Testing and assessing the effects of Family-Aggression Replacement Training (Family ART)

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Thirdly, I thank the participants of Family ART, who all were willing to let me use data concerning them in my study.

And finally, gratitude also goes out to everyone who in one way or another assisted me in writing my thesis or contributed otherwise in making my period in Tromsø for my master studies an enjoyable time.
Disclaimers

Attending an ART conference in August 2011, I was introduced to Family-TIES (Training In Essential Skills) by Robert Calame and Kimberlee Parker, who first introduced Family ART. I emailed Calame and Parker to ask about the new term, Calame answered:

I much prefer the name Family TIES (formerly referred to as Family ART). We have given Knut Gundersen the permission to use and translate Family ART in Norway. So perhaps you should use both names with explanation. ART is already well known in Norway. The new name reflects that it is not only ART because it is not. We add elements from Problem Solving, Character Education, Empathy Training and some Situational Perception Training elements also. So we call it TIES which implies the glue that keeps a family together and stands for Training In Essential Skills which are not restricted to ART only (Calame, 2011).

Because the manual used for Family-ART in Re does not specifically involve problem solving, character education, empathy training nor situational perception training—and partly because it is how it is known in Norway—I decided to employ the term Family ART.

Lindøysenteret for Barn og Unge and the ART centre\(^1\) cooperated in translating, revising and further developing the original manual from Calame and Parker, so that it would better fit the context of Norway. The manual used in Re is a further revision of this “Norwegian manual”. The revision was done by Aktiv i Re to adjust the Family ART programme to better fit the target age-group, and make it serve primarily as a programme of prevention rather than intervention.

\(^1\) A department of Diakonhjemmet University College in Rogaland
Abstract (English)

*Family Aggression Replacement Training (Family ART)* is an expansion of *Aggression Replacement Training (ART)*. The purpose of Family ART is to further enhance social skills and reduce problem behaviour. This is to happen by increasing application of what is learnt in the training sessions, to settings outside that of the training, by actively involving children’s significant persons in the ART programme. The purpose of this study was to assess the effects of a Family ART intervention on six families. The assessment was based on pre- and posttest scores on the *Social Skills Rating System (SSRS)*, and qualitative data obtained through semi-structured interviews. The secondary objective of the SSRS and interviews was to determine *how* any effect may have come about. In addition to this, the interviews were employed to investigate whether the parents experienced personal development. The SSRS results indicated that Family ART was associated with an increase in social skills and a reduction in problem behaviour. Additional support for the effect of Family ART was found in the interview transcripts: Both parents and children expressed that the intervention had benefitted them somehow. Given the low number of participants and the lack of proper control group comparison, the present study was considered explorative and no conclusion was drawn. The findings do indicate that the intervention works as intended, but more rigorous research must be conducted in order to conclude whether or not this is the case.

Key words: Family Aggression Replacement Training, intervention, assessment
Abstract (Norwegian)


Ytterligere støtte for at Familie ART er virksom ble funnet i intervjuavskriftene: Både foreldre og barn ytret at intervensionen hadde på en eller annen måte gavnet dem. På grunn av få deltakere og mangel på en kontroll gruppe å sammenligne med ble studien vurdert som utforsknings og ingen konklusjoner ble sluttet. Funnene indikerer at intervensionen fungerer etter planen, men mer robust forskning må gjøres for å kunne konkludere hvorvidt dette er tilfellet.

Nøkkelord: Familie ART, intervension, vurdering
ASSESSMENT OF FAMILY ART

Preface

This study was initiated by Aktiv i Re (an action group in the municipality of Re, Vestfold), who wanted an assessment to be done on the effects of Family ART, an intervention they had just started providing. I got involved in this project when I told Professor Frode Svartdal after his presentation of it that I was very interested in participating in such a study. This project was a collaboration between AiRe, Prof. Svartdal, and myself, with AiRe in the driver seat.

I have never had any close relation to ART, but became aware of it a decade ago when introduced to it by an old friend who then worked at an institution for youth with behavioural problem—already then such programmes spurred interest. I have long considered that I may enjoy working with preventions, interventions, and programme implementation so this was something of great relevance to me.

AiRe initially designed the study and was responsible for conducting the Family ART intervention and the SSRS testing. We agreed that teacher ratings should be collected, which had not been done for Group 1. I also presented the idea and took responsibility for conducting and transcribing interviews when it became apparent that there would not be many participants and I thought there would be too little quantitative data to rely on. It thus became a mixed-methods design study. Overall, AiRe was very open to hear suggestions on how to improve the current and future assessments, but at the end of the day they are limited in what they can actually do due to practical reasons (e.g., expertise, time, finances).

The process of processing the SSRS data and writing up the study was done by me, working closely with Prof. Svartdal.

Nicholas S. Johansen (Student)  02/05.12
Frode Svartdal (advisor)
Testing and assessing the effects of Family-Aggression Replacement Training (Family ART)

Low levels of social skills or high levels of problem behaviour may cause serious consequences to a person’s family and immediate surroundings, society in general, and to themself (e.g., Kazdin, 1996; Romeo, Knapp, & Scott, 2006). Problem behaviour spans from milder forms of oppositional behaviour (e.g., arguing loudly, and refusing to do as told) to severe forms of antisocial behaviour (e.g., theft, arson, and violence) (Frick et al., 1993). Problem behaviour may arise as early as infancy and continue through childhood and adolescence to adulthood (McMahon, Wells, & Kotler, 2006). The burden and costs of problem behaviour imply great benefits if the prevalence is reduced.

Following a growing interest for behavioural problems in children and adolescents, investigations and reports during the 1980s and ‘90s led the Norwegian Ministry of Children, Equality and Social Inclusion (1997) to compose a plan of action to “… develop and improve the efforts in the education and treatment of children and adolescents with behavioural problems… [and] ensure help both to those whom already have developed serious behavioural problems and those whom are at risk to do so” [author’s translation] (Innledning, para. 1). A panel of experts was appointed to give an account and make recommendations of plausible approaches in the work of preventing and treating behavioural problems in children and adolescents (Zeiner et al., 1998). Among the highly recommended were the The Incredible Years (TIY) (Webster-Stratton, Reid, & Hammond, 2004), Parent Management Training-Oregon (PMTO) (Forgatch & Patterson, 2010), and Multisystemic Therapy (MST) (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 1998). These are but a few of the now many programmes being employed in Norway.

TIY, PMTO and MST are multi-modal approaches; meaning they are composed of different units addressing various modalities, or aspects, of the issues at hand. Overall, considerable evidence has accumulated and demonstrate the advantage of employing multi-modal methods in treatment of antisocial behaviour. Empirical studies and meta-analyses have found multi-modal programmes to produce better results than programmes employing singular methods (e.g., Antonowicz & Ross, 1994; Durlak, 1995; Lipsey, 1992). Studies and meta-analyses have also provided evidence in favour of TIY (Sougstad, 2008; Webster-Stratton, Rinaldi, & Reid, 2011), PMTO (Ogden & Hagen, 2008; Bullard et al., 2010), and MST (Huey, Henggeler, Brondino, & Pickrel, 2000; Sawyer & Borduin, 2011) specifically.

2 Unless otherwise stated, all translations are done by the author.
Another multi-modal programme that has been found promising and is currently employed in Norway is *Aggression Replacement Training* (ART) (Goldstein, Glick, & Gibbs, 1998). The employment of ART in Norway has increased greatly in the course of the last decade. Few scientific studies have been conducted to determine the effects of ART within Norwegian contexts; however, as will be elaborated on later, the studies that have been conducted have found considerable evidence in favour of the intervention.

Considerably less documented is Family ART (Calame & Parker, 2003). This expansion of ART is currently gaining momentum nationally (Finne, 2012) although there is to date no published effect study on Family ART in Norway and very few internationally. Hence, it is of substantial interest to assess the effects of Family ART to consider whether its wide-spreading employment as an intervention is advisable. In light of the finding that parenting programmes have been found to have the greatest impact among interventions (Scott, 2002), and also because ART itself has proved to be effective, it is plausible that Family ART will prove to be an effective intervention.

**Overview of the present study**

Although effect studies on Family ART lack, its use is spreading. Thus, this paper assesses the effects of Family ART to determine if the intervention is successful in enhancing social skills and reducing problem behaviour as intended. The study followed six families that participated in a Family ART intervention.

Social skills and problem behaviour were assessed through the SSRS (*Social Skills Rating System*; Gresham & Elliot, 1990) and interview before and after the intervention. The SSRS is a multi-informant rating instrument which enables data triangulation and was thus well suited for this study. Further triangulation was done methodologically by employing semi-structured interviews to supplement the SSRS and provide information beyond its reach.

Because the present intervention did not include any control procedures (e.g., a control condition) and only included six families, it may appear weak in terms of inferring a causal relation between the intervention and associated changes. On the other hand, the study employed a mixed-methods design that was considered fairly well suited for facilitating internal validity in identifying possible effects of the intervention and how it affected participants.

