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Social information processing and child physical abuse: Theory, research and practice

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Presentation Overview

Part A. A Social Information processing (SIP) model of Child Physical Abuse (CPA) will be described and examples of SIP model driven research will be discussed.

Part B. A new intervention program for high-risk parents, *Thoughtful Parenting: Moment to Moment (TTMM)*, based on the SIP model of CPA will be describes and preliminary results from a clinical trial testing the effectiveness of the *TTMM* program with high-risk mothers will be presented.

Final comments/Questions.

SOCIAL INFORMATION PROCESSING MODEL OF CHILD PHYSICAL ABUSE (MILNER, 1993, 1995, 2000, 2003)

The underlying assumption is that when an individual observes the behavior of someone else, cognitive processes determine the selection of interpersonal emotional and behavioral responses that occur.

BRIEF HISTORICAL OVERVIEW

SOCIAL/COGNITIVE LEARNING THEORIES

(e.g., Bandura, 1986; Heider, 1958; Markus & Zajonc, 1985; Mischel, 1973)

SOCIAL SKILLS MODELS

(e.g., Lang, 1977; McFall, 1982; Patterson & Reid, 1970).

COGNITIVE/BEHAVIORIAL MODELS USED TO EXPLAIN CHILD PHYSICAL ABUSE

SOCIAL/SITUATIONAL MODEL

(Parke & Collmer, 1975; Rosenberg & Reppucci, 1983)

COGNITIVE DEVELOPMENTAL MODEL

(Newberger & Cook 1983)

COGNITIVE/BEHAVIORAL MODEL

(Twentyman, Rohrbeck, & Amnish, 1984)

SOCIAL/COGNITIVE/BEHAVIORAL MODEL

(Azar, 1986, 1997; Azar & Seigal, 1990)

TRANSITIONAL MODEL

(Wolfe, 1987)

SOCIAL INFORMATION PROCESSING MODEL OF CHILD PHYSICAL ABUSE

(MILNER, 1993, 1995, 2000, 2003)

PRE-EXISTING SCHEMATA (beliefs re/punishment, hostile intent)

STAGE 1. PERCEPTIONS (emotion recognition)

STAGE 2. INTERPRETATIONS & EVALUATIONS (evaluations of wrongness, attributions, expectations of child compliance)

STAGE 3. INFORMATION INTEGRATION & RESPONSE SELECTION (use of mitigating information)

STAGE 4. RESPONSE IMPLEMENTATION & MONITORING



SOCIAL INFORMATION PROCESSING MODEL OF CHILD PHYSICAL ABUSE

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SOCIAL INFORMATION PROCESSING MODEL OF CHILD PHYSICAL ABUSE

(MILNER, 1993, 1995, 2000, 2003)

FACTORS RELATED TO INFORMATION PROCESSING

1. AUTOMATIC & CONTROLLED PROCESSING

2. STRESS/DISTRESS

3. PERSONALITY FACTORS
(NEUROPSYCHOLOGICAL & PSYCHOPHYSIOLOGICAL FACTORS, AFFECTIVE STATES, SELF-IMAGE, SOCIAL ISOLATION & SOCIAL SUPPORT, ALCOHOL/DRUG USE)

A Social Information Processing Based Prevention Program for High-Risk Mothers

Social Information Processing Based Prevention Program

Thoughtful Parenting: Moment to Moment (TPMM)

Format: Small group, eight weekly 90-minute sessions

Sessions 1-4: Mindfulness Based Training
Objectives: Learning that thoughts and feelings are "attentional control" or "shifting focal attention."

Sessions 5-8: Metacognitive Awareness Training
Objectives: Learning that thoughts and feelings are "mental events," rather than realities to which one must respond.

Social Information Processing Based Prevention Program

Sessions 1-4: Mindfulness Based Training

What is Mindfulness?

Mindfulness involves being aware of and paying attention to the moment in which we find ourselves.

Research suggests that mindfulness-based programs help people:

- Effectively manage stress and pain
 - Reduce risk of depression
 - Improve interpersonal functioning
-

Social Information Processing Based Prevention Program

Sessions 1-4: Mindfulness Based Training

Techniques used to teach mindfulness:

Awareness of the breath

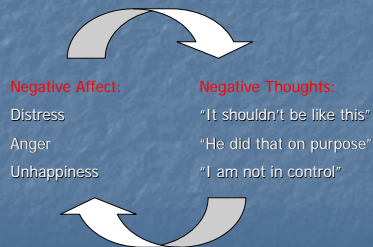
Body scan

Attitudes of mindfulness:

Acceptance, Beginner's mind, Non-judging, Non-striving, Trust, Letting go, Patience

Social Information Processing Based Prevention Program

Sessions 1-4: Mindfulness Based Training



Social Information Processing Based Prevention Program

Sessions 5-8: Metacognition skills

Increase ability to experience thoughts as "just thoughts," not facts or reality.

