Applying an implementation perspective to improve services - a view from Norway

Policy Innovation Workshop
Implementation Science and its Practical Application

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The formula for successful implementation

$$SI = f(E, C, F)$$

SI = Sucsessful implementation

f = function

E = Evidence (research, clinical experience, and client preferences)

C = Context (the environment in which the intervention is implemented)

F = Facilitation (”making it happen” – implementation and leadership)

- “*After all, how physically fit can you get if you buy a top-of-the-line exercise bike or treadmill but never use it?*”

(Kitson, Harey & McCormack, 1998)

Diffusion - dissemination and implementation

- **Diffusion** is the passive process by which a growing body of information about an intervention, is initially absorbed and acted upon by a body of highly motivated recipients (Rogers, 1995: Diffusion of innovation),
- **Dissemination** is the targeted distribution of information and intervention materials to a specific public health or clinical practice audience.
- **Implementation** is the use of strategies to adopt and integrate evidence-based health interventions and change practice patterns within specific settings.

Adapted from Lomas, 1993

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Implementation research

- When outcomes of services or programmes are lacking or below expectations, the explanation may be that the intervention did not work as expected or that the implementation failed.
- The quality of the implementation is a key to good outcomes, and interventions ”that work” are of little value without proper implementation.
- ”…even the strongest, most extensively evaluated program will fail without an adequate implementation support system” (Greenberg et al., 2001).

Implementation. Beyond programs?

- Empirically supported programs, - systematic reviews,
- Generic research based practice,
- Local projects and innovative practice,
- Political reforms or systems change
- *Interventions that work + high quality implementation = value for money*

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Interventions that works

- A theory that explains why the intervention works,
- Inclusion and exclusion critieria defining the target group,

- A general description of the intervention, and a detailed description of core components,
- Criteria for recruitment, training and supervision of practitioners,

- Implementation criteria (treatment fidelity and program integrity),
- Evaluation of outcomes and implementation quality,

- Quality assurance – monitoring of intervention quality and outcomes on a regular basis.

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Implementation outcomes: effective and userfriendly

- Implementation outcomes may differ from clinical outcomes
- Indicators of productivity like the number of persons referred, served or treated (number of dropouts and ”no show”),
- User- or client satisfaction with the intervention,
- Positive attitudes toward the intervention among staff at the implementation site,
- The number of on site practitioners using the intervention.

The importance of leadership

National Implementation Research Network, Dean Fixsen, Phyllis Panzano, Sandra Naoom, & Karen Blasé (2008)

- *Organizations with leaders at various levels who make decisions that impact the way practitioners work with consumers.*

- LEADERS WHO:
- Have communication channels to provide information to practitioners and to hear about their successes and concerns.
- Work to build consensus and provide specific guidance on technical issues,
- Focus on the issues that really matter at the practice level.
- Give good reasons for changes in policies, procedures, or staffing.
- Engage in resolving issues that get in the way of using the innovation effectively.

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The importance of leadership

National Implementation Research Network, Dean Fixsen, Phyllis Panzano, Sandra Naoom, & Karen Blasé (2008)

- LEADERS WHO:
- Seek feedback from practitioners about supports for effective use of the innovation.

- AND ARE ACTIVELY INVOLVED IN:
- conducting employment interviews,
- participating in practitioner training,
- conducting performance assessments of individual practitioners, and creating more and better organization-level assessments to inform decision making.

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Norwegian children's services

- The central government includes central government agencies at the regional and local level while the local government is a two-tier system with municipality and county authorities
  - Education
  - Child welfare services
  - Mental health services for children and youth

- Norwegian municipalities have a strong political and administrative autonomy and decisions to adopt new practices in welfare services are usually made at the municipality or agency level.

- In the delivery of services, professionals have considerable freedom of choice as regards methods and approaches.

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Norwegian children’s services

- Some governmental policy decisions are mandatory, and the implemented actions (eg new service delivery programmes) are normative, but new practice initiatives are usually offered to the municipalities on a voluntary basis.

- Norway has a decentralised approach to innovation and new practices are disseminated from a number of sources, but adopted, implemented and evaluated locally.

- But there are exceptions....