The SSRS, administered before and after the intervention, was capable of determining the overall effects of the intervention, and the SSRS subscales also allowed a more detail-oriented investigation in determining where the changes in social skills and problem behaviour were rooted. Earlier studies (Brannigan, Gemmell, Pevalin, & Wade, 2002;
Langeveld, Gundersen, & Svartdal, 2012) found that the SSRS subscales cooperation and self-control were strongly correlated with decreased levels of problem behaviour. Both cooperation and self-control are directly targeted by Family ART, and it was hence of interest to see if and how those two dimensions could be illuminated in the interviews.

The interviews supplemented the quantitative data by elaborating on the findings, and enabled further exploration for plausible explanatory details regarding the findings. Thus, information as to how change in cooperation and self-control may have happened was provided. For instance, previously problematic situations that were apparently improved by participation in Family ART were shared by the interviewees. The interviews also made it possible to explore what personal development the parents may have had from Family ART participation.

As the present study was performed concurrently with another Family ART intervention, and with a number of ART interventions nationwide, the results of the present study were depicted together with results from these studies to compare both overall effects and the nature of effects. These comparisons add contextual information to the ratings of this project’s dataset and may thus aid to a better understanding of the changes observed.

**Theoretical background**

**Aggression Replacement Training.** This paper addresses Family ART, and in order to better understand Family ART, it may be useful to examine its roots, namely ART. ART is an intervention that is designed to prevent, reduce or replace asocial behaviour, and strengthen prosocial behaviour. It does so by addressing aspects of behaviour, affect, and cognition through its three coordinated components, skillstreaming (social skills training), anger control training, and moral reasoning training respectively (Goldstein et al., 1998).

The Skillstreaming component consists of 50 inter- and intrapersonal skills, grouped into six categories. Constituting each skill are specific steps for how to perform the skill; by a certain set of procedures, participants are taught constructive behaviours, enhancing current social functioning and providing alternatives for current destructive behaviours (Goldstein et al., 1998; Goldstein, 2004). Anger Control Training teaches that anger is natural, but there are more socially competent ways of handling anger than to exert aggression. The participants learn how to make sense of their emotions and control their behaviour in the case of anger (Goldstein et al., 1998; Feindler & Baker, 2004). Moral Reasoning Training is the cognitive—or values—component of ART. The participants are not told what is right and what is wrong; rather, the aim is to promote self-reflection and perspective taking in the participants, so that
they may use what they have learnt from the other components more socially competently (Goldstein et al., 1998; Gibbs, 2004).

There are prescribed recommendations on how to conduct ART (Goldstein et al., 1998; Gundersen, Finne, & Olsen, 2005; Gundersen & Svartdal, 2011) and following these recommendations is crucial: The effectiveness of ART—like other programmes—is greatly influenced by the quality of its implementation (Hollin, 1995; Cooke & Philip, 2000). Studies have found the outcomes of properly implemented ART to be promising (e.g., Nugent, Bruley, & Winimaki, 1999; Hosley, 2005), whereas sub-optimal implementation could cause effects contrary to the purpose of the programme (Svartdal & Gundersen, 2012; Wilson & Lipsey, 2007).

Prior to the year 2000, there existed no systematic attempt at employing ART. Five years and some months later, ART or ART-based programmes were to be found in all of Norway’s 19 counties—employed in nursery schools, primary schools, secondary schools, in institutes for further education (Moynahan & Strømgren, 2005), and institutions (e.g., Milepælen community home, Akershus; Tromsø Youth Centre, Troms). The child welfare services in Norway are organized in five regions. In 2005, each region had established, or planned to establish, facilities for treatment of youth based on systematic use of ART (Moynahan & Strømgren, 2005). It is evident that ART practice in Norway progressed rapidly from the grass root movement it initially was.

This progression indicates a rise in popularity, which in turn should evoke a rise in concern—a concern for whether or not this is a good programme to employ in Norway. The usefulness of an intervention in one country is not synonymous with it being universally useful; in fact, even usefulness within a country is influenced by cultural factors (American Psychological Association [APA], Presidential Task Force on Evidence-Based Practice, 2006). This indicates the importance of conducting studies that assess ART within Norwegian contexts.

Moynahan and Strømgren (2005) conducted a pilot study to assess the effectiveness of ART with children and adolescents with ASD or ADHD diagnosis, and with children and adolescents who had no formal diagnosis but displayed aggressive behaviour. They concluded that ART yielded measurable effect on children and adolescents with aggressive behaviour, and children with ASD or ADHD diagnosis. The training did, however, not seem to have had any effect on adolescents with ASD or ADHD diagnosis. Gundersen and Svartdal (2006) performed an outcome evaluation of ART with children and adolescents from schools and institutions in western and eastern parts of Norway. They concluded that ART yielded good
results: Social skills were improved, whereas problem behaviours were reduced. A study by Langeveld, Gundersen and Svartdal found that increased social competence (strongly moderated by cooperation and self-control) had a strong mediating role on reducing problem behaviours. The intervention they employed in the study was ART, and hence also found ART to have favourable effect.

The use of ART as a means of intervention or prevention has been recommended (e.g., Andreassen, 2003; Kjøbli, 2009) and received official recognition: A research report to the Ministry of Education and Research classified ART as a Category 3 Programme; namely, a programme with documented results (Knudsmoen, Holth, Nissen, Schultz, Tveit, & Torsheim, 2006). Subsequently, more studies have provided additional support for the use of ART, both explicitly (e.g., Barnoski & Aos, 2004; Gundersen & Svartdal, 2010; Hatcher et al., 2008; Stamnes & Moe, 2007) and implicitly by its theoretical basis (Nordahl, Sørlie, Tveit, & Manger, 2003; Sørlie, 2000).

The municipalities of Re and Larvik (in Vestfold, Norway) have accepted these studies as evidence of its value and embrace ART as a preferred intervention in their respective districts. Larvik intends to implement ART, or facets of the intervention, in all municipal services aimed at children and youth (Domben, Sollid, Skogshagen, & Domben, 2005). As part of the action plan, a new adaption of ART was developed: Helskole ART [whole school ART]. Effect studies on ART in nursery schools and whole-school ART indicated that both interventions seemed to be effective (Sæstad & Kyrrestad, 2007).

Re employs ART in all schools, including private nursery schools. Thus, 140–150 children a year receive ART. There being a great drive for ART in nursery schools, most children have participated in ART before they start primary school. Responsible for all that concerns the ART programme in the municipality is Aktiv i Re [Active in Re] (AiRe). AiRe is an action group responsible for various preventive and intervention measures in Re. In 2011, AiRe added a new project to their portfolio: Family ART.

Family ART. Goldstein et al. (1998) referred to generalization as transfer to new settings and maintenance over time, and recognized that generalization of training outcomes seemed a rarity. They asserted that this could come about by directing interventions not just at the children and youth, but also at significant persons in their lives (e.g., parents and peers). From this assertion and their experiences at the Batshaw Youth and Family Centres (BYFC, in Montreal, Canada), Calame and Parker developed an expansion of ART, named Family ART. The programme was named Family ART due to its emphasis on including members of
the child’s family\textsuperscript{3} in the ART programme and intending thus to enhance training outcomes, and to increase transference to settings outside the training sessions (Calame & Parker, 2003).

Family ART is typically conducted in the following manner (Calame & Parker, 2003). When the child aged 6–10 has participated, or is currently participating, in an ART group, the parents may choose to join with their child in a Family ART group. The group consists of 3–6 families and is led by three Family ART educated trainers. Before the start of each session a meal is provided for the families; including this voluntary meal, each session lasts three hours. The programme spans over nine evenings, and takes place as presented in Figure 2. The final two sessions are called booster sessions and are intended to refresh and encourage further practice of what Family ART participants have learnt in the course of the programme. (See Appendix A, for an overview of what the specific content of the sessions was).

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1}
\caption{Overview of Family ART training sessions.}
\end{figure}

Many aspects of Family ART are similar to ART. The content of the Family ART sessions may vary, but overall it addresses familial interaction. The focus is on the acquisition of communication skills, featuring: listening, expressing one’s feelings, understanding the feelings of others, making complaints constructively, negotiating, and problem solving. Other skills may be added prescriptively by the trainers based on family realities uncovered in the course of the programme. Anger Control Training and Moral Reasoning Training are only designated one session each, but emotional issues and the family’s value system can be challenged throughout the programme in setting up and performing role-plays (Calame & Parker, 2003).

\textsuperscript{3}The terms \textit{family} and \textit{parent} are employed for simplicity: They do not refer only to biological, nuclear family members, but to any significant persons directly involved in the life of the child.
Substantial evidence has been found in support of family-based interventions (e.g., Scott, 2002; Sexton & Alexander, 2002). An early study (Goldstein, Glick, Irwin, McCartney, & Rubama, 1989) found that making parents and other family members active participants in an ART intervention reduced the frequency of re-arrests among youths, compared to a control group and an ART intervention where only youths participated. This is assumed to be due to change in the environments of the youth; environments in which prosocial behaviours were then supported, encouraged, and reinforced (Goldstein et al., 1998). The family intervention done in this study is similar to and can therefore be considered a forerunner of Family ART, but must not be taken to be considered Family ART proper. To our knowledge there are only two studies that have been found to explicitly attempt to assess the effects of Family ART.

