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

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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

E.g. Bushman & Anderson, 2001

E.g., Dodge, 1991

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 7th 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.


- **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?*

Kahneman, 2011
Majority of people answer...
Effects of **Automatic** Processing on Problem Solving

**Stimulus**
- Perceived Threat

**Memory Bin**
- Direct Action
  - Verbal Assertion
  - Help Seeking

**Response Enactment**
- Direct Action

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

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Verbal Assertion
Help Seeking
Effects of Automatic Processing on Problem Solving

**Stimulus**
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  - Direct Action
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**Response Enactment**
- Verbal Assertion
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
2. give meaning to the cues
3. select desired outcomes
4. Generate possible responses
5. Identify potential consequences of a response
6. act out selected responses

1. Hypervigilant for aggressive cues
2. Hostile attributional biases
3. Higher value on retaliation than affiliation
4. Narrow solution generation abilities
5. Tendency to evaluate aggression positively
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?

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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

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Training Resources

Copingpower.com
33 Sessions plus Parent Training

Guilford.com
18 Sessions Ages 9-13

Guilford.com
High School
Training Resources

  – Social Skills Training, Anger Management, & Moral Reasoning

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.