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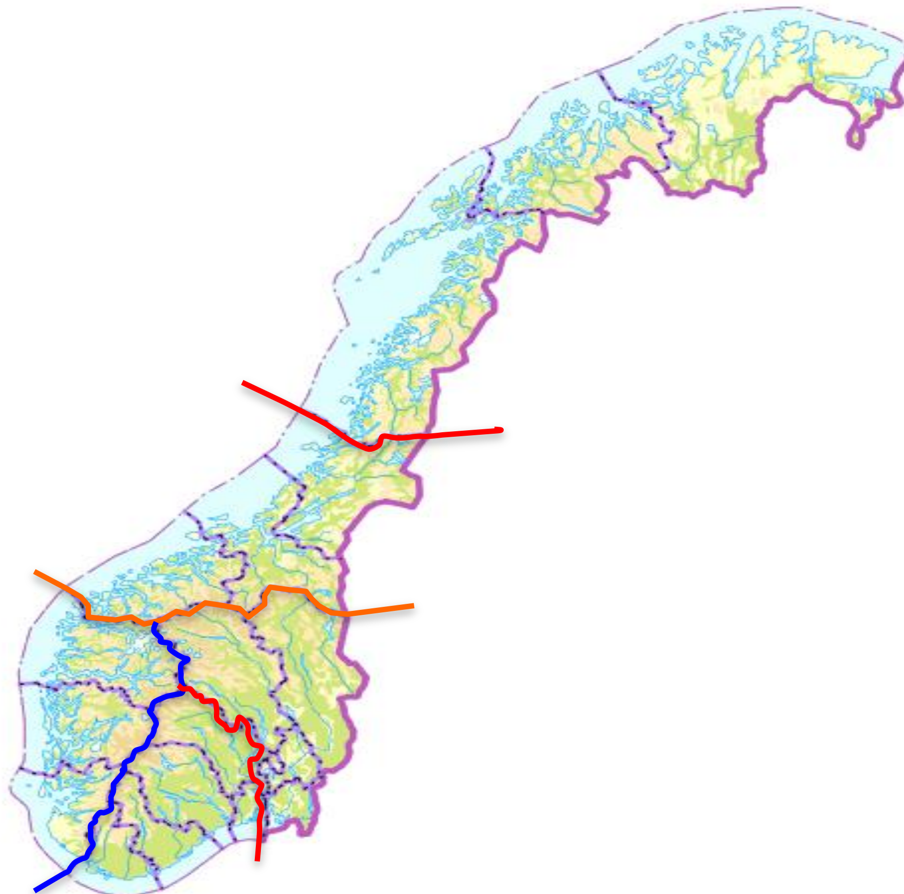
Implementing evidence based practices in Norway

In 1998 a national initiative was launched by the Norwegian government in order to increase and improve services, competence and research in relation to children and youth with conduct problems,



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A national implementation policy

- A national initiative by the ministries to fund and implement evidence-based programs across Norway on a long term basis,
- Increased professional interest and demand for evidence based treatment methods at the local level,
- Collaborative implementation of programs at the national, regional and municipal level,
- Establishing a national center in order to promote implementation, and intervention research,
- Establishing implementation teams and national comprehensive therapist/practitioner training, supervision and maintenance program.

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MST
Multisystemic
Therapy

Functional
Family Therapy
FFT

MST and
Contingency
Management

Multidimensional
Treatment Foster
Care (MTFC)

PMTO
Parent Management
Training

PALS
School-wide PBS
model

TIBIR
Early intervention
For children at
risk

PMTO for minority
families and children

What should be implemented?

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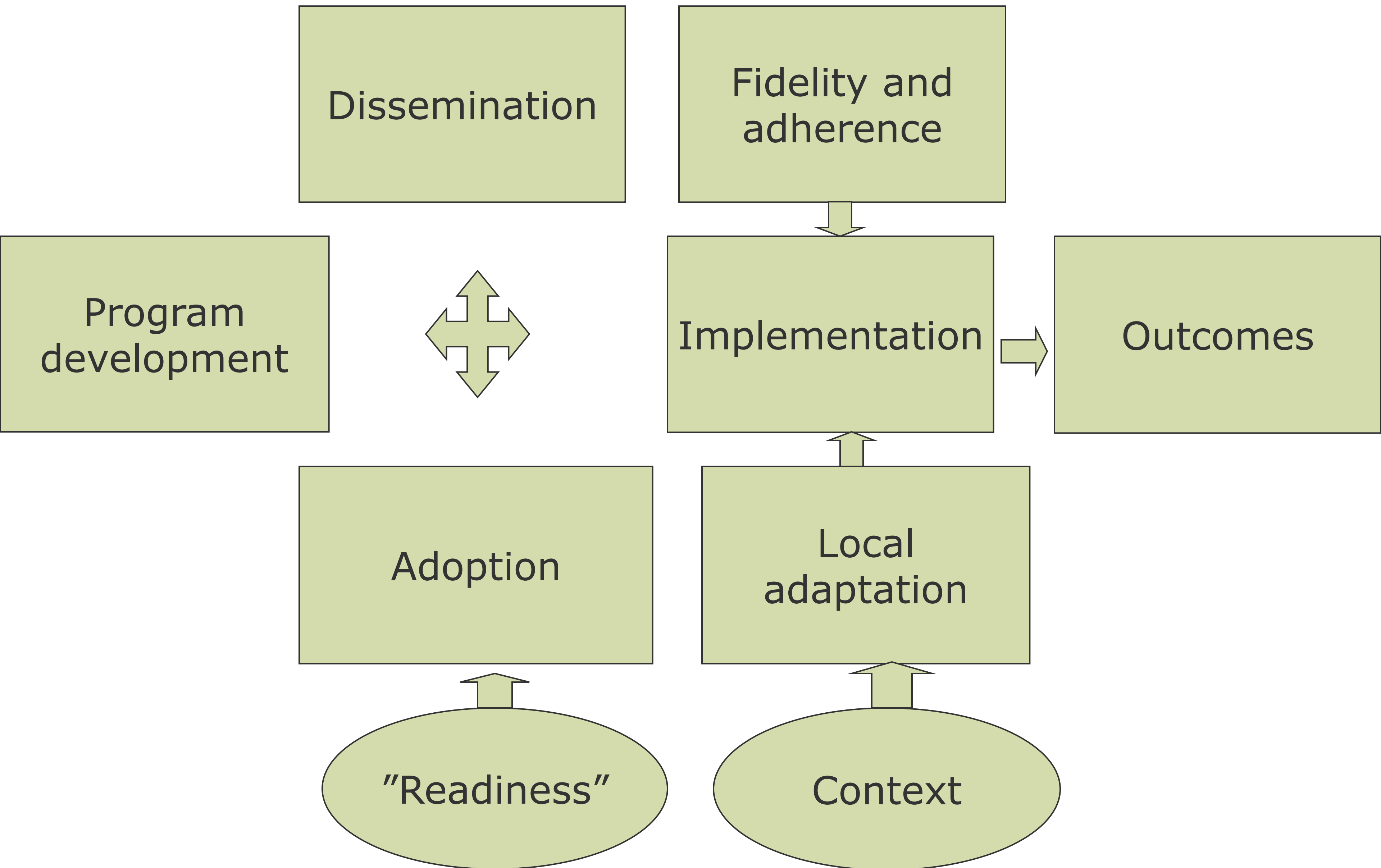
The Norwegian implementation model