First, Calame and Parker (2004) conducted an outcome evaluation on the Family ART programme they run at Batshaw’s Prevost Campus. They found that the group with the highest degree of family participation (out of three groups) demonstrated the greatest increase in skill performance. Prior to the intervention, all participants had shared a similar skill level. Second, a study in progress has been conducted using data BYFC amassed on Family ART (and Family TIES) over a period of five years. The results are encouraging and leading to further research (Calame, Parker, & Ellenbogan, 2012).

Studies on ART, Family ART and similar family-including interventions indicate that Family ART ought to be an effective intervention. As of yet, however, Family ART is not an evidence-based programme. It is nearly a decade since the conception of Family ART and yet there are just one or two studies that assess the effects of the programme. It is apparent that more research is required. This also applies to Norway, as Family ART is being employed as an intervention in Norway despite no effect studies having been conducted here.

The present study

In a report by the Norwegian Social Research (a.k.a. NOVA) on the action group in Re (AiRe), the researcher emphasized the importance of evaluating the projects AiRe runs, in order to assure the quality (Mathisen, 2008). As there existed no information on the effects of Family ART in a Norwegian context, the necessity of evaluating Family ART thus seemed greater to AiRe.

The main purpose of the present study was to assess the outcome of Family ART—to examine if the intervention had the intended effect of enhancing social skills and reducing problem behaviour. The secondary objective was to determine how this effect came about, by employing both quantitative and qualitative data. The utility of the present study is that the
findings reported will add to the work of countering the ignorance that currently exists on the
effects of Family ART.

The present study used a simple PRE vs. POST design to assess any change between
the tests that was associated with the intervention. This design was chosen because of
practical circumstances. The concurrent Family ART and ART studies employed a
corresponding design. However, such a test-retest design by itself is weak in terms of valid
conclusions about the efficacy of the intervention (Reichardt, 2009). For example, changes
could have occurred since pretest for a number of reasons that were unrelated to the present
intervention (e.g., history [other interventions], maturation [natural development over time],
testing [learning how to respond]; Reichardt, 2009) and the lack of control group with random
allocation of participants to conditions makes the design vulnerable to selection problems
(e.g., Kazdin, 1982).

Information from the interviews could at least partially compensate for selection
problems that could threaten the internal validity of the study. The interviews ensured that
there seemed to be considerable diversity in the sample. For example, participation in Family
ART is voluntary and there might therefore be a discrepancy between those who apply to
participate and those who do not (a self-selection problem; e.g., Goodwin, 2009). The
interviews revealed both similarities and differences in this regard; for instance, concerning
reasons for applying, expectations, and current state of the relationship between mother and
child. Through the interviews it was investigated whether the children possibly could have
been influenced by some other intervention or life event: For instance, one child had gone
through a very tough time the previous year, and that had improved parallel to the
intervention; the mother assumed though that this would not affect her daughter as much as
the intervention.

Furthermore, the present study was conducted within the same time frame as another
Family ART intervention, which the present study can be compared with. Unfortunately, no
Family ART interventions in Norway do currently take place within a frame of rigorous
scientific research. Some mothers expressed in the interview that the intervention may be
stigmatized: People may think it is only for families with serious problems of aggression, and
hence do not want to be associated with it. As this image changes, more people may apply to
participate, and eventually there might be enough people to construe control conditions or
simply do tests on larger n.

Meanwhile, the current situation is that, given the low number of participants and the
lack of proper control group comparison, the present study should be considered explorative.
The low $n$ was necessitated by the fact that few Family ART interventions are available for research scrutiny. Still, we believe that it is an important study that will provide valuable data on the effects of Family ART. There are two principal arguments for this contention. Firstly, the need for information on Family ART is obvious, and if the effects of its administration is large (as we expect), changes should be detectable even with a low $n$. Secondly, the mixed-methods design of the study with a larger number of informants and different sources of data should give a good indication of whether any effect in fact occurred.

Method

Subjects

Subjects were 6 children (3 girls). Mean age at the time of intervention was 9.33 years. The inclusion criterion was that the participants had attended (and completed) the Family ART programme.

Informants

The children’s mothers participated in Family ART, provided SSRS data, and were interviewed to serve as informants on the participating children. The children’s class teachers also served as informants; they provided SSRS data on the subjects.

Group composition

This study provides results from two separate Family ART groups. In both groups, each family was represented by a child and the mother of the child. Group 1 consisted initially of three families. Group 2 consisted of four families. Due to variations in group composition and data collection, an overview of the Family ART participants is best presented in Table 1.
Table 1  
**Participant Overview**

<table>
<thead>
<tr>
<th>Group 1</th>
<th>Age</th>
<th>Sex</th>
<th>Participated in sessions</th>
<th>SSRS</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 1</td>
<td>10</td>
<td>Boy</td>
<td>Child, mother</td>
<td>Mother</td>
<td>Mother</td>
</tr>
<tr>
<td>Child 2</td>
<td>10</td>
<td>Girl</td>
<td>Child, mother</td>
<td>Mother</td>
<td>Mother</td>
</tr>
<tr>
<td>Child X*</td>
<td>9</td>
<td>Boy</td>
<td>Child, mother, grandfather</td>
<td>Not included</td>
<td>Mother</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group 2</th>
<th>Age</th>
<th>Sex</th>
<th>Participated in sessions</th>
<th>SSRS</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child 3</td>
<td>10</td>
<td>Boy</td>
<td>Child, mother</td>
<td>Teacher, Mother</td>
<td>Pre: Child, mother + father</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Post: Child, mother</td>
</tr>
<tr>
<td>Child 4b</td>
<td>10</td>
<td>Boy</td>
<td>Child, mother</td>
<td>Teacher, Mother</td>
<td>Pre: Child, mother + cohabitant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Post: Child, mother</td>
</tr>
<tr>
<td>Child 5</td>
<td>7</td>
<td>Girl</td>
<td>Child, mother</td>
<td>Teacher, Mother</td>
<td>Child, mother</td>
</tr>
<tr>
<td>Child 6</td>
<td>9</td>
<td>Girl</td>
<td>Child, mother</td>
<td>Teacher, Mother</td>
<td>Child, mother</td>
</tr>
</tbody>
</table>

*Notes.* Group 1 provided pre- and posttest SSRS, but only posttest interview data.  
Group 2 provided pre- and posttest SSRS and interview data.  

* The family of Child X dropped out because illness arose in the child; no posttest ratings were thus given, the pretest ratings were hence excluded. The interview was still conducted due to interest in their experience.  
*b* Child 4 is diagnosed with ADHD.

**Instruments**

**Social Skills Rating System.** The SSRS (Gresham & Elliot, 1990) comes in three versions that address different school levels⁴: Nursery school (aged ≤ 6), elementary school (6–12), and secondary school⁵ (12–19). Each version has three different SSRS response forms, for three types of respondents: one for the child (a self-assessment form), one for the parent, and one for the teacher.

This instrument was chosen due to its capability of measuring both social skills and problem behaviour. The domain of social skills measures positive social behaviours. On the parent form, this domain is divided into four factor-based subscales: *Cooperation, Assertion, Responsibility,* and *Self-Control.* The corresponding domain on the teacher form does not include *Responsibility.* The teacher form addresses the domain of *academic competence,*

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⁴ All stated age ranges are according to the Norwegian educational system and are +/- 1 year  
⁵ The term secondary school envelops both unngdomsskole and videregående skole in the Norwegian educational system. The age ranges for the respective levels are 12–15 and 16–19.
which the parent form does not. The Cooperation scale measures behaviours that demonstrate independence and teamwork (e.g., doing ones chores, spending time wisely before asking or while waiting for help). The Assertion scale measures initiating and responding behaviours (e.g., inviting someone home, accepting invitation to play). The Responsibility scale measures behaviours that demonstrate communicative ability and concern for property (e.g., listening, asking for permission).

The domain of problem behaviour measures behaviours that can interfere with the development of social skills. This domain is divided into three subscales: Externalizing, Internalizing, and—only on the elementary level—Hyperactivity. The Externalizing scale measures inappropriate behaviour such as aggressive acts, poor control of temper, and quarrelling. The Internalizing scale measures behaviours that indicate anxiety, sadness, loneliness, and poor self-esteem. The Hyperactivity scale measures behaviours involving excessive movement, fidgeting, and impulsive reactions.

