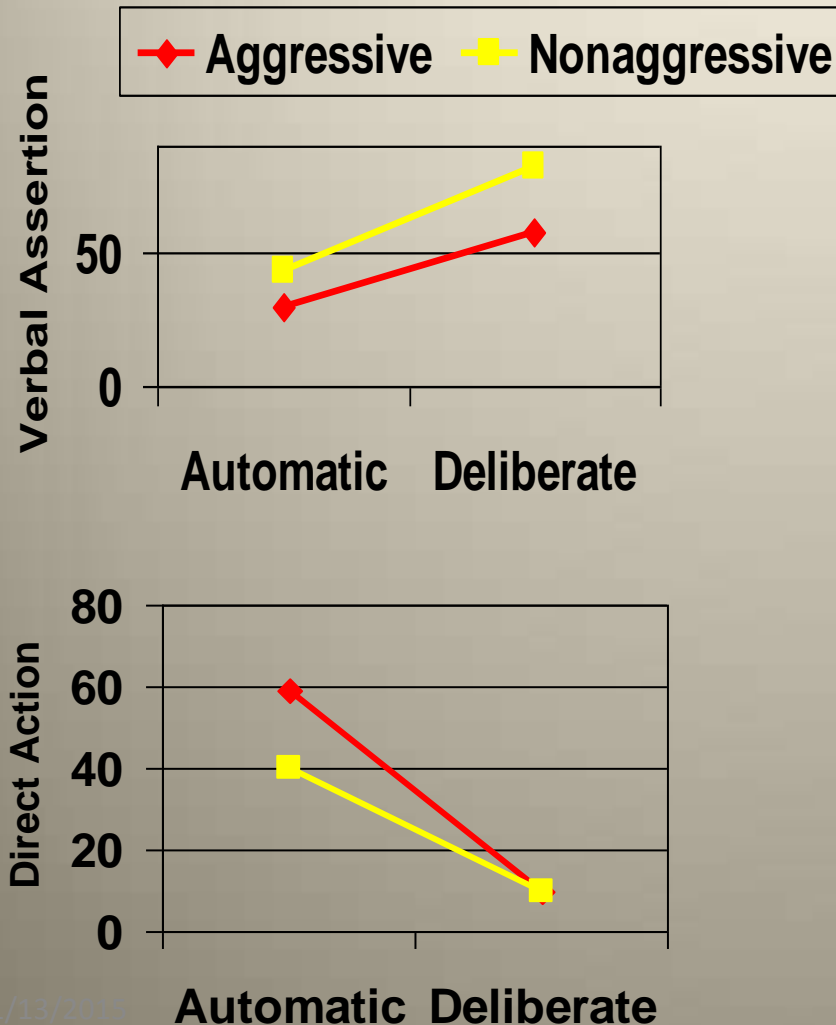
Help Seeking



11/13/2015

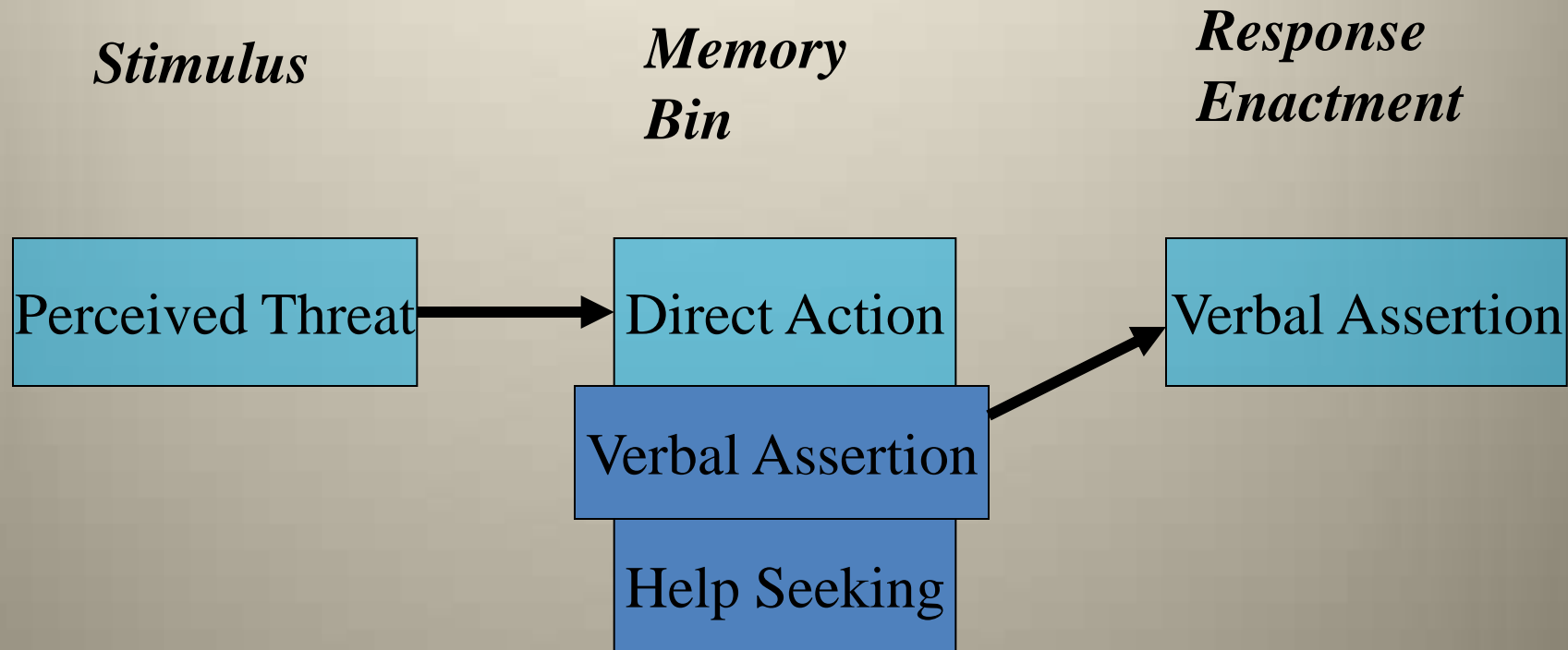
J. Lochman

# Effects of Deliberate vs Automatic Processing on Problem Solving



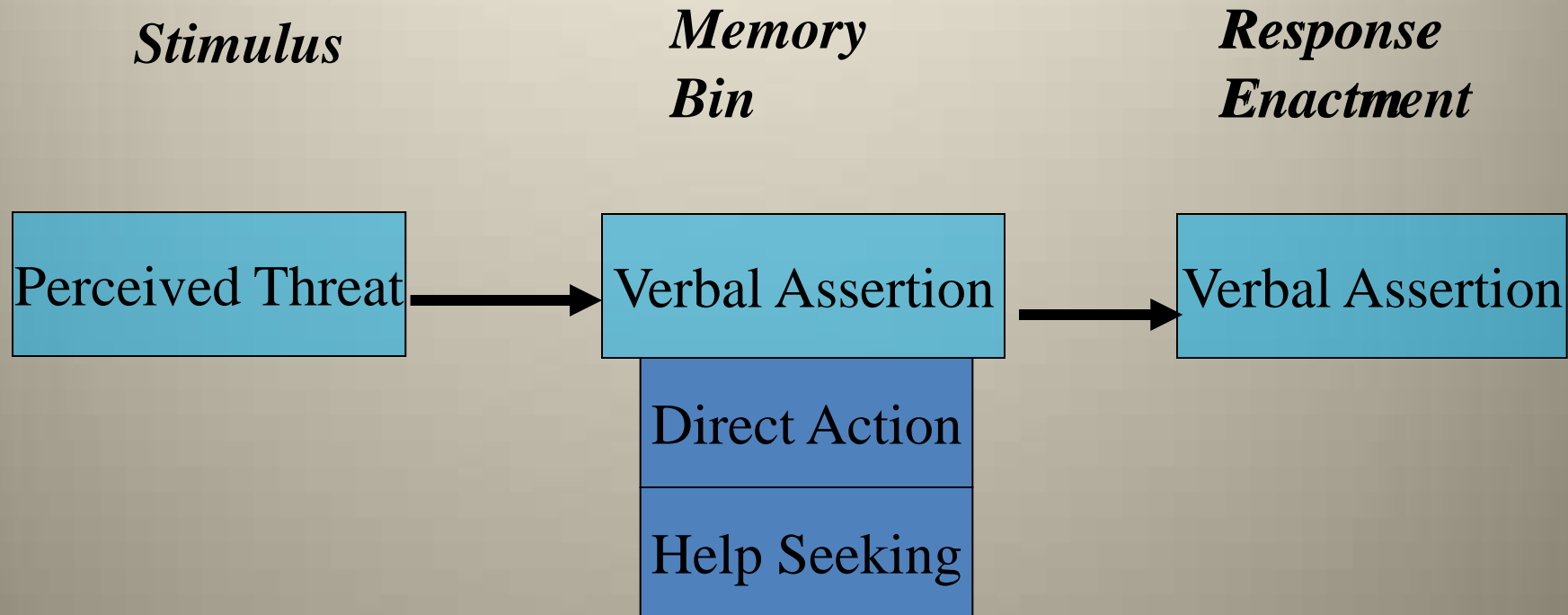
- Both aggressive and nonaggressive boys who use automatic processing produce 50 % fewer verbal assertion solutions and three times more direct action solutions than when they use deliberate processing (e.g. instructed to wait 20 seconds before responding) Lochman et al., 1989; 1990