(Ogden, Amlund-Hagen, Christensen & Askeland, 2009)



Adoption of interventions

- Adoption is a go/no go decision about implementing an intervention,
- Decisions are more often taken on the organizational level than by the individual practitioner,
- What potential adopters emphasize (Dearing , 2007):
  - Cost ****
  - Simplicity ****
  - Compatibility ****
  - Evidence **
  - Trialability *
  - Observability *

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Intervention integrity and local adaptation

- *Striking a good balance between intervention integrity and local adaption is a question about how much an intervention can be modified without entering the "zone of drastic mutation" and diluting the intervention.*

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What facilitates local adaptation

- Problem awareness and willingness to prioritize the intervention,
- Personal contacts between change agents and local agencies,
- When the timing is right and the intervention matches the values and priorities of the organization,
  - ”Buy in” at all levels: long term commitment and support from the local community, from the administration, but also from local practitioners,
  - Competent leadership and local ’champions’ (’gatekeepers’),
  - Good technical support from the ’change agents’ - relevant, attractive and user friendly materials.

The RE-AIM framework

1. REACH
How do I reach those who need this intervention?

2. EFFECTIVENESS
How do I know that my intervention is working?

3. ADOPTION
How do I develop organizational support to introduce my intervention?

4 IMPLEMENTATION
How do I ensure this intervention is delivered properly?

5. MAINTENANCE
How do I incorporate this intervention over the long term?

Glasgow, 2009; Palinkas & Soydan, 2011

Implementing Parent Management Training, The Oregon model (PMT-O) (Patterson, Forgatch and colleagues)

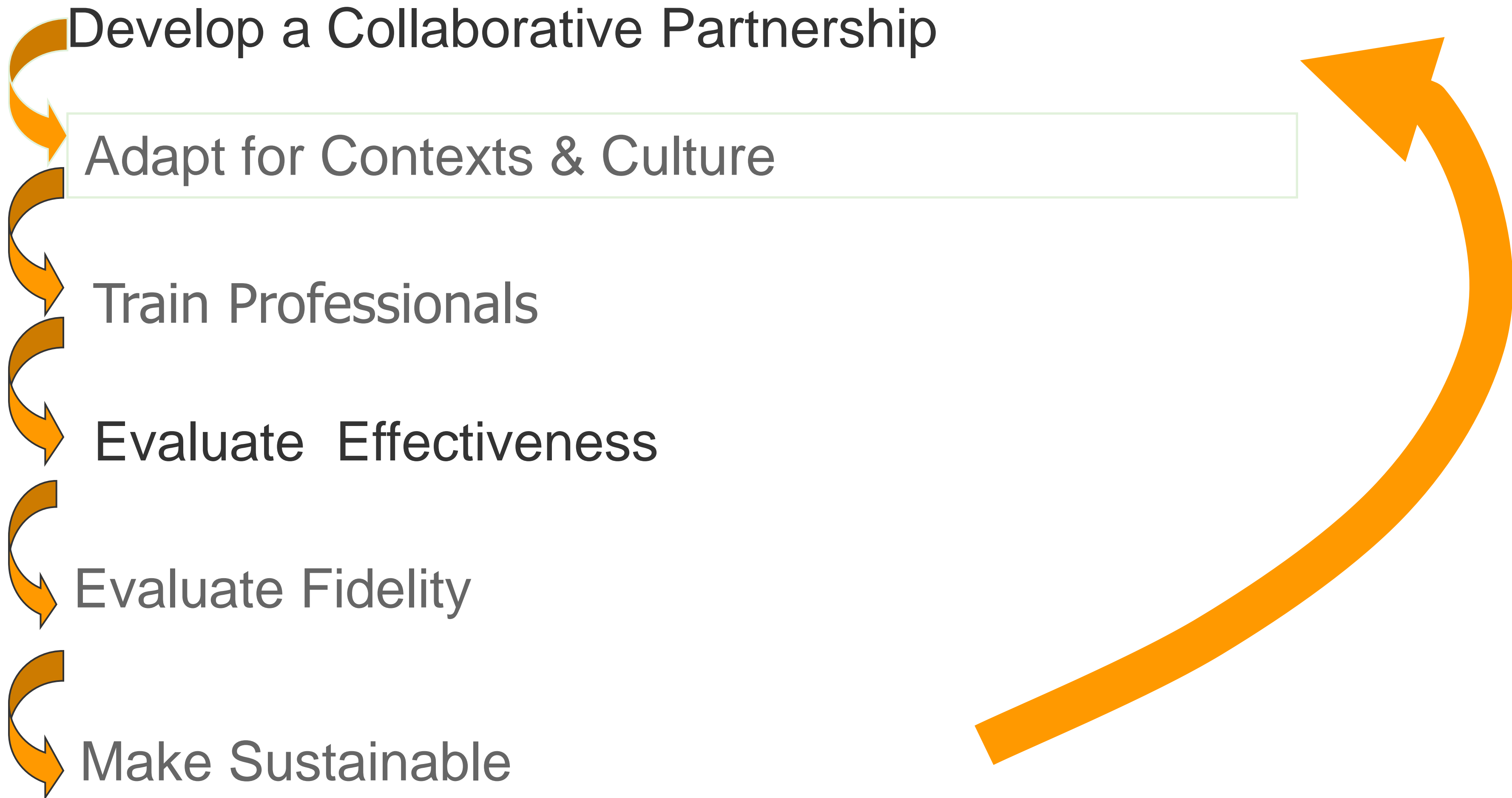
- Parent Management Training (PMTO) implemented from 1999:
  - Introductory training (18 months)
  - 383 qualified therapist trained and certified by 2011,
    - Supervision groups on a regular basis,
    - Monthly network meetings,
    - Re-certification every 3rd year,