The SSRS holds strong psychometric properties (e.g., Demaray et al., 1995; Gresham & Elliot, 1990; Ogden, 2003), and validity across different cultures (e.g., Jurado, Cumba-Avilés, Collazo, & Matos, 2006; Ogden, 2003; Shahim, 2004). A Norwegian version was translated, revised, and partly validated (only the teacher form) by Ogden (2003). Originally, to answer the items, three alternatives of frequency were given: Never, Sometimes, and Often. Ogden (2003) added Very Often to the answer scale, and also reduced the number of items on the parent form from 40 to 23. His findings indicated consistency in ratings across informants; there was consistent covariation between teacher ratings on problem behaviour and peer students’ sociometric nominations.

This study employed the Norwegian version of the teacher and parent forms addressing the elementary level. Only the domains and subscales that the forms have in common were included.

**Interviews.** Semi-structured interviews (e.g., Wengraf, 2001) served as qualitative measures for the assessment and were conducted before and after the Family ART intervention. The open-ended questions had been prepared beforehand, but when and how they were asked in the course of the interview varied slightly. In addition to asking the prepared questions, the interviewer made prompts, probes or statements where appropriate. There were differences in the questions asked before and after the intervention (see Appendices E and F), but the main aspects being addressed were the same: The interviews conducted before the training addressed the participants’ thoughts and expectations regarding the ART and Family ART programmes and their effects; the interviews conducted after the
training addressed thoughts regarding the Family ART programme they had participated in, and how they perceived the effect to be. For the present assessment, mainly the POST interviews were relevant.

Additionally, the interviews provided AiRe feedback on what the participants expected and what they experienced, which can serve as helpful pointers in the development of the Family ART intervention.

**Design and procedure**

The mixed-methods design employed in this study was a variant of *convergent design* (Creswell & Piano-Clark, 2010). The quantitative and qualitative data collection happened concurrently before and after the intervention and acquired “different but complementary data on the same topic”, as is the purpose of mixed-method design according to Morse (1991, p. 122). For the present assessment, priority was placed on the quantitative data.

The Posttest SSRS and interviews were conducted after the last booster session to give the participants more time to try and experience Family ART by themselves, and for the informants to observe potential change. The answers were assumed to then be more accurate than if they were to come right after the weeks of intensive training.

**SSRS.** The SSRS forms were administered by the Family ART trainers: The pretests were administered at a home visit before the start of the intervention; the posttests were administered at the end of the final session.

**Interviews.** The interviews were conducted either at the home of the interviewee, at school, or at the offices belonging to AiRe. The interviews were primarily conducted one-on-one, but at two (pre-intervention) occasions another person was present; namely, husband and cohabitant of the mother of Child 2 and 3, respectively.

**Ethical concerns and participants’ consent**

Complying with the recommendations given in the NOVA report (Mathisen, 2008), AiRe intends to continuously evaluate their projects. The Family ART project and its assessment were initiated, and are administered by AiRe. The author was invited to participate in an early stage assessment of the programme, by conducting interviews and receiving SSRS data for analysis on behalf of AiRe. The author remained a neutral party throughout the study.

Both subjects and informants received oral and written information about the purpose and procedure of the present study. Participation was voluntary; not participating in the study from start or later withdrawing would have no consequence to them. A written consent (see Appendices B, C and D) was made; the mothers approved on behalf of their children. All
agreed to participate and no one withdrew from the study. Permission to share the interview transcripts with AiRe was given orally by each mother.

**Statistical analysis**

Because of the low n, the results from the present project (n = 6) were combined with another Family ART dataset (n = 6) that was conducted within the same timeframe as the present project. These data were analyzed by repeated measures ANOVA in Statistica 10 with a significance level of α = 0.05. Due to the low n no further statistical tests were performed. The qualitative data were processed in Nvivo9.

**Comparison dataset**

The comparison Family ART dataset that was involved in this study consisted of 6 adolescents (2 girls). Mean age at the time of the intervention was 15 years. This Family ART project was not done in Re. Pre- and posttest SSRS ratings were also there collected to assess the intervention. The study was conducted by the Family ART trainers responsible for the intervention.

**Results and discussion**

A main expectation of the present data was that the Family ART intervention should be associated with enhanced social skills and reduced problem. Thus, the SSRS ratings on social skills should increase from pre- to posttest, whereas ratings on problem behaviour should decrease, and the interviews should contain statements of improvement.

This expectation was examined by comparing the direction of the PRE vs. POST changes of all informants. The results are presented in Table 2. According to this summary, all parents rated positive changes in social skills, whereas teachers did so for half of the subjects. Furthermore, for problem behaviour, both informants rated improvement for half the subjects. The informants disagreed on two cases: The mother of Child 4 reported improvement in both domains, whereas the teacher reported the opposite. The mother of Child 5 reported no change in problem behaviour, whereas the teacher reported increased problem behaviour.
Table 2

*Overview of direction of reported change in the children.*

Change between the pre- and posttest rating is indicated in the following manner:
Increase = plus sign, decrease = minus sign, no change = *, and missing data = 0.
*Improvement is plus sign for social skills, and minus sign for problem behaviour.

<table>
<thead>
<tr>
<th>Child</th>
<th>Change reported by parents</th>
<th>Change reported by teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>social skills</td>
<td>problem behaviour</td>
</tr>
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<td>Child 1</td>
<td>+</td>
<td>-</td>
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<tr>
<td>Child 2</td>
<td>+</td>
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<td>Child 6</td>
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<tr>
<td>Improved</td>
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<td>3/6</td>
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</tbody>
</table>

These results thus provide a mixed picture. In light of earlier findings, a possible reason for the discrepancy between the informants is the difference between the settings and informants (e.g., Achenbach, McConaughy, & Howell, 1987; Funder & Colvin, 1991): The children’s behaviour may have changed in one setting, but not the other (Scott, 2002); the dissimilar relationship between parent, teacher and child may have affected how the child was rated (e.g., Briggs-Gowan, Carter, & Schwab-Stone, 1996; Ogden, 2002).

**SSRS—group analyses**

The statistical analysis tested the two Family ART projects combined in PRE vs. POST comparisons. The ANOVA indicated a significant interaction in that social skills increased from PRE to POST, whereas problem behaviour decreased correspondingly, $F (1,11) = 6.204$, $p = .030$, shown in Figure 2. This finding is in accord with the expectation.
In Figure 3, the two Family ART projects are shown. It is apparent that the positive changes from pre to post (increased social skills scores, and reduced behaviour problem scores) in the present dataset (solid lines) were quite dramatic compared to the other Family ART project (dashed lines). Also included in the figure are the results from a larger ART project (dotted lines) conducted in parallel with the two Family ART projects.

The positive changes were more pronounced in the Family ART projects. This most probably is due to Family ART being an expansion of ART: The children have already participated in ART and may already to some extent have increased social skills and reduced behaviour problems.

It should also be noted that the apparent difference between the two Family ART projects most probably can be attributed to age level difference. The children in the present project (solid lines) are at the elementary level, whereas those of the comparison (dashed lines) are at the secondary level. Age levels have been found to moderate the effects of interventions (Wilson, Lipsey, & Derzon, 2003). Thus, one study found significant change between pre- and posttest on both SSRS domains in children at elementary school level, whereas no or marginal change was found in children at secondary school level (Langeveld, Gundersen, & Svartdal, 2012).
Changes in social skills and problem behaviour ratings from pre- to posttest. 
0 = mean pretest level. Solid lines = the present project; dashed lines = Family ART comparison project; dotted lines = ART projects

The SSRS permits a further examination of the subdomains of social skills (Cooperation, Assertion, Responsibility, and Self-Control) and problem behaviour (Externalising and Internalizing), and it is hence possible to illuminate how the observed changes in social skills scores and problem behaviour scores changed. In the following analyses the parallel Family ART results are included as comparison. Note that the age-level difference between the groups may be relevant to all of the following explorative analyses.

**Social skills.** The parent ratings presented in Figure 4 (solid lines) indicate an increase between pre- and posttest ratings on all social skills subscales ($M = 6.67$). The mean POST-PRE differences for the individual subscales were as follows: Coop = 7.83; Assert = 5.00; Resp = 6.00; Self-C = 7.83. The ratings for Coop and Self-C were most pronounced. These findings are as expected.

The way the Family ART sessions were conducted strongly promoted cooperative behaviour among all the participants—especially between mother and child—and may hence be the cause of the change in Coop. The Family ART programme contained an emotion...
management component and also generally promoted a way of communicating in a friendly manner. This may have influenced the change in Self-C.

Compared to the comparison (dashed lines), the changes seemed to be considerably more pronounced in the present dataset.

Figure 4. Parents’ ratings on the social skills subscales (solid lines). Comparison Family ART project in dashed lines.

Figure 5 shows that there seemed to be marginal or no changes between pre- and posttest teacher ratings (solid lines) ($M = -0.58$). The mean POST-PRE differences for the individual subscales were as follows: Coop = 0.25; Assert = -1.00; Self-C = -1.00.