# Effects of Deliberate Processing on Problem Solving





# Effects of Automatic Processing on Problem Solving

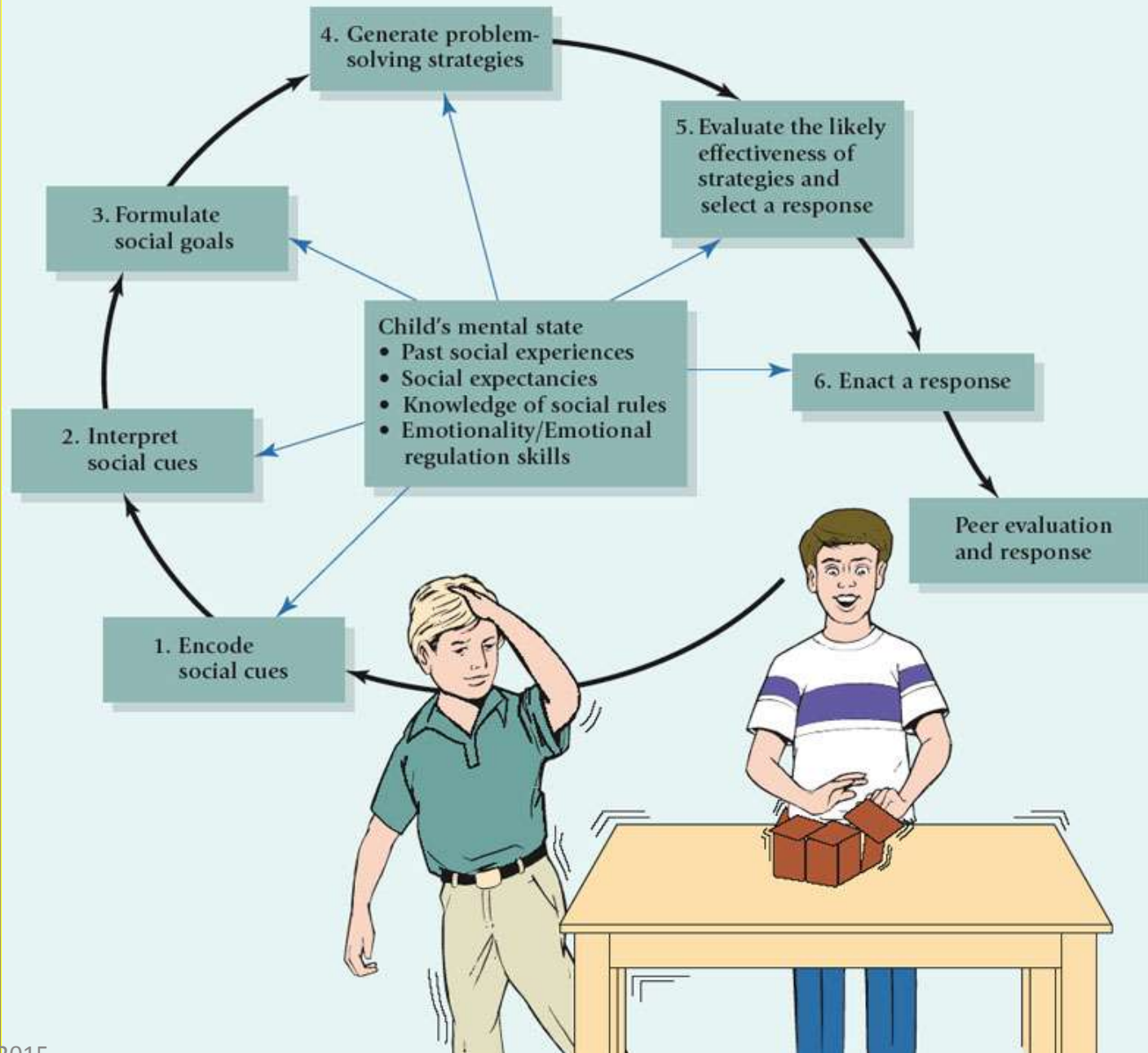


# QUESTION

**How do we as professionals design an intervention in a manner that will increase the probability that the student will learn to engage in deliberate processing and make wiser personal decisions?**

# SOCIAL INFORMATION PROCESSING (Dodge et al)

- *“How a person decides what to do.”*
- Foundation of all research-supported interventions for child aggressive behavior
- Six cognitive “steps” that must be accomplished, competently or not
- Reactive aggressive children and youth bring cognitive deficits and distortions to the process



# Social Information Processing **Deficits** in Reactive Aggressive Youth

(Dodge, 1991; Crick & Dodge, 1994)

- |  |   |
|--|---|
| 1. attend to available social cues               | 1. Hypervigilant for aggressive cues            |
| 2. give meaning to the cues                      | 2. Hostile attributional biases                 |
| 3. select desired outcomes                       | 3. Higher value on retaliation than affiliation |
| 4. Generate possible responses                   | 4. Narrow solution generation abilities         |
| 5. Identify potential consequences of a response | 5. Tendency to evaluate aggression positively   |
| 6. act out selected responses                    | 6. Difficulty enacting prosocial skills         |

# Train Deliberate Processing in the Context of Problem-Solving

- Learn to insert that moment of reflection
- Train problem-solving
  - What is my problem?
  - What are my choices to resolve it?
  - What are the foreseeable consequences of each?
  - Which one is in my best interest?
  - Do I have the skills to do it?
  - Now do it and recycle
- Start with goal development...

# Goal Development

- Why? – Sets a pro-social compass
- Who in your life is someone you'd like to emulate?  
Why?
  - No sports stars, celebrities, or criminals
- If things go your way, realistically, where do you see your life going?
- If a goal is something you want and are willing to work to obtain, what is one of your goals for this (week? month? year?)