  - Treatment adherence monitored on a regular basis,
  - Clinical outcomes and implementation studies.

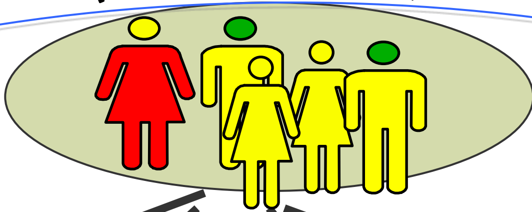
High quality implementation of PMTO

- "Developing and evidence-based intervention is an essential but insufficient condition for success; the program must also be well executed" (Durlak, Weissberg et al., 2011).
- Developing a systematic program for training and a handbook in accordance with the PMTO theory and treatment principles.
- Recruiting competent practitioners within the existing services for training,
- Establishing referral and intake systems within the different services in order to reach the indicated and selected target group (matching interventions to the risk level).

PMTO - Implementation Feedback Process



Forgatch, 2006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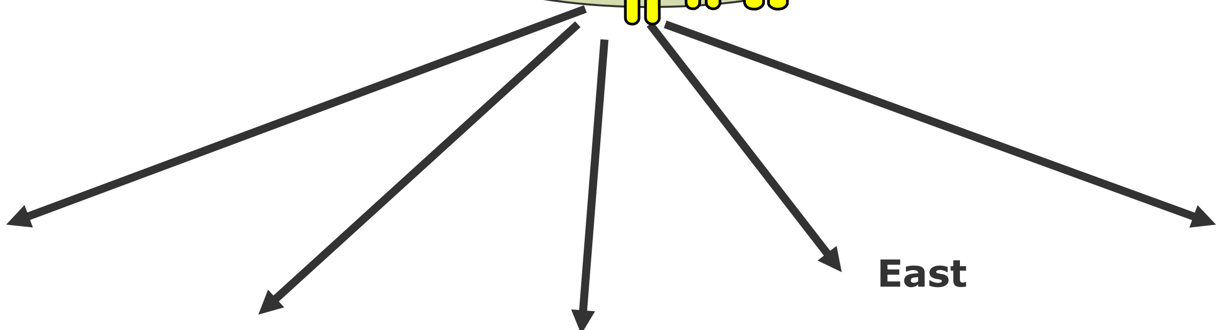
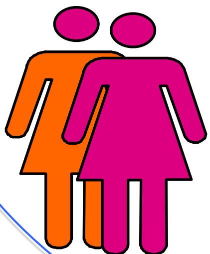
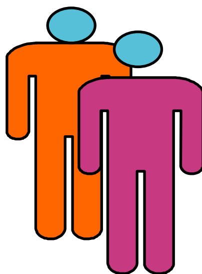
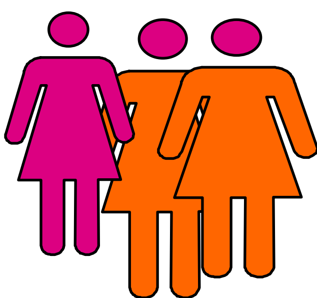
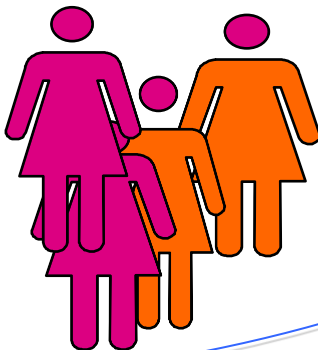
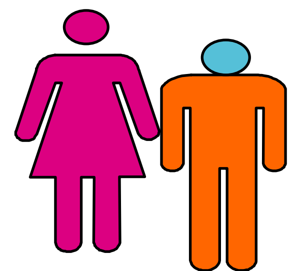

North
Middle
West
East
South

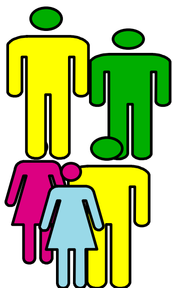


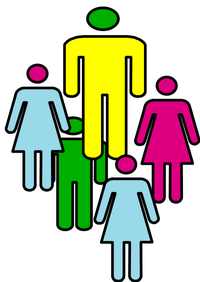


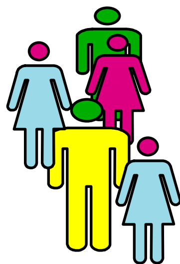


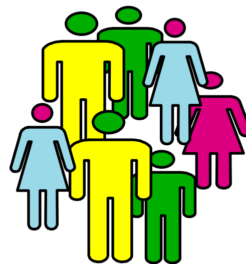


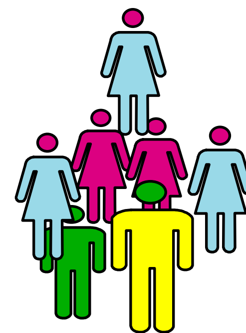












From evidence-based programs to evidence based practice

- **<u>Parenting principles</u>:**
- Discipline,
- Monitoring,
- Skill encouragement,
- Positive involvement,
- Problem solving.