The ratings in the comparison dataset (dashed lines) all increased. Note that the difference between the datasets primarily occurred at pre-test. The difference between the two datasets may then be traced to at least one likely explanation: High competence scores on pretest have been found to be associated with low change due to the intervention (e.g., Langeveld, Gundersen, & Svartdal, 2012), possibly because of a ceiling effect. Thus, the comparison group had a larger potential for change.
Problem behaviour. According to Figure 6 it seems that the parent ratings on both subscales of problem behaviour have decreased on posttest ($M = -2.50$). The mean POST-PRE differences for the individual subscales were as follows: Ext = -2.67; Int = -2.33.

Compared to the comparison dataset (dashed lines), the decrease seemed to be more pronounced in the ratings in this project’s dataset (solid lines).

In the comparison dataset, the relation between ratings on Externalizing and Internalizing remained very much the same across the tests.
Scores on Problem Behaviour subscales

Figure 6. Parents’ ratings on the problem behaviour subscales (solid lines). Comparison Family ART project in dashed lines.

Figure 7 shows that the teacher ratings on problem behaviour (solid lines) differed little overall from pre- to posttest. There appeared to be a change across the tests, in that Ext seemed to increase, whereas Int seemed to decrease.

The same conclusion, that the ratings differed little, applies also to the comparison dataset (dashed lines).
Figure 7. Teachers’ ratings on the problem behaviour subscales (solid lines). Comparison Family ART project in dashed lines.

Summary of group findings. The results indicate that the Family ART intervention was associated with an improvement in both social behaviour and problem behaviour. This change was more pronounced in the parent ratings: The overall improvement from pre- to posttest appeared in the parents ratings (\( M \) social skills = 6.67; \( M \) problem behaviour = -2.5) but not in teacher ratings (\( M \) social skills = -.58; \( M \) problem behaviour = -.63).

Interviews⁶

The following section will elaborate on the SSRS findings, addressing the relation between the SSRS and interview data. The quantitative data suggested that improvement primarily in social skills followed the intervention. By examining the qualitative data it was possible to find some plausible causal associations between intervention and improvement. Though not the focus here, interviews could in their own right have provided data on whether

⁶ All the transcript excerpts are translated by the author. Appendix G contains the original excerpts. N = Nicholas, the author. M = Mother #, # indicates which child they are mother of. C = Child.
informants perceived change in the subjects following the intervention. A statement from Mother 1 exemplifies this well; she expressed that they “kinda lived—put ugly—from living down there to now being upstairs. It’s incredible!... I cannot express how it has helped me and my family and the surroundings” (Mother 1).

The following section will also explore what the parents expressed about personal development through Family ART participation. Both children and parents participate in Family ART, but most programme assessments of Family ART have been based on change in the children only. It is possible that also their parents experience some personal development from participating. It was of interest to investigate whether the parents thought Family ART had had any effect on themselves.

**Elaborating the SSRS findings.** Figure 4 (solid lines) showed that there seemed to be a considerable increase in the cooperation and self-control ratings following Family ART participation. Cooperation and self-control were of particular interest as interviewees accentuated them as the most important, and because one study found these factors to most strongly mediate change (Langeveld, Gundersen & Svartdal, 2012). An investigation of the qualitative data was done to determine what may have fostered increased cooperation and self-control.

**Cooperation.** One likely explanation for the increased ratings on cooperation is the sense of unity cultivated by doing Family ART together; the training sessions are arranged so that parents and children cooperate throughout the intervention. The qualitative data were examined to determine what it was about this joint participation that may have influenced the observed improvement.

The mothers stated that training together with their children was important. Specific answers as to why varied, but the tenet was that by doing it together they had a common base on which to work on their relationship and face challenges.

- _M: I am convinced that the programme was particularly effective because we did it together… It wouldn’t have been the same if we did it each for ourselves, we became closer._ (Mother 3)

- _M: What I want to emphasize, which I didn’t get to mention earlier, is that it was of great value that we could train together. That’s what we gained the most by._ (Mother 6)
- N: Being critical, do you think something else you participated in could have caused the improvement, another programme or something he (the son) did?
  - M: I think the fact that we went to Family ART together.
- N: Was it important that you went together?
  - M: Yes. He saw that also mom was in on this and was learning it, she encounters me differently. (Mother 1)

Some mothers also shared that they and the children would make the other aware if one strayed from what they had learnt, and if this was brought forth in a proper manner it would inspire both to change their behaviour in the argument. For instance, Mother 4 stated that she believed it had an effect that she and her son trained together, “Because then we have gone through it together. Then one can say that, ‘hey, this is what we did at training…’”. Mother 3 said that when she would forget the training her son would tell her “mom, you forgot ART” and she would reply “yes, I forgot ART now, and mom must work more on that part”. “We then had a mutual understanding of training and working towards the goal of having a better life together”.

When the children were asked what they thought of training together with their mothers, their replies were all in the direction of it having made a difference for the better; however, they had no clear answer as to why this may be so.

- N: I mean, that you and your mother trained together. Do you think you would be less angry with your mother if you trained with another person?
  - C: With another person? (N: Yes.) No, I think I would’ve been as often angry then, maybe. Anyway, I’m not so angry anymore …
- N: But are you less irritated at each other now? (C: Mhm.) Do you know why?
  - C: Family ART as usual [he had answered it a few times earlier]
- N: But you do not know why so?
  - C: I don’t know, I think I don’t know. (Child 4)

- N: When you did ART at school you did so with a teacher and other pupils, but when you did Family ART it was with your mother. Do you think it was different that it was with your mother?
  - C: Mhm, because... it was different.
- N: How was it different?..
The interviews indicate two likely reasons for the increased ratings on cooperation:
1. A stronger relation developing between mother and child based on their joint participation.
2. A common base on which to direct attention should practice of ART flicker.

The interviews with the children uncovered that many of the children seemed to believe that Family ART had benefitted them, but they had a hard time expressing why this may be so. It could be that these young children were not eloquent, maybe especially so as they were affected by the social setting the interview posed (Saville-Troike, 1982; Wengraf, 2001). Perhaps there were elements of some bias present: If they—despite efforts to convince them of the neutrality of the interviewer—expected the interviewer to want them to support Family ART, they might have tried to please him by stating that it was good.

**Self-control.** Figure 4 also suggested that the intervention increased self-control. The SSRS items constituting the self-control scale primarily address emotional control and social interactions. These aspects are heavily targeted by the Family ART intervention and it was therefore likely that the intervention was associated with the improvement. An examination of the qualitative data was conducted to determine what it was by the intervention that could have increased the self-control ratings.

Most children and mothers expressed that they had benefitted from learning new ways of communicating and having social interaction. For instance, training to give and receive compliments and complaints was a “life-changer” for the family of Mother 3: “what I personally needed was to convey a complaint in a proper manner. That was the icing on the cake for me. When I … learnt that way of conveying a complaint and started using it, I noticed how the atmosphere at home changed completely”

- N: At home with your mother and father, do you think it has changed, how you behave with one another? (C: Yes.) How?
  - C: *nods* Yes. She manages to control herself, but..
- N: Did she often bicker before?
  - C: Now we are.. Mom, when she learnt ART she has stopped being so angry and that makes me happier, then everything works out well.
- N: What does she do now then?
  - C: She says it in a nice way.
- N: So she has become less frequently angry, but when she gets angry, she still says it in a nicer fashion?
- C: Yes. (Child 3)

- M: The best were the themes about complaining, to give and receive a complaint. Also, I think that the conversations My Daughter and I had about what makes me angry and what makes her angry, and how we perceive one another, were very good. (Mother 6)

- N: Did you argue more before or
  - C: –We were angrier with each other then, or at least I was more angry at mom.
- N: But you are less angry now? (C: Yes.) Why? (C: ART, the ART.)
- N: ART or Family ART? (C: Family ART then.)
- N: But why are you less angry now, do you know?
  - C: Because I’ve learnt self-control. (Child 4)

Both mothers and children expressed in the interviews that they had benefitted from lessons taught on and techniques employed to improve social interaction. It was expressed that communication was generally improved by exerting emotional control in problematic situations, especially where a party previously would have had outbursts.

**The parents as subjects.**

The interviews indicated that the mothers had learnt something from participating in Family ART, which they expressed by either mentioning specific techniques they made use of or the overall experience of learning through the training sessions. Statements about how they applied what they had learnt to situations with other adults and children indicate that the acquired skills and knowledge was something not limited to interaction with the participating child.

- M: This about presenting a complaint and somehow become aware of how to ask, that was very good to learn, both for me and My Daughter really. That and for My Son too, I use it with him as well. (Mother 5)
- **M:** Often I was the one starting it, not my son; I caused the problems and lacked the tool for how to handle it all. In retrospect I see that it’s I who that changed, but we’re doing well now… I see that My Son has certainly benefitted from it as well. (Mother 3)

- **M:** It’s help for self-help, a manual. Tips on how to do things, get over things. Some don’t need it, some need it a lot. Child rearing can be something you struggle with for 20 years. I think it’s difficult, but have now gotten a pointer, and I see results. It took time, but they are showing now. (Mother 2)

The SSRS provides multi-informant ratings on the children. Typically for ART effect studies is that only the children are tested for effect of the intervention. Grounded in the interviews, the author wishes to contend that, in the case of future Family ART effect studies, also the parents should be subjects of testing, because it seems that a Family ART intervention involves change in the parents.

