Taking the Oregon model of Parent Management Training (PMTO™) to scale throughout Norway

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Theoretical Model
A Social Interactional Learning Model

Contextual Factors
Parenting Practices

Positive
Limit Setting/Discipline
Monitoring
Problem Solving
Positive Involvement
Skill Encouragement

Child/Adolescent/Adjustment

Coercive
Aversive Behaviors
Negative Reciprocity
Escalation
Negative Reinforcement

Dangerous Neighborhood
Lack of Skills
Poverty
Mass Trauma
Trauma

Discrimination
Transitions
Stress
Illness
Substance Use
Experimental / Contrast

Parenting Practices

Child Outcomes

SAMPLES
- Divorced Mothers (PTC)
- Step-families (MAPS)
- School in High Crime Neighborhoods (LIFT)
- Maltreated Children
- Adjudicated Youth
- Treatment Foster Care: Delinquents - Boys
- Treatment Foster Care: Delinquents - Girls
- Foster Care: Mentally Ill (Hospitalized)
- Early Intervention Treatment Care (2-4)

POSITIVE PARENTING
- Skill Encouragement
- Positive Involvement
- Effective Discipline
- Problem-solving
- Monitoring / Supervision

COERCIVE PARENTING
- Negative Reciprocity
- Escalation
- Negative Reinforcement

CHILD OUTCOMES
- Arrest Rates / Severity of Crime
- Substance Use
- Noncompliance
- Delinquent Behavior
- Academic Function
- Out of Home Placement
- Deviant Peer Association
- Depression

PARENT OUTCOMES
- Depression/Stress
- Standard of living
- Arrest rates
- Marital adjustment
- Marital satisfaction

Forgatch & Patterson 2010
Social Interaction Learning Model

- Aversive Behavior
- Negative Reciprocity
- Coercive
- Positive

Adverse Contexts → Disrupted parenting → Child Adjustment

- Skill Encouragement
- Limit Setting
- Monitoring
- Problem solving
- Positive Involvement

Negative Reinforcement → Escalation
PMTO Intervention Model
Implementation Approach

- **Full program transfer** to an adopting community
  - Demonstrated effectiveness
  - Family Process
  - Child Outcomes
  - Sustained Method Fidelity
  - Multiple generations
- Implementations for large systems that can and will sustain
  - Fidelity
  - Effective outcomes
- Starts with visionary leader committed to effecting change
- Sustained by satisfied families & therapists
- Fidelity
  - Competent adherence
  - Observations based on intervention sessions
- Valid Measurement
  - Multiple Methods
  - Direct Observation
  - Predictive Validity
  - Continuing Effectiveness
# Fidelity of Implementation Rating System (FIMP)

Knutson, Forgatch, Rains, & Sigmarsdóttir, rev. 2009

## 9-Point Likert Scale
- Good work = 7-9; Acceptable = 4-6; Needs Work = 1-3

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Proficiency in understanding &amp; application core components</td>
</tr>
<tr>
<td>Structure</td>
<td>Session management, leads without dominating, pacing/timing, responsive to family</td>
</tr>
<tr>
<td>Teaching</td>
<td>Promotes mastery, use of role play, elicits goal behavior</td>
</tr>
<tr>
<td>Process</td>
<td>Proficient in intervention skills, safe learning context</td>
</tr>
<tr>
<td>Overall</td>
<td>Growth, satisfaction, likely return, adjust context, difficulty</td>
</tr>
</tbody>
</table>

Sessions scored: Encouragement and Limit Setting
Fidelity To Intervention Model

Fidelity

Change Parenting

Change Child Behavior
Norwegian PMTO Fidelity Effects on 9-Month Pre-Post Parenting Change
Forgatch & DeGarmo In press      N=242 Families; 110 Interventionists

Paths are standardized beta coefficients. Multilevel parameters adjusting for clustering in parentheses.
\( \chi^2 (4) = .63, p = .96; \) comparative fit index (CFI) = 1.00; root mean square error of approximation (RMSEA) = .00; ***\( p < .001; * p < .05. \)
Fidelity Drift Across Generations

G1 Fidelity

Training

G2 Fidelity

Training

G3 Fidelity
Fidelity Across 3 Generations: Norway
PMTO program adaptation and development

The SIL model and PMTO

Early intervention for children at risk (Askeland, Apeland, Christiansen, Solholm)

Brief Parent Training

Social skills training

Parent groups

School consultation

PMTO for minority families (Flock, Gomez, Pettersen, Torsvik)