  - Measureable and observable
- What is your academic goal for this semester?
  - What are the largest barriers to meeting it?



# 1. What is my problem?

- Tendency to confuse *disliking another's behavior* with a *problem*
  - *External locus of control*
  - *“Those guys are always hassling me”*
  - *“The teacher gives too much homework”*
- Learn to frame a problem in terms of own participation in it
  - *I **want** to avoid trouble **but** those guys...*
  - *I **want** to pass math **but** I don't want to do homework*
- Problem = A goal + an obstacle

## 2. What are my choices to resolve it?

- Narrow solution generating skills
  - “Nothing.” – Common automatic response
  - Strong preference for direct action
- Use scenario training to foster development of non-aggressive responses
  - “You are eating lunch and a student who you don’t like walks by and whispers, ‘Punk.’”
  - Add role plays with “Stop Action.”

### 3. What are the foreseeable consequences of each?

- Takes advantage of human capacity to cognitively “move” in time
- Train consequential thinking or “If-Then Thinking.”
  - “If I hit him, then he will hit back” - but better:
  - “If I hit him, then I get the consequences for fighting in school.”
  - “If I just smile at him, then...”
- Use “choices” from previous step training

## 4. Which one is in my best interest?

- *Which one will most likely result in the consequences that will help me to meet my short and long term goals in this environment?*
- *Sometimes forget what they really “want.”*
- What are the barriers to always acting in your best interest?
  - Well-practiced aggressive impulsivity
  - Non-aggressive skills deficit
  - Competes with peer approval

## 5. Do I have the skills to do it?

- You can't *inhibit a direct action impulse* if you don't know how to
- You can't be *verbally assertive* or *tactically quiet* if you don't know how to
- **Knowing about** a behavior is not the same thing as being able to perform that behavior under rapidly moving conditions of ambiguity and emotion
- Implications for behavioral skills training?

