Postscript

This paper discusses the implementation and evaluation of two family and community based intervention programmes for children and young people implemented in Norway, namely Parent Management Training (PMTO) (Ogden and Amlund Hagen in press) and Multisystemic Therapy (Ogden and Halliday-Boykins 2004; Ogden and Amlund-Hagen 2006), and a school-wide intervention programme, PALS (Sørlie and Ogden 2007). In PALS universal interventions are combined with treatment by offering PMTO to the parents of the high risk children. The Norwegian experiences and results also illustrate how evidence-based programs developed in the US have been transported across geographical and language borders, implemented nationwide, evaluated for their effectiveness in regular practice and examined for sustainability. This paper describes this national strategy, and the main components and immediate outcomes of the PMTO- and PALS-programmes in Norway.

**Keywords:** behaviour problems, intervention, PALS, PMTO, Norway

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**POSTSCRIPT**
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This postscript presents the implementation and evaluation of family and community based intervention programs for children and young people implemented in Norway. The Norwegian experiences and results illustrate how evidence-based programs developed in the US have been transported across geographical and language borders, implemented nationwide, evaluated for their effectiveness in regular practice and examined for sustainability. This update describes this national

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strategy, and the main components and immediate outcomes of the PMTO- and PALS-programs in Norway.

Introduction
Since 1999, Norway has launched a national initiative to prevent and ameliorate conduct problems more effectively and to promote social competence in children and young people. Several empirically based programmes were implemented in the regular service systems, with the aim of building and maintaining social and emotional competence. The Norwegian initiative is based on the collaborative efforts of a national centre for programme training, implementation, dissemination and research, and the local child and adolescent service systems. In order to increase capacity and meet the challenges of large scale implementation, the Norwegian Center for Child Behavioral Development (NCCBD) was established at the University of Oslo. It is organized as a three-tiered organization with development departments for children, adolescents, and research. The national strategy further includes an extensive system of quality assurance, including program-based training and supervision of professionals, and monitoring of program and intervention adherence, and outcomes. An empirically and action-oriented approach focusing on risk reduction and promotion of protective factors are at the heart of all programs implemented by the Centre.

Parent Management Training, the Oregon model (PMTO)
The Oregon model of Parent Management Training (PMTO) was developed by Gerald Patterson, Marion Forgatch and their colleagues at the Oregon Social Learning Center (OSLC). A randomised controlled trial of the Norwegian version of PMTO (Ogden, Forgatch, Askeland, Patterson, & Bullock, 2005) was conducted with 112 children aged 12 or younger and their parents recruited through regular child welfare and child mental health services in Norway (Ogden & Amlund-Hagen, 2008). The families were randomly assigned to PMTO or regular services, and parents who received PMTO reported fewer externalizing behavior problems in their children, whilst their teachers reported a higher level of social competence compared to the children who had received regular services. Parents in the PMTO group were also more competent in limit setting or disciplining their children. PMTO was particularly effective in problem behavior in children who were eight years or younger at intake. The sustainability of outcomes was addressed in a 1-year follow-up of study (Amlund-Hagen, Ogden, & Bjørnebekk, 2011). The study showed that even if the positive behavior changes were sustained in the PMTO group, the comparison group caught up with the intervention group on several of the outcome indicators. The scaling up of PMTO was examined in a study by comparing the child behavioral outcomes in effectiveness and dissemination phases of implementation (Tømmerås & Ogden, 2015). Despite the larger heterogeneity of the service providers and in the intake characteristics of the target group, no attenuation of program effects was detected when PMTO was scaled up.

Early Interventions for Children at Risk
Many parents may manage with shorter or alternative interventions to the PMTO, and the Early Interventions for Children at Risk program (TIBIR) was designed as modular structured version with lower threshold for
intake to treatment in the municipal services, and with shorter or alternative intervention approaches (Solholm, Kjøbli & Christiansen, 2013). This program can be considered an extended and adapted version of PMTO based on the same principles. The intervention modules were tested in separate trials.

Brief Parent Training (BPT: Kjøbli & Ogden, 2012) promotes parenting skills in a short term intervention (3-5 sessions) delivered by regular staff in municipal child and family services. In an RCT with 216 children (3-12 years) and their parents, the post intervention assessment documented beneficial outcomes in parenting practices and child behavior (Kjøbli & Ogden, 2012). A follow-up study six months post intervention found that the beneficial outcomes were sustained on most child and parent variables (Kjøbli & Bjørnebakk, 2013), but generalization effects to the school and kindergarten were limited at both time points.

PMTO parent group training was delivered to groups of caregivers to 8 children who met weekly for 12 sessions. The intervention was evaluated both immediately following, and six months after termination of, the intervention (Kjøbli, Hukkelberg, & Ogden, 2012). Short- and long-term beneficial effects were reported from parents, although only short term effects and no follow-up effects were evident from teacher reports.

Individual Social Skills Training for children (ISST: Kjøbli & Ogden, 2014) did not achieve positive outcomes as expected, and the program will be re-examined and refined in the next version. The evaluation of the consultation model is completed, but is awaiting publication. Within this adapted program, the full-scale PMTO intervention is still offered, but only as a backup for those families that need more extensive help.