**Summary of interview findings.** Examining the interview transcripts uncovered that, although to varying extent, all interviewees reported change (in social skills or problem behaviour) for the better following the intervention. The parents appeared to be more capable of expressing why or how they thought certain changes had taken place.

**General discussion**

This study set out to assess whether or not a Family ART intervention would be successful at increasing social skills and reducing problem behaviour. SSRS testing and interviews were conducted before and after the intervention to collect data for this assessment. Based on previous studies on Family ART and similar interventions (e.g., Calame & Parker, 2004; Sexton & Alexander, 2002) the assumption was that Family ART is associated with improvement. The assumption was tested and ostensible support was found.

An ANOVA of the SSRS data indicated a significant interaction ($\alpha = 0.05$) from PRE to POST in that social skills increased, whereas problem behaviour decreased, $F(1,11) = 6.204, p = .030$. This result, presented in Figure 2, came from a combination of two datasets, because the low $n$ of either would very unlikely empower any significant finding. Figure 3 suggested that the intervention in Re was relatively good compared to two other datasets.

The overall SSRS results were promising, and an investigation of the SSRS subscales was conducted to identify where these results were rooted. Examining the subscales uncovered mixed results. Largely, Family ART seemed to be associated with an improvement in both social behaviour and problem behaviour. This change was more pronounced in the
social behaviour ratings, and further so in the parent ratings. The improvement from pre- to posttest appeared considerably better when reported by the parents ($M_{\text{social skills}} = 6.67$; $M_{\text{problem behaviour}} = -2.5$) than by the teachers ($M_{\text{social skills}} = -0.58$; $M_{\text{problem behaviour}} = -0.63$). A simplified overview of the results was presented in Table 2.

The qualitative data, in the form of interview transcripts, were examined in search of plausible causal associations between intervention and change, as reported by the parents and children. Additional support for the effect of Family ART was found in the interview transcripts: The parents and children expressed that the intervention had benefitted them somehow.

**Teacher vs. parent ratings**

There appears to be a considerable discrepancy, in that the SSRS parent ratings and the overall positive attitude of the interviews did not seem to correspond with the teacher ratings that apparently reported less of a change in the children across the tests.

What reasons may have caused the observed discrepancy between teacher and parent ratings? Different informants often do not agree on details concerning a certain child’s behaviour (Achenbach et al., 1987; Loeber, Stouthamer-Loeber, Van Kammen, & Farrington). This could be because the informants observe behaviour in different settings or they have different insights (Cox & Rutter, 1985). Perhaps then both parent and teacher ratings were accurate: Improvement following the intervention may have only occurred at home and not at school (Scott, 2002).

On the other hand, it may be that the teachers were less biased than the parents, because of occupational competence and their experience with a number of children in the same class as the rated child (Ogden, 2002); whereas the parents’ assessments are coloured by their personal history with their children, and comparisons are often limited to siblings (if any) and close friends of the children (Briggs-Gowan, Carter, & Schwab-Stone, 1996). Perhaps teacher interviews would have shed more light on the differences between the parent and teacher ratings. Initially, interviewing the teachers was considered; however, due to practical issue (mainly time constraint), this was not possible.

**The parents as future subjects**

Parents participate in Family ART to learn about ART and how to practice it in order to ensure better environments for the child. It is plausible that the parents may gain more than mere knowledge on how to assist their children; the parents are active participants of Family ART themselves and may develop from it in similar fashion as their children.
The question on what effect Family ART may have on the parents had not been prepared beforehand. The urge to explore this problem arose in the course of the first interview and was carried on from there as it spurred great interest. Related answers could have come by chance when asked question 2 and 4 (see Appendix F)—as they did with Mother 1—but chance is unreliable and so it was decided to include it as a set question.

That it was not planned earlier could be considered a shortcoming, but the freedom enabled by semi-structured interviewing and that the idea occurred during the very first interview made it possible to perform the inquiry reliably with all interviewees.

There seemed to be a consensus among the mothers that they had benefitted from the intervention. Not only did they report favourable development in their interaction with their child, but they also reported that they applied what they learnt in social interaction with people in general.

It is feasible that even if the children do not experience an immediate effect, if the parents do, they may change situations in the home so that the child in the longer term will benefit from them having participated in Family ART. A question then is if it had not been better if only the parent participated in an intervention (e.g., PMT).

**Methodological challenges and issues**

Designing and carrying out the intervention and this study was the responsibility of AiRe. Small $n$ and lack of control groups are common problems in early assessment studies on interventions (Zeiner et al., 1998) and this poses a threat to the internal and external validity of said studies. These threats were also posed this study. It is difficult for AiRe to make a more robust research design (Bugge-Hansen, 2011): Families have to voluntarily apply to participate, and there are limits to how many Family ART groups they can run in parallel and in total per year—thus the $n$ is limited and control conditions (let alone randomization to them) is put off. The families who want to participate are to be allowed to participate as soon as possible, and AiRe does not have the capacity to create control groups by recruiting and following up on external families. Therefore, although they desire to assess Family ART in a proper scientific fashion, it is a great challenge as the priority of AiRe is to provide the intervention. This is reasoned by a strong conviction that it has a beneficial effect (Bugge-Hansen, 2011).

However pure the intentions and great the faith in Family ART, it is important that an intervention, which is provided to the wide public, is tested and the assumed good effects properly corroborated. There is no way around it but to conduct rigorous studies that embody the scientific principles of experimental design. This must be the aim of future effect studies.
on Family ART, because the findings of the present study may be challenged due to its shortcomings.

Validity. There are some threats to the validity of the reported findings of this study. The internal validity is challenged by the lack of control conditions, which implies that the observed changes following Family ART participation are not conclusive. For instance, the changes in social skills may have been due to other behaviour-shaping initiatives in Re, such as Whole school ART and Appreciative Inquiry (Cooperrider & Whitney, 2001) (spanning from playtime to syllabus), or the changes may be due to the children naturally developing (maturing) over time. Due to the number of services in Re that aim to enhance social functioning and reduce problem behaviour, it would be difficult to find children for a control condition whom have had no participation in any intervention. In such cases one may form “control conditions” of specific kinds of interventions and conduct a comparative study on the different interventions.

Earlier research on ART found the SSRS to remain stable over time (Diperna & Volpe, 2005). The mean age of the participants was 9, similarly to the present study (9.33). In light of this finding, it seems unlikely that the effect was due to maturation and that it posed a threat to the internal validity.

SSRS. The SSRS’ ability to triangulate was not fully utilized. There are missing teacher ratings, hindering a proper combination of Group 1 and 2. The teacher ratings are missing for Child 1 and 2 because AiRe did not initially plan to have the teachers rate the children. AiRe was swift to comply when urged by the author to acquire teacher ratings Group 2. Children ratings were attempted for Child 1, 2 and X. An AiRe employee sat with each child to assist them in filling out the form if needed; however, the process was stopped when it the children showed little understanding for the questions and how to rate accurately. Children ratings were thus removed from the assessment, as they did not seem to provide valid data. The children ratings would have been a welcome addition to the quantitative dataset, given that they were valid. I would have been interesting to consider, for instance, if they corresponded most with the parent or teacher ratings.

Interviews. Another shortcoming was that the interviews were not specifically modelled after the SSRS, which implies that some connections between interview and SSRS rating were to some extent luck. Lack of research experience was the reason for potentially sub-optimal structuring of the interviews. An alternative and probably better strategy for future mixed-methods research on interventions would be to construe the interviews to specifically address facets of the quantitative instruments employed.
Final remarks

First hand observations, interviews, and informal conversations with AiRe, the participants of Family ART, employees at schools and other governmental institutions in Re indicate a broad lay consensus in Re that ART and Family ART are effective.

However broad this consensus, more and proper research has to be conducted in order to draw such conclusions. By the end of 2012 there will be about 12 families that have participated in Family ART in Re, and AiRe expects many more in the following years. A larger dataset is better fit for analyses than what was the base for this thesis, but more has to be done than to simply amass subject data; the design of the assessment must be more scientifically robust. Hopefully this is something AiRe and other service providers will accept and strive to achieve, somehow despite their current limitations.

Personally I would like to see some of these future effect studies on Family ART find a way to systematically assess the participating parents in addition to the children. Also, with ART and now Family ART being used as interventions of a preventive nature, it seems prudent to conduct longitudinal studies to see if and for how long the effects are lasting.

That Family ART indeed is effective at enhancing social skills and reducing problem behaviour is not a conclusion that will be asserted here. Due to the threats to the validity of the findings, we are wary of drawing any conclusion. Nevertheless, the measures taken to augment the power of this study (the mixed-methods design) and the results this procured (findings in quantitative and qualitative data) support that a causal interaction may at least be assumed as this is what is strongly indicated.
ASSESSMENT OF FAMILY ART

References


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Mother 1. (2011, October 11). Parent interview, post. [Interview]. Transcript in possession of Aktiv i Re.