- Identifying core principles, structure, sequence and change mechanisms which should be implemented with high fidelity:
  - Early interventions for children at risk (TIBIR)
  - School-wide prevention and intervention model (PALS)

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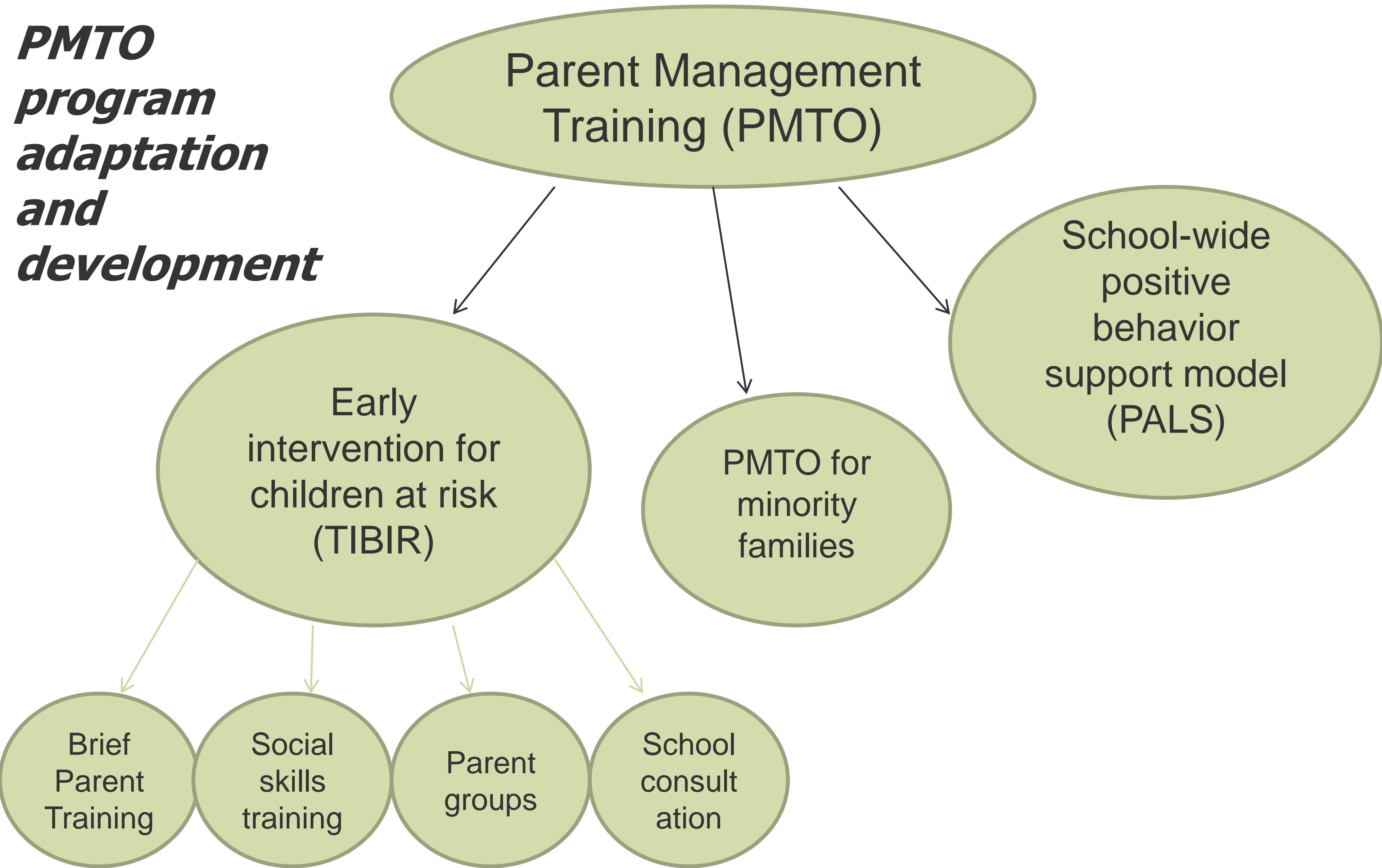

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PMTO and adapted short term preventive interventions by local services (training, supervision and monitoring of fidelity)

Intervention components	Training of practitioners	Target group	Research
PMTO (full scale)	20 days training combined with supervision over 18 months (FIMP)	**Parents**	**RCT pre-post and follow up study published**
Brief parent training	9 days training over 6 months followed by 6 months supervision (practitioners in local services)	**Parents**	**RCT (in print)**
Social skills training	6 days training and supervision over 6 months (practitioners in local services)	**Children**	**RCT**
PMTO group intervention for minority families	Certified PMTO therapists and 5 days training of bi-lingual link workers	**Mothers**	**RC T wait list control (in print)**
PMTO group intervention	2 days training of certified PMTO therapists	**Parents**	**RCT wait-list control**
Consultation to practitioners in schools and child care	4 days consultation training for PMTO therapists and counselors in local services	**Staff in schools and child care**	**RCT**

The PALS schoolwide positive behavior support model

- PALS is a school-wide, multi-level, and multi-component 3-year intervention model for primary schools adapted from the Positive Behavior Support model (SPBS; Sprague & Walker, 2005),
- To prevent and cope with student problem behavior and to promote social competence in schools,
- Pre-defined core components are implemented in a step-wise manner at universal, selected, indicated level, and adjusted to each school's culture and needs,
- Interventions are implemented according to the PALS assessment system (School Wide Information System, SWIS), and matched to student risk level.