Multisystemic Therapy
In the period from 1999 to 2003, 25 multisystemic therapy (MST)-teams were established in all regions of Norway and 23 teams are still operating. Randomized controlled trials of MST in Norway have been conducted at post-intervention (Ogden & Halliday-Boykins, 2004) and at a 2-year follow-up (Ogden & Amlund-Hagen, 2006). As was the case with the RCT of PMTO, these studies tested the effectiveness of MST as intervention was delivered via existing child and family services. Moreover, the sustainability of MST has been investigated (Ogden, Amlund-Hagen & Andersen, 2007), as well as gender differences in treatment response (Ogden & Amlund-Hagen, 2009). Finally, a study on the effect of MST on drug-abusing adolescents has been published showing encouraging outcomes (Holth, Torsheim, Sheidow, Ogden & Henggeler, 2011). All of the MST studies demonstrated positive outcomes for the MST groups compared to the groups receiving regular practice.

The adapted Schoolwide Positive Behavior Support (SWPBS)
The SWPBS model, named N-PALS in Norway, is a structured yet flexible whole school approach with the main goals to prevent and reduce school problem behavior and to promote an inclusive learning environment that can facilitate safety and the psycho-social functioning and learning of all students (Arnesen, Meek-Hansen, Ogden, & Sørlie, 2014; Sugai & Horner, 2006). The focus is on positive, systematic, data-driven, educative and reinforcement-based practices conducted within a framework of research based, collective (schoolwide), proactive, and predictable approaches. The schoolwide model involves all staff and students, and takes approximately three to five years to fully implement. The model is an adapted and elaborated
version of the School-wide Positive Behaviour Support model (Sprague & Walker 2005). It combines modification of the social learning environment with direct teaching and behavioural interventions implemented by the school staff.

PALS include components and strategies explicitly matched to the development of behaviour problems, risk- and protective factors, and effective approaches to the prevention and management of behaviour problems in school (Arnesen, Ogden & Sørlie 2006). The model is typically implemented over a three year period. During this period training activities and supervision is offered on a school-wide basis and adapted to each school’s context and needs. Both staff and students are involved in training activities through proactive actions and skills-oriented learning activities. In order to participate in PALS, a commitment to participation is required from at least 80% of the staff at the school, as well as from the principal and the school administration. A PALS-team with participants from staff, administration, parents and school psychological services is organized at each school, and this team is responsible for the implementation process. The implementation of the school-wide intervention model also makes provision for close cooperation with the child welfare and child and youth mental health systems to provide additional support to the parents of high-risk students when needed.

The theory of change underlying the PALS model claims that schools, as a major context of children’s social development, may influence the students’ behavior in positive or negative ways. A key element of the change theory is that the students’ behavior is “directly influenced by how teachers and other members of the staff collectively model behavior, how they express positive expectations, how they teach and enforce discipline, and how they support social skills” (Sørlie & Ogden, 2015, p. 203). The behavior is the outcome of mutual positive relations and interactions among students and staff. The schoolwide implementation of rules and positive expectations are accompanied by systematic positive behavior support, but also moderate corrections from staff. Through clearly formulated and communicated rules and expectations, the students are expected to demonstrate socially competent and prosocial behavior as well as complying with school rules.

The school program is organized according to the principle of ‘matching interventions to students’ risk level’. More specifically, the intervention model relies on a three-tiered system of prevention and supports. Tier I interventions (universal, primary prevention) apply to everyone and all settings in the school with the goal to prevent problems by defining and teaching consistent behavioral expectations across the school setting and recognizing students for expected and appropriate behaviors. Tier II interventions (selected, secondary prevention) are designed for students at moderate risk for severe behavior problems and who might not respond sufficiently to the universal interventions. The interventions are standardized and mostly delivered in short term organized small-groups. Tier III (indicated, tertiary prevention) targets the few students with or at high risk of conductive disorders. The interventions at this level are intensive, highly individualized and multi-modal.

N-PALS has still been systematically implemented in more than 200 primary schools across the country. The adapted Norwegian model has been evaluated and reported in several publications (Sørlie & Ogden, 2007; 2014; 2015; Sørlie, Ogden & Olseth, 2015; 2016). Results from the longitudinal effectiveness
study indicate several positive and practically significant intervention effects after three and four years of implementation. These include a) lower level of more and less severe problem behavior occurring within and outside the classroom context, b) better psycho-social classroom climate (measured as students’ relations and student-teacher relations), c) reduced number of students segregated from class due to challenging behavior, d) increased teacher collective efficacy and self-efficacy, e) increased use of effective discipline practices (e.g., positive and proactive behavior support strategies, mild and predictable sanctioning of problem behaviors), f) more positive behavioral development among high-risk students over time, and g) in general, greater benefits were achieved for schools implementing N-PALS with high fidelity. Several user surveys, including one among all principals in schools with 1-10 year experience with the N-PALS model, support the positive evaluation results. Nine out of 10 principals reported positive benefits from N-PALS and expressed great satisfaction with this preventive system approach (Sørlie, Ogden, Arnesen, Olseth, & Meek-Hansen, 2014).

Conclusion
Hopefully, the experiences from Norway may inspire large scale implementation of evidence-based practice combining ‘top-down’ and ‘bottom-up’ initiatives in the child and adolescent services. The message from our research is that effective interventions should be based on sound theory and extensive research and simultaneously target multiple social systems including family, peers, school and child care. Moreover, interventions should motivate, engage and support children and adolescents in the change process. Implementing evidence-based programs and practices with high fidelity, assessing them in field trials and monitoring and evaluating them as they are implemented in regular practice on a large scale, constitute the challenges of today.

References