## 6. Now do it and recycle

- “*Pretty soon, you gotta put your pants on and go out the door.*” – 16 year-old youth
- Skills training *in vitro* then *in vivo*
  - Behavioral rehearsal using as much realism as possible
  - Use of “Mini-Challenges” in the problem environment
- Train post-incident analysis: What worked? What needs more practice?

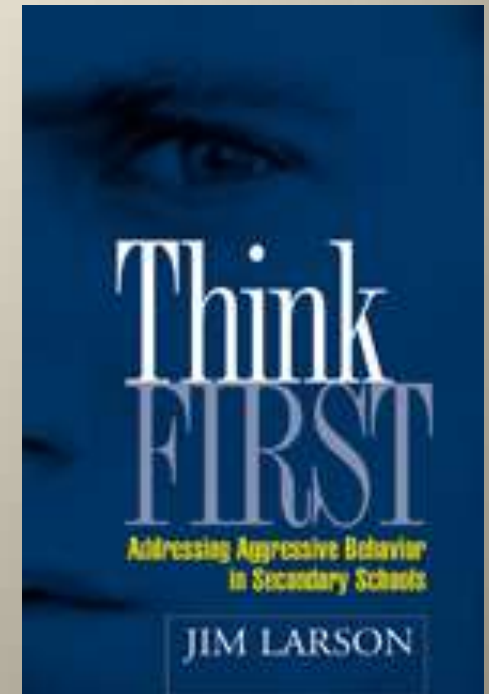
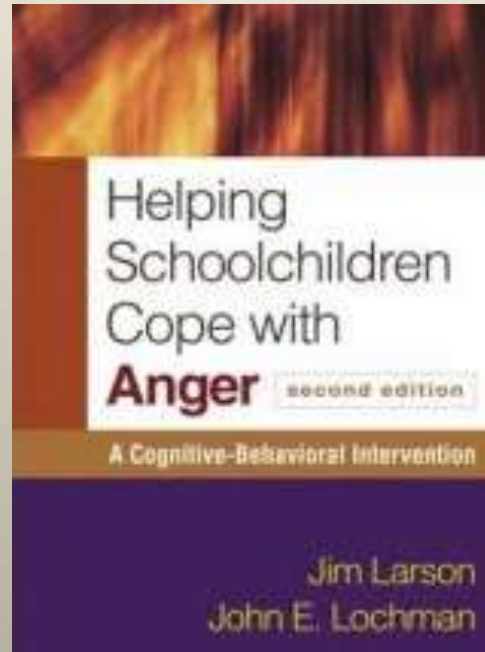
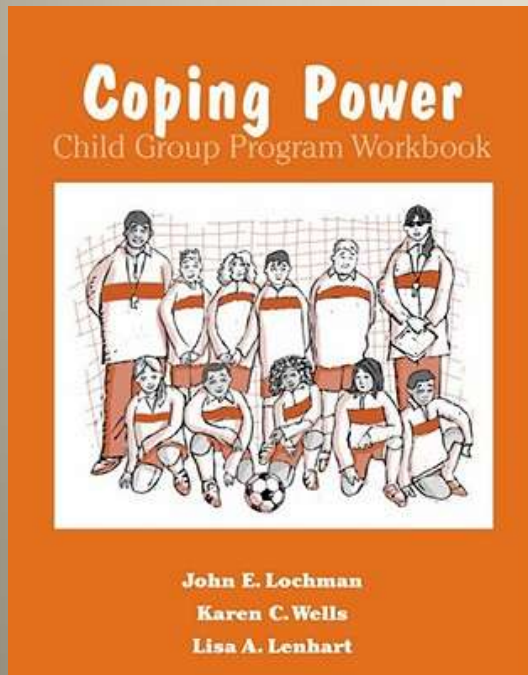
# Reactive Aggressive Girls

- Physically aggressive girls high risk for abuse
- Boy-issues most common reason for anger
- Similar social-cognitive deficits
- Tendency to hold longer grudges can impede group treatment
- May also use relational aggression