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Successful implementation requires:

Wisdom to combine rigid demands with positive/flexible working relationships

Creating partnerships for improved practices

Flexibility to support assimilation of the intervention:

- Cultural adaptations
- Systems integration

Rigidity regarding factors that knowingly influence:

- Therapist adherence
- Client outcomes
- Sustainability

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Implementation of ESP in Norway: Challenges

- ”Works in the US, but not here”
- Home- and community based, short-term, manualized interventions,
- Monitoring of treatment fidelity and program integrity,
- Challenging professional autonomy and standardizing treatment,
- Either too expensive or an advanced way of saving money.

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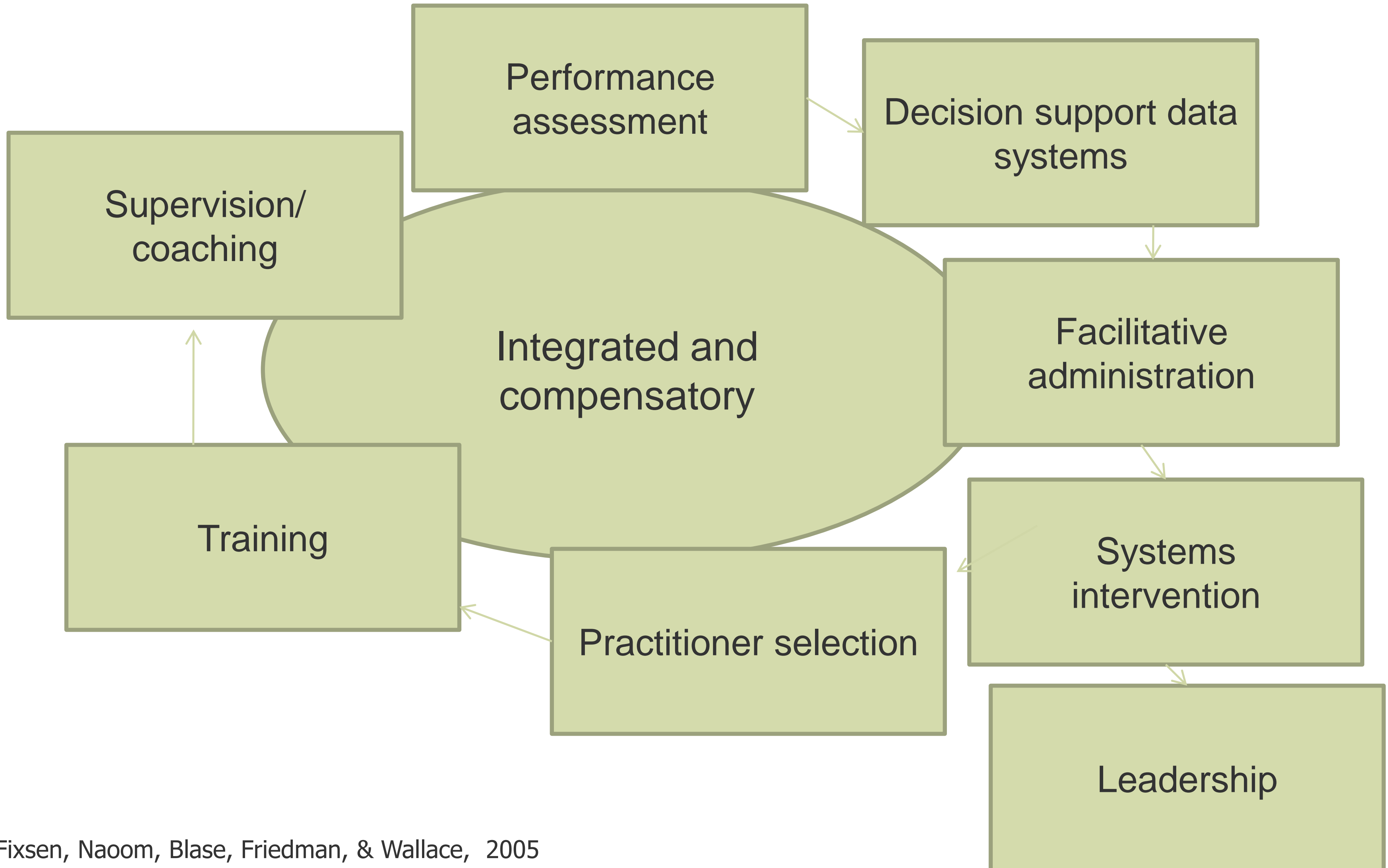
Generic features of effective practices

- **Research must be translated** - adaptation of findings to specific policy and practice contexts,
- **Enthusiasm**- of key individuals - personal contact is most effective,
- **Contextual analysis** - understanding and targeting specific barriers to, and enablers of, change,
- **Credibility** - strong evidence from trusted source, including endorsement from opinion leaders,
- **Leadership** - within research impact settings,
- **Support** - ongoing financial, technical & emotional support,
- **Integration** - of new activities with existing systems and activities