Mother 2. (2011, October 11). Parent interview, post. [Interview]. Transcript in possession of Aktiv i Re.

Mother 3 (2012, March 21). Parent interview, post. [Interview]. Transcript in possession of Aktiv i Re.


Innhold på de ulike kursdagene:

Trening 1: Gj en innføring i hva ART er. Trene på å gi og få et kompliment.
Trening 3: Trene ferdigheten: Å framføre en klage.
Trening 4 m/barn: Trene på ferdigheten: Å svare på en klage.
Trening 5 m/barn: Sinnekontroll: Hvem blir sint på meg, hva er det jeg gjør som gjør andre sint og hva kan jeg gjøre i stedet?
Trening 6 m/barn: Trene på vanskelige situasjoner barnet opplever utenfor hjemmet. Foreldrene trener på å veilede sitt barn.
Trening 7 m/barn: Moralsk resoneringsstrening: Vi diskuterer et aktuelt dilemma.
Trening 8 m/barn: Tema tillit: Vi øver på situasjoner som bygger tillit og samtaler om hva som bryter ned tillit.
Trening 9 m/barn: Moralske karakteregenskaper: Vi jobber med barnets styrker.

Påmelding til din skole via kontakttærer eller rektor eller Familiesenteret på kommunehuset.

Kirkevoll skole: 33 06 45 50
Ramnes skole: 33 06 37 00
Røsttoppen skole: 33 06 14 44
Solør skole: 33 06 18 70
Familiesenteret: 33 06 16 01
Infoskriv angående kvalitetssikring av FamilieART

ART er et satsningsområde i Re kommune, gjennom Aktiv i Re; litt i underkant av 150 barn får nå årlig ART-skolering ved at alle skoler og barnehager i kommunen kjører ART-grupper. Over 50% av alle barn i alderen 5–10 år har fått eller vil få delta i en ART-gruppe.

ART, et program for forhindring og behandling, har mottatt offentlig anerkjennelse gjennom en forskningsrapport gjort på bestilling fra Kunnskapsdepartementet der det klassifiseres som et program med dokumenterte gode resultater.

Imidlertid, for tiden foreligger det dessverre ikke mange formelle studier på effekten av FamilieART, men resultatene som har kommet så langt gir god grunn til å tro at FamilieART fungerer.

Vi er veldig opptatte av at vi skal tilby noe virksomt som deltakerne føler de har god nytte av. Derfor har vi i samarbeid med Diakonhjemmet Høgskole i Rogaland og Universitetet i Tromsø gått inn for å kvalitetssikre FamilieART programmet vi fører i Re.

I den anledning besøker Nicholas Johansen, en masterstudent i psykologi ved UiTø, Re i uke 41. Han skriver sin avhandling om FamilieART og ønsker derfor å observere våre aktiviteter og snakke med deltakere og trenere. Vi håper at du som har gjennomført FamilieART vil være villig til å stille opp på et intervju nå etter endt deltakelse, slik at vi kan supplere de data som kom fra spørreskjemaene (SSRS) med deres personlige uttrykk.

Med vennlig hilsen

Vidar Bugge-Hansen (prosjektleder) og Nicholas Johansen (masterstudent ved UiTø)
Infoskriv angående kvalitetssikring av FamilieART

ART er et satsningsområde i Re kommune, gjennom Aktiv i Re; litt i underkant av 150 barn får nå årlig ART-skolering ved at alle skoler og barnehager i kommunen kjører ART-grupper. Over 50% av alle barn i alderen 5–10 år har fått eller vil få delta i en ART-gruppe.

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Med vennlig hilsen

Vidar Bugge-Hansen (prosjektleder) og Nicholas Johansen (masterstudent ved UiTø)
Appendix D

Forespørsel om deltakelse i en forskningsstudie
"Kvalitetssikring av FamilieART i Re kommune"

Bakgrunn og hensikt
Dette er et spørsmål til deg om å delta i en forskningsstudie i forbindelse med en avhandling til en mastergrad i psykologi ved universitetet i Tromsø. Målet med studien er å undersøke og kvalitetssikre at programmet (FamilieART) som gjøres i regi av Aktiv i Re fungerer godt. Du er blitt utvalgt fordi du har sagt deg villig til å delta i programmet.

Hva innebærer studien?
Studien innebærer hovedsakelig en analyse av deltakeres (barn og foresatte) SSRS skjemaer og deres og treneres svar på intervjuspørsmål.

Hva skjer med informasjonen om deg?
Informasjonen som registrareres om deg skal kun brukes slik som beskrevet i hensikten med studien. Alle opplysningene og prøvene vil bli behandlet uten navn og fødselsnummer eller andre direkte gjenkjennende opplysninger. En kode knytter deg til dine opplysninger og prøver gjennom en navneliste. Det er kun autorisert personell knyttet til prosjektet som har adgang til navnelisten og som kan finne tilbake til deg.

Data (svar på skjemaer og intervjuer) som samles inn vil med andre ord bli anonymisert slik at det ikke av utenforstående vil kunne knyttes opp mot individene som deltok.

Det er ønskelig fra Aktiv i Re og kommunens side å inn i fremtiden beholde de anonymiserte data som samles inn, for å kunne bruke dem i videre utforming og arbeid med FamilieART.

Frivillig deltakelse
Det er frivillig å delta i studien. Du kan når som helst og uten å oppgi noen grunn trekke ditt samtykke til å delta i studien. Dette vil ikke få konsekvenser for din videre behandling. Dersom du ønsker å delta, undertegner du samtykkeerklæringen på siste side. Om du nå sier ja til å delta, kan du senere trekke tilbake ditt samtykke uten at det påvirker din øvrige behandling. Dersom du senere ønsker å trekke deg eller har spørsmål til studien kan du
kontakte Vidar Bugge-Hansen (prosjektleder) på epost (vidar.bugge.hansen@re.kommune.no) eller telefon (90819943) eller Nicholas Johansen (masterstudent, UiTø) på epost (njo016@post.uit.no) eller telefon (46675367).

Ytterligere informasjon om studien

Masteroppgaven der dette omtales vil bli gjort tilgjengelig på
http://www.ub.uit.no/munin/handle/10037/138

Samtykke til deltakelse i studien

_Jeg er villig til å delta i studien_  
(For foresatte og trenere)

________________________________________________________________
(Signert av prosjektdeltaker, dato)

Stedfortredende samtykke når berettiget, enten i tillegg til personen selv eller istedenfor  
(For foresatte på vegne av barn)

________________________________________________________________
(Navn på barnet, signert av nærstående, dato)

_Jeg bekrefter å ha gitt informasjon om studien_  
________________________________________________________________
(Signert, rolle i studien, dato)
Appendix E

Dimensjoner å adressere i intervju: FØR

**Barn**

1) Tanker og forventninger om FamilieART før deltakelse
   a) Hvordan tenker du om ART opplegg du har deltatt på før?
      (Gruppe-ART, klasse/avd.-ART, Erfaringer / opplevelser)
   b) Tanker om FamilieART opplegget (formelt sett)? Hva forventes om:
      i) De formelle rammene (antall samlinger, hyppighet, varighet, tidspunkt, størrelse)
         (Mindre viktig, litt mer viktig for foresatte)
      ii) Det faglige innholdet
         (Tema og verktøy—hvilke forventninger? Noen leksjoner som stikker seg ut?)
      iii) Det relasjonelle
         (Samvær og samspill med andre. Spise mat sammen. Forventninger til andre
          familier? Kontakt utenom kurssettingen. Forventninger til trenerne?
          (“Vet du at du kan snakke med trenerne når det ikke er trening?”)

2) Forventede effekter av programmet. Etter FamilieART, hva håper du har skjedd?
   a) ”Tror du at du kommer til å oppføre deg forskjellig med (dine søsken/) andre barn
      gjennom å være på FamilieART?”
   b) ”Tror du at du kommer til å oppføre deg forskjellig med (dine foreldre/andre) voksne
      gjennom å være på FamilieART?”