Increase awareness of cognitions linked with increased risk of aggression:

Negative interpretations

"It shouldn't be like this"

Hostile attributions

"He did that on purpose"

Low perceived control

"I am not in control"

Social Information Processing Based Prevention Program

Thoughtful Parenting: Moment to Moment (TPMM)

Mindfulness may help parents:

Reduce negative thoughts and feelings

Respond with greater flexibility

Reduce risk of reacting to difficult parenting situations with hostility or aggression

Thoughtful Parenting: Moment to Moment Program Evaluation Design

Two-Group Design

Group	Pre	T	Post
Group T (R)	O	X	O
Group C (R)	O		O

Solomon Four-Group Design

Group	Pre	T	Post
Group T (R)	O	X	O
Group T (R)		X	O
Group C (R)	O		O
Group C (R)			O

SIP Program Evaluation Design

Group

Group I: Treatment/Extensive Facilitator Training (EFT)

Group II: Treatment/Nominal Facilitator Training (NFT)

Group III: Wait-list Control (WLC) Condition

SIP Program Evaluation Design

Group	Pre	T	Post
Group T/EFT (R)	O	X	O
Group T/NFT (R)	O	X	O
Group WLC (R)	O		O

SIP Program Evaluation Design

Group	Pre	T	Post	6-M
Group T/EFT (R)	O	X	O	O
Group T/NFT (R)	O	X	O	O
Group WLC (R)	O		O	O

Measurement model/Assessment instruments

Target Population:
High-risk mothers.

Intermediate Outcomes:

Increased flexibility in thinking (Measures: Perceived Modes of Processing Inventory and Rigidity scale from the Child Abuse Potential Inventory); Decreased negative interpretations of child behaviors (Measures: Problems with child subscale from the Parenting Stress Index - short form, the Problems with child/self scale from the Child Abuse Potential Inventory, and Parent Possibilities Questionnaire); Increased perceptions of parent control (Measures: Parent Attribution Test and Parenting Locus of Control Scale); Reductions in negative affect (depression, distress, anger) (Measures: Beck Depression Inventory, Total Stress score from the Parenting Stress Index-short form, Unhappiness and distress scales from the Child Abuse Potential Inventory; state and trait scales from the State-Trait Anger Expression Inventory - 2).

Measurement model/Assessment instruments continued

Distal Outcomes:

Improved parent-child interactions (parental sensitivity to child cues and ability to promote socio-emotional and cognitive growth) (Measures: Parent-child Dysfunctional Interaction subscale from the Parenting Stress Index - short form and the NCAST Teaching Scale - parent/child observation measure); Lower rates of harsh parenting practices (Measure: Conflict Tactics Scale - Parent to Child); Reduced risk for child physical abuse (Measures: Child Abuse Scale from the Child Abuse Potential Inventory and the Anger Expression Index from the State-Trait Anger Expression Inventory - 2); Lower rates of child maltreatment reports/confirmations (inspection of Illinois Department of Child and Family Services Central Registry).

Note: A Consumer Satisfaction Survey (CSS) was administered at the post-intervention assessment. The CSS asked mothers to rate the facilitator's ability to present the program, the extent they thought the program provided meaningful information, and if they would recommend the program to others.

Preliminary TPMM Program Evaluation Results

Pilot Study 1: Evaluation of the *TPMM* intervention manual by professionals.

Pilot Study 2: Evaluation of the *TPMM* intervention by at-risk parents.

Pilot Study 3: Testing the impact of the *TPMM* intervention using a small group of at-risk parents (without a control condition).

Main study: Outcome data from a randomized controlled evaluation of the *TPMM* program with at-risk mothers.

Study 3. Pre-post intervention test scores

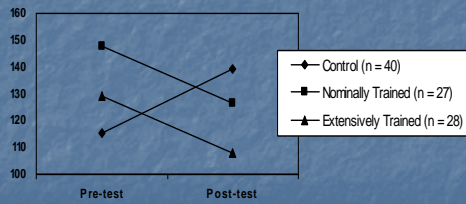
Scale/Subscale	Pre-test score		Post-test score	
	<i>M</i>	(<i>SD</i>)	<i>M</i>	(<i>SD</i>)
Beck Depression Inventory	11.33	(9.26)	7.16	(8.28)
State Anger	20.83	(3.76)	19.33	(6.34)
Trait Anger	18.83	(4.49)	6.83	(4.62)
Anger Expression Index	32.66	(16.94)	21.16	(17.53)
Parenting Stress Index	65.00	(26.69)	59.06	(29.27)
Parental Distress	26.83	(11.19)	23.50	(13.45)
Parent Child Interaction	17.00	(9.50)	6.16	(9.26)
Difficult Child	21.16	(7.57)	9.39	(8.20)

Preliminary Findings

The findings reported today represent data from the first 95 at-risk mothers who completed 4 or more sessions ($M = 6.8$ sessions) and completed the pre-treatment and the post-treatment measures with valid responses.