Sandra Nutley

Implementation drivers



Fixsen, Naoom, Blase, Friedman, & Wallace, 2005

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Measuring implementation quality

Client Benefits

Performance Assessment
(Fidelity)

COMPETENCY

ORGANIZATION

Coaching

Systems
Intervention

Training

Integrated &
Compensatory

Facilitative
Administration

Selection

Decision Support
Data System

Leadership

Core implementation components

- *Recruitment and selection of practitioners*; t*raining and supervision/ coaching*

- *Performance assessment and decision support data systems* : evaluation of the amount and quality of work related to the practitioners use of the intervention, which is used for quality improvement and increased effectiveness,

- *Leadership and facilitative administration:* leaders who take decisions that influences the way in which practitioners work with clients, and creating new structures or procedures which support and encourage the use of the intervention,

- *Systems interventions* are changes in the external systems in order to develop better support for the use of the intervention (e.g. Increased credibility, collaboration and referrals)

Fixsen, Panzano, Naoom, & Blase, 2008

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”Measuring implementation drivers”

- Structured interviews adapted from the Measures of Implementation Components of the National Implementation Research Network Frameworks (Fixsen, Panzano, Naoom, & Blase, 2008),

- Ogden et al. Measurement of implementation components ten years after a nationwide introduction of empirically supported programs – a pilot study *(Implementation Science in print)*:

- Respondents; MST therapists (N=56), PMTO therapists (N=93) their clinical supervisors and managers managers were interviewed.

Implementation quality 10 years after

- Overall, the respondents reported mean scores at the upper end of the competency scales,

- Both programs seemed to have established and sustained highly structured and consistent procedures for recruitment, training and supervision. High ratings were also given for working with external systems and leadership.

- Lower mean ratings were given for the organization scales which were under the control of the local agencies and represented new demands made by the implementation framework.
  - (performance assessment, decision support data systems and facilitative administration).

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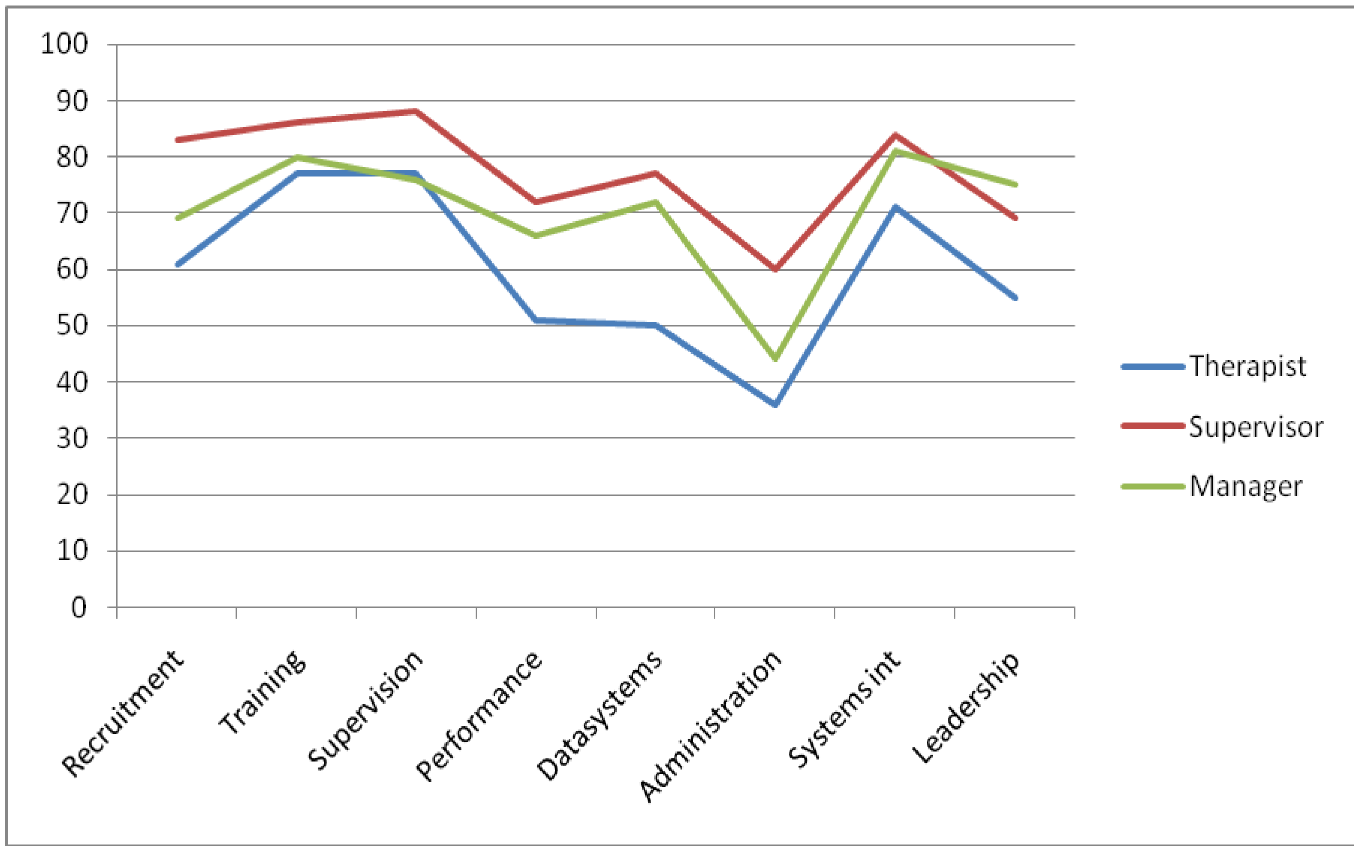
Mean scores for the informant groups