**Foresatte**

1) Kjennskap om (gruppe/annen) ART. Tanker og forventninger om FamilieART
   a) Fikk dere innblikk i ART som barnet deltok på før? Merket effekt av det?
   b) Hvor hørte dere om FamilieART?
   c) Hvorfor valgte dere å bli med? (Kom gjerne med tips/idéer om hvordan å få flere med)
   d) Tanker om FamilieART programmet (formelt sett). Hva forventes om:
      i) De formelle rammene (antall samlinger, hyppighet, tidspunkt, varighet, størrelse)
      ii) Det faglige innholdet (tema og verktøy)
      iii) Det relasjonelle
         (Samspill med andre. Spise mat sammen. Forventninger til andre familier?
          Kontakt utenom kurssettingen: informasjonsmøtet/hjemmebesøk, telefonsamtaler
          mellom samlingene. Forventninger til trenerne?)
2) Forventede effekter av programmet. Etter fullendt program, hva håper du å sitte igjen med? (ha gjort, ha lært)
   a) "Tror du at samspillet mellom deg og barnet vil endre seg gjennom FamilieART?"
   b) "Hva med deg i samspill med andre enn barnet?" (andre barn, voksne)
Appendix F

**Dimensjoner å adressere i intervju:**

**Barn**

1) Tanker om FamilieART opplegget (formelt sett)? Hvordan oppfattes:
   a) De formelle rammene (antall samlinger, hyppighet, varighet, tidspunkt, størrelse)
      (Mindre viktig.. litt mer viktig for foresatte)
   b) Det faglige innholdet
      (Tema og verktøy. Noen leksjoner som stikker seg ut?)
   c) Det relasjonelle
      (Samvær og samspill med andre. Spise mat sammen. Forventninger til andre familier?
       Kontakt utenom kurssettingen. ("Vet du at du kan snakke med trenerne når det ikke er
       trening?") Forventninger til trenerne?

2) Oppfattede effekter av programmet. Etter FamilieART, hva mener du har skjedd?
   a) "Har du merket forskjell i hvordan du oppfører deg sammen med (dine søsken/) andre
      barn etter å ha lært (Familie)ART?"
   b) "Har du merket forskjell i hvordan du oppfører deg sammen med (dine foreldre/
      andre) voksne etter å ha lært (Familie)ART?"

3) Var det noe som rett og slett var dårlig med FamilieART programmet?
   Hvordan kunne FamilieART bli enda bedre ifølge deg?

4) Hva er det mest positive du sitter igjen med etter å ha deltatt i FamilieART?

**Foresatte**

1) Tanker om FamilieART programmet (formelt sett). Hvordan oppfattes:
   a) De formelle rammene (antall samlinger, hyppighet, tidspunkt, varighet, størrelse)
   b) Det faglige innholdet
      (Tema og verktøy. Noen leksjoner som stikker seg ut?)
   c) Det relasjonelle
      (Samspill med andre. Spise mat sammen. Relasjoner til andre familier. Var det
       tilrettelagt så man følte seg trygg, fri..?)
   i) Trenerne
      (1) Følte dere at dere ble ivaretatt? (Telefonsamtaler)
      (2) Hva gjorde de som dere opplevde som bra?
(3) Kunne de gjort noe annet/på en annen måte for å gjøre opplevelsen av programmet som helhet bedre?

2) Oppfattede effekter av programmet. Etter fullendt program, hva tenker du at du sitter igjen med? (har gjort, har lært)
   a) "Har du merket endring i hvordan samspillet mellom deg og barnet er etter (Familie)ART trening?"
   b) "Hva med deg i samspill med andre enn barnet?"

3) Var det noe som rett og slett var dårlig med FamilieART programmet?
   Hvordan kunne FamilieART bli enda bedre ifølge deg?

4) Hva er det mest positive du sitter igjen med etter å ha deltatt i FamilieART?
Appendix G

Interview excerpts

“Jeg kan si én ting, at vi levde på en måte—for å si det veldig stygt—fra å leve down there til nå å være up stairs. Det er helt utrolig… Jeg har ikke ord på hvordan det har hjulpet for meg og min familie og omkretsen rundt.“ (Mother 1)

Cooperation

“Jeg er overbevist om at programmet var ekstra bra fordi vi gjorde det sammen… Sønnen og jeg… Det ville ikke vært det samme å gjøre det hver for oss, vi kom nærmere hverandre.“ (Mother 3)

“Det jeg vil trekke fram som jeg ikke sa til spørsmålene er at det var veldig verdifullt at vi kunne øve sammen. Det er det vi tjente mest på.“ (Mother 6)

“N: Med et litt kritisk blikk, tror du det kan ha vært noe annet som har ført til forbedringen, en annen oppfølging eller noe han har vært med på?

• M: Jeg tror faktisk det at vi gikk på Familie ART sammen..

• N: Var det viktig det at dere gikk sammen?

  o M: Ja. at han så at mamma var med på dette og lært dette og, at hun møter meg annerledes… så har jeg lært hvordan jeg skal gjøre ting og tang. Jeg vet ikke om ting kunne vært annerledes.. jeg tror at om jeg ikke hadde vært med på Familie ART og BUPA tror jeg ikke vi ville vært så langt som vi er i dag. Det har vært tøffe år, men Familie-ART—go for it! (Mother 1

N: Men tror du det har en effekt at dere trener sammen?

• M: Ja, det tror jeg.

• N: Har du noen videre tanker om det, hvorfor?

  o M: For da har vi gått igjennom det sammen. Da kan man si at "du, sånn gjorde vi på kurset.." (Mother 4)

\(^7\) N = Nicholas, author; M = Mother; C = Child,
“Og når jeg ble sint, når jeg glemte ART på en måte, så brukte han å si «mamma, du glemte ART» så sier jeg «ja, nå glemte jeg ART, nå må mamma jobbe litt mer med akkurat den delen». Da hadde vi en felles forståelse for det at vi jobbet, trente med det og jobbet mot et mål at vi sammen skal ha det godt.“ (Mother 3)

N: Kranglet dere mer før f.eks. eller krangler dere mer
  • B: Ble mer sinne på hverandre da, eller jeg ble mer sinna på mamma i hvert fall.
  • N: Men du er mindre sinna nå? (C: Ja) På grunn av hva da? (C: ART. ARTen.) ART eller FamilieART? (C: FamilieART da) Men hvorfor er du mindre sinna nå da, vet du det?
    ◦ C: Fordi der har jeg lært selvkontroll.
    ◦ N: Hjalp det at du øvde på selvkontroll med moren din på FamilieART eller tror du at du kunne øvd med hvem som helst?
    ◦ C: Det hjalp å øve en gang eller noe sånn
    ◦ N: Jeg mener, at du og moren din øvde sammen, tror du at du ville være mindre
      sinna med moren din om du øvde med en annen person?
        ▪ C: Med en annen person? (N: Ja) Nei, jeg tror jeg ville vært like sinna da, kanskje. Men jeg er egentlig ikke så veldig sinna nå lenger uansett. (N: Det høres bra ut.) (Child 4)

N: Når du gjorde ART på skolen gjorde du det med lærer og andre elever, men når du gjorde FamilieART gjorde du det med moren din. Synes du det var veldig annerledes at det var med moren din?
  • (C: mhm, fordi... det var annerledes)
  • N: Men hvordan var det annerledes?
  • (C: At jeg var med mamma i stedet for med noen i klassen)
  • N: Men hvilken forskjell gjør det for deg? (C: Det vet jeg ikke)
  • N: Tror du at hvis hun hadde gjort ART alene og du hadde gjort ART alene så hadde det vært det samme som nå? (B: Nei)
  • N: Hvorfor ikke det da? (B: For vi lærte samme ting)
  • N: Det var spesielt at dere gjorde det samme? (B: Mhm.) (Child 3)
**Self-Control**

“Ja, for oss var jo, det som jeg personlig trengte var å fremføre en klage på en positiv måte. Det var prikken over i’en for min del. For da jeg lært, eller tok i bruk, lært den måten å fremføre en klage på og tok det i bruk, så merket jeg at det ble en helt annen stemning her hjemme. “ (Mother 3)

“Det beste var temaene rundt anklage, både det å gi en anklage, og motta en anklage. Ellers synes jeg at samtalene som Datteren og jeg hadde om hva som gjør meg sint og hva som gjør henne sint, og hvordan vi oppfatter hverandre var veldig fint” (Mother 6)

N: Kranglet dere mer før f.eks. eller krangler dere mer
• C: --Ble mer sinne på hverandre da, eller jeg ble mer sinna på mamma i hvert fall.
• N: Men du er mindre sinna nå? (C: Ja) På grunn av hva da? (C: ART. ARTen.)
• N: ART eller FamilieART? (C: FamilieART da)
• N: Men hvorfor er du mindre sinna nå da, vet du det?
• C: Fordi der har jeg lært selvkontroll. (Child 4)

N: Hva med hjemme med moren og faren din, synes du det er blitt annerledes hvordan dere oppfører dere sammen? (B: ja) Hvor?na
• B: Nå er vi. Mamma, når hun har lært ART har hun sluttet å bli så sint og da blir jeg gladere, da går all ting fint.
• N: Kjeftet hun mye før?
• C: *nikker* Hun greier jo å styre seg, men..
• N: Hvordan er det hun gjør nå da?
• C: Hun sier det på en pen måte.
• N: Så hun er blitt mindre sint, men når hun blir sint så sier hun det fortsatt på en bedre måte. (C: Ja) (Child 3)

**The parents as subjects**

“mange ganger ikke Sønnen som startet det, men det var jeg som startet problemene og manglet det verktøyet for hvordan jeg skulle gjøre det. Så i ettertid ser jeg jo at det var jeg som har endret meg, men vi har fått det bra“ (Mother 3)