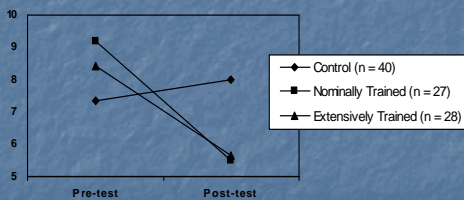
Note: At present we have obtained pre- and post-treatment assessments on 92% of all participants. Success at obtaining the pre-, post-treatment and six month follow-up assessments currently is 87%. Both figures are for all participants who completed the initial assessments (however, we expect that the final percentages of assessment completion will be lower).

As shown in the Figure below, the patterns of means for the Child Abuse Potential Inventory scores, a measure of child abuse risk, were consistent with expectations. The group by time interaction was significant, $F(2, 92) = 4.56$, $p = .01$, $r_{es} = .30$, and the nominally trained and extensively trained groups showed significant decreases across assessments.



- The CAP Inventory also contains scales that assess ego strength and loneliness.
- For ego strength, the group by time interaction was significant, $F(2, 92) = 5.82$, $p < .01$, $r_{es} = .33$, with ego strength scores increasing across time in TPMM groups but not in the control group.
- For loneliness, the group by time interaction was significant, $F(2, 92) = 4.43$, $p = .014$, $r_{es} = .30$, with loneliness scores decreasing across time in TPMM groups but not in the control group.

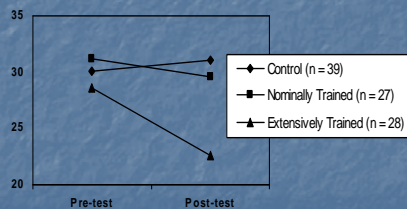
As may be seen in Figure below the pattern of means for the Beck Depression Inventory, a measure of depression, was as expected. The group by time interaction was significant, $F(2, 92) = 4.53$, $p = .01$, $r_{es} = .30$, and the nominally trained and extensively trained groups showed significant decreases across assessments.



For the Parenting Stress Index, pre-test means (*SDs*) were 71.43 (23.48), 77.73 (15.81), 72.90 (21.47) for the control, nominally trained and extensively trained groups, respectively. Post-test means (*SDs*) were 70.71 (24.38), 80.51 (19.76) and 69.99 (25.62) for the control, nominally trained and extensively trained groups.

The Parenting Stress Index scores did not show a significant change between the pre-test and post-test assessments.

As shown in the figure below, the Anger Expression Index scores for participants in the extensively trained TPMM group were significantly lower across time, whereas the Anger Expression Index scores for the nominally trained TPMM group and the control group did not decline.



Some, but not all, caveats!

All measures have not been scored.

Many analyses have not been conducted.

Individual change score analyses (RC Index) - which will include person variables - remains to be conducted.

Fidelity checks

Attrition percentages and r with risk

Conclusions

Preliminary results from the randomized controlled trial suggest that TPMM program participants compared to wait-list control participants, experienced greater reductions in child physical abuse risk, depressive symptoms, and anger.

Moderate effect sizes were found for abuse risk and depression higher effect sizes were found when the extensively trained facilitator condition was compared to the control condition) and low moderate effect size for anger expression.

Conclusions

The results are mixed with regard the effect of facilitator training on the program's impact. Of concern are the findings that the program's impact appeared to be attenuated on some measures (parenting stress, anger expression) but not all (depression, abuse risk) in the nominally trained facilitator group.

Thus, although data are relatively consistent in showing positive effects for groups lead by extensively trained facilitators, data are mixed as to the effectiveness of the nominally trained facilitators.

Comment

Noteworthy is the fact that these intervention effects were found over and above those that might be expected from the receipt of usual services, including the services provided by Healthy Families programs.

Next steps

- Replicate with at-risk females
- Replicate with at-risk males
- Replicate with female and male abusive parents
- Deconstruction of intervention
- Use with IPV perpetrators

QUESTIONS?