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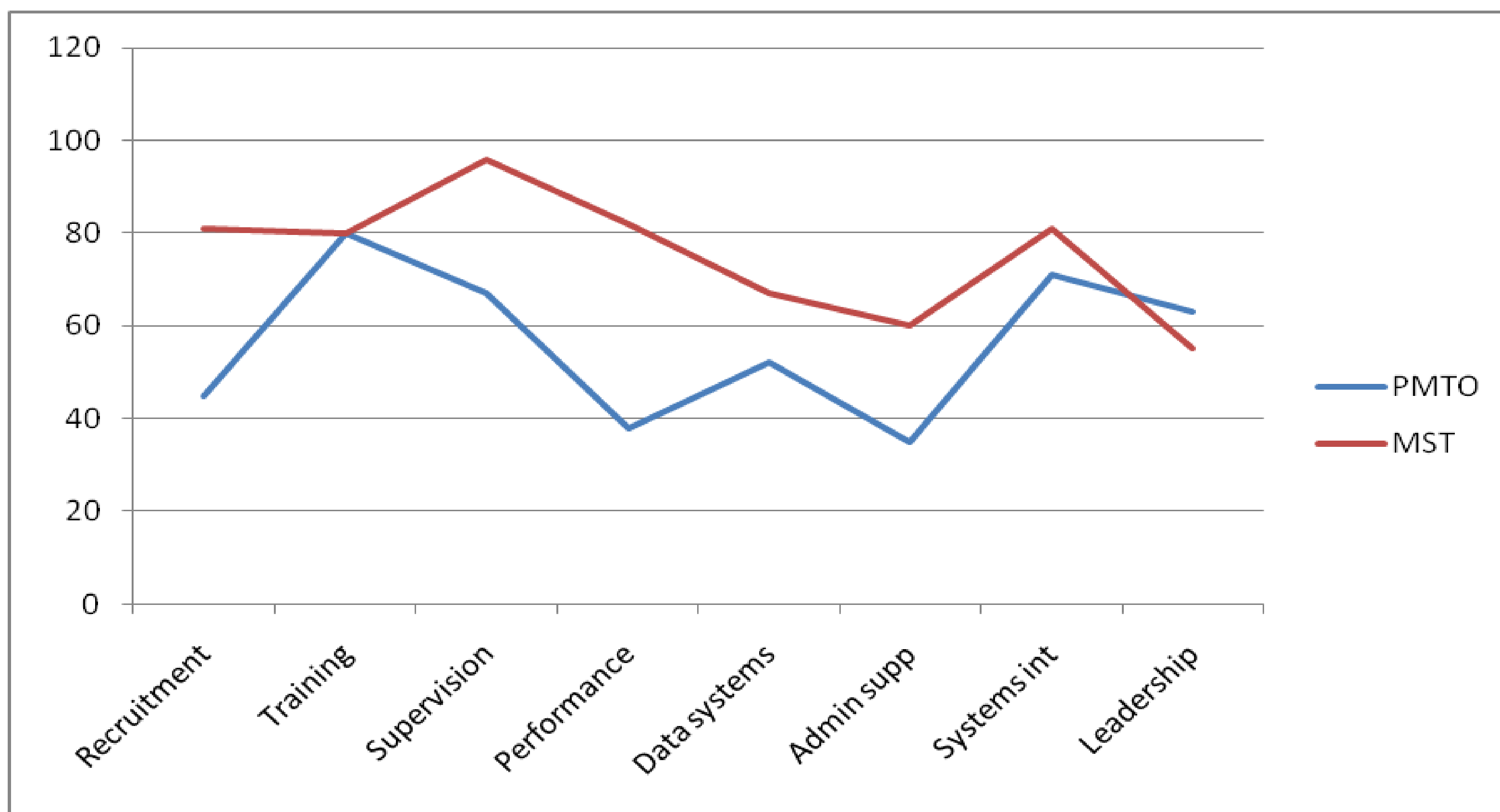
MST and PMTO therapists compared
(means scores)



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Implementation facilitators in Norway I

- A genuine interest and commitment at the political and administrative level for national implementation of evidence based interventions,
- Establishing a national center for training, implementation and research,
- Dedicated implementation teams and clear lines of responsibility,
- Therapist and practitioner recruitment strategy through the service systems.

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Implementation facilitators in Norway II

- Comprehensive skill-based training programs, and systems for monitoring of program sustainability and treatment adherence,
- Permanent networks for booster training, supervision and consultation,
- Attending to organizational factors: Technical support, managing turnover in staff; ongoing training of practitioners,
- The ability of the program developers and stakeholders to motivate and inspire Norwegian practitioners,
- Positive feedback from families and from the media.

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Implementation and practice in Norway

- There are signs of increased collaboration between research, policy and practice in Norway and an increased willingness among practitioners to be more accountable and concerned about outcomes.
- There are several indications of a growing interest among policy makers,researchers and practitioners for 'what works', and how good practice should be implemented with rigor.
- Implementation research investigates how evidence-based practices challenge the traditional way of delivering services and how this might lead to behavioural changes in implementers, service deliverers and practitioners.

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