# Training Resources



Copingpower.com

33 Sessions plus  
Parent Training

Guilford.com

18 Sessions  
Ages 9-13

Guilford.com

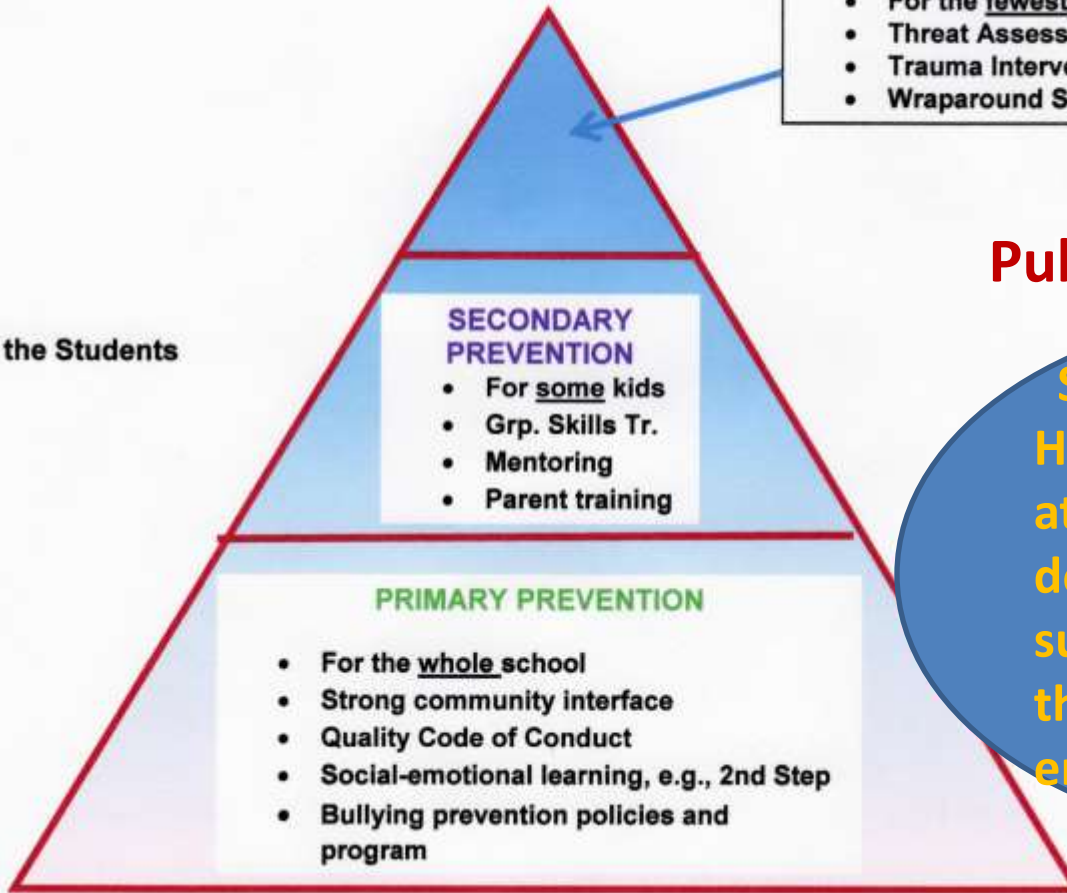
High School

# Training Resources

- Glick, B., & Gibbs, J. C. (2011). *Aggression replacement training* (3<sup>rd</sup> Ed.). Champaign, IL: Research Press.
  - Social Skills Training, Anger Management, & Moral Reasoning
- Manassis, K. (2012). *Problem-solving in child and adolescent therapy: A skills-based, collaborative approach*. New York: Guilford Press.



All of the Students



- TERTIARY PREVENTION**
- For the fewest kids
  - Threat Assessment
  - Trauma Intervention
  - Wraparound Services

- SECONDARY PREVENTION**
- For some kids
  - Grp. Skills Tr.
  - Mentoring
  - Parent training

- PRIMARY PREVENTION**
- For the whole school
  - Strong community interface
  - Quality Code of Conduct
  - Social-emotional learning, e.g., 2nd Step
  - Bullying prevention policies and program

## Public Health Model

Students are in a **HEALTHY** school atmosphere to the degree that it successfully addresses their social and emotional diversity

## The Three Tiers of Prevention

At the **PRIMARY TIER**, “*Universal*” procedures are used

At the **SECONDARY TIER**, “*Selected*” procedures are used

At the **TERTIARY TIER**, “*Indicated*” procedures are used