School-wide Positive behavior Support (Arnesen & Meek-Hansen)

PALS short version

PMTO program adaptation and development

The Norwegian Center for Child Behavioral Development
Establishing a continuum of interventions: PMTO and adapted short term preventive interventions by local services (training, supervision and monitoring of fidelity)

<table>
<thead>
<tr>
<th>Intervention components</th>
<th>Training of practitioners</th>
<th>Target group</th>
<th>Research</th>
</tr>
</thead>
<tbody>
<tr>
<td>PMTO (full scale)</td>
<td>20 days training combined with supervision over 18 months (FIMP)</td>
<td>Parents</td>
<td>RCT pre-post and follow up study published</td>
</tr>
<tr>
<td>Brief parent training</td>
<td>9 days training over 6 months followed by 6 months supervision (practitioners in local services)</td>
<td>Parents</td>
<td>RCT (in print)</td>
</tr>
<tr>
<td>Social skills training</td>
<td>6 days training and supervision over 6 months (practitioners in local services)</td>
<td>Children</td>
<td>RCT</td>
</tr>
<tr>
<td>PMTO group intervention for minority families</td>
<td>Certified PMTO therapists and 5 days training of bi-lingual link workers</td>
<td>Mothers</td>
<td>RCT wait list control (in print)</td>
</tr>
<tr>
<td>PMTO group intervention</td>
<td>2 days training of certified PMTO therapists</td>
<td>Parents</td>
<td>RCT wait-list control</td>
</tr>
<tr>
<td>Consultation to practitioners in schools and child care</td>
<td>4 days consultation training for PMTO therapists and counselors in local services</td>
<td>Staff in schools and child care</td>
<td>RCT</td>
</tr>
</tbody>
</table>
Cross national research collaborative to increase the PMTO scientific and clinical knowledge base.

• The effectiveness of PMTO compared to regular services were demonstrated in a Norwegian randomized replication effectiveness study, (Ogden & Amlund-Hagen, 2008).

• Moderators of treatment included treatment fidelity/adherence and age,

• The sustainability of clinical outcomes for the PMTO children was demonstrated in a follow up study one year after termination of treatment, although the comparison children caught up on several outcomes, (Amlund-Hagen, Ogden, & Bjørnebakk, 2011)

• Indications of generalization effects from family to school and mediating effects for discipline and family cohesion.
PMTO for ethnic minority mothers and their children

- Group training with ethnic minority mothers in Norway; 18 weekly group sessions of 2 hours duration with 8-12 participants, (Flock, Gomez, Pettersen & Torsvik)

- Trained bi-lingual assistants (link workers) assisted in the recruitment of participants and translated to Urdu and Somali during group sessions

- RCT wait-list control study with 96 mothers from Pakistan and Somalia showed significantly reduced externalizing behavior problems reported by mothers (CBCL, ECBI), but not by teachers (TRF) (Bjørknes & Manger in print),

- Increased maternal use of positive strategies and decreased use of harsh discipline in the PMTO group
Effect sizes
PMTO effectiveness for ethnic minority families

- **Monitoring fidelity**: Therapists and link-workers filled in a standard fidelity checklist after sessions 3, 6, 12 and 18 with a high mean score of 3.68 on a four-point scale,

- **Dropout**: There was very little dropout from the intervention: 4/50 and 0/46,

- **Dosage-response**: The 33 out of 50 who participated in more than 50% of the sessions benefited most in terms of improved parenting and reductions in child problem behavior,

- **Family satisfaction**: 88% would definitely recommend the intervention to others, or use it again if relevant.
Large scale implementation increasing the reach of PMTO and program adaptations

Number of families having received PMTO or TIBIR (early intervention for children at risk)

2010 not yet available
Conclusions

• Over a period of ten years, PMTO and several adaptations of the original program (PALS; TIBIR) have been implemented on a national scale in Norway,

• Programs developed based on the SIL model and PMTO principles are both preventive and treatment oriented, adapted to the risk level of children and families, and delivered through specialist as well as generalist services in child welfare, mental health and school,

• The infrastructure of the implementation is made up by the program developers, a national center for implementation and research, several highly competent implementation teams (PMTO, PALS, TIBIR), targeted programs for training and supervision and the consistent monitoring of program and intervention fidelity,
PMTO Across Populations
Norway

>10,000

>800

29
The Netherlands

>1100

26

>60
Michigan

24 >150

>1100