

## **PARENTS, GROUP-HOME STAFF AND SCHOOL STAFF WORKING TOGETHER AROUND CHILDREN WITH PROFOUND MULTIPLE DISABILITIES**

MATS GRANLUND, CECILIA OLSSON, TINA VON DARDEL and  
MARIE ANDERSSON 1)

### **INTRODUCTION**

This paper presents a project initiated by the staff of a group-home for 12 children with profound multiple disabilities. The staff felt that their working-tasks were built too much upon routines and intuitive knowledge. They identified three problem areas:

1. How do we set attainable goals for the communicative development of our children? The goals need to be based on the present functional abilities of the children.
2. What kind of methods should be used to attain the goals? How do we know when we have performed a good job?
3. What can we do to actively engage all persons within a child's "sphere" (i.e. group-home staff, school-staff and parents) in assessing the needs of the children, setting goals for intervention and implementing intervention.

Consequently, the aims of the project were:

1. To increase the knowledge of the children's present communicative abilities in carers (i.e. group-home staff, school-staff and parents).
2. To reach a consensus among carers in their perceptions of the children's functional communicative abilities, problem areas and goals for intervention.
3. To set and prioritise goals for intervention attainable within a relatively short period of time (e.g. two to three months) and to develop methods for attaining them.

--Before designing the project literature was reviewed in areas believed to be important. Areas of importance were in-service training (Granlund & Olsson, 1987; Granlund & Olsson, 1988; Granlund, Winlund & Olsson, submitted for publication; Granlund, Olsson & Jadne, submitted for publication; Kunz et al., 1982; Montegar, Reid, Madsen & Ewell, 1987; Repp, Felce & de Kock, 1987; Seibert & Hogan, 1982; Spreat et al., 1985; Ziarnik & Bernstein, 1982; Ward, 1987), interdisciplinary team and group process (Bailey et al., 1983; MacDonald & Gilette, 1986) interventions in families with handicapped children (Bailey et al., 1986; MacDonald & Gilette, 1986; Mahoney & Powell, 1988), perceptions of needs and life experiences in families with handicapped children (Bailey & Simensson, 1988; Dunst et al., 1988; Gustavsson, 1986; Renlund & Wester, 1987) and finally the "Adoption Process" in the in-patient treatment of children and adolescents (Gustavsson, 1986; Palmer et al., 1983; Renlund & Wester, 1987).

The literature stressed the importance of the following factors for a good outcome of interventions

1) ALA Fub: s Stiftelse, Sibyllegatan 7, 114 51 Stockholm, Sweden.

- that all participants in in-service training and team-work are actively participating throughout the process
- that all participants in in-service training "act out" new knowledge in real life situations
- that staff and parents need many opportunities to meet and talk with other persons involved with handicapped children
- that participants in in-service training and supervision need individual feedback on behaviour change
- that participants in in-service training and families in early intervention must be able to influence the goals set for intervention
- that staff and parents reach a consensus in their perception of the needs and abilities of the handicapped child
- that staff and parents have a common set of terms when talking about the handicapped child
- that the perceptions of problems articulated by staff or parents in supervision of family-intervention are acknowledged and supported by professionals.

The main purpose of this study was to investigate if a project in which the points stressed in the literature were taken into consideration affected the knowledge and consensus concerning the communicative abilities of profoundly handicapped children among carers, i.e. group-home staff, parents and school staff.

Another purpose was to investigate the effects of consensus among carers concerning the communicative abilities of profoundly handicapped children on the degree of goal-attainment after interventions as contained in the project had been implemented.

## **METHOD**

### **PROJECT DESIGN**

#### **Information to project-participants:**

Parents and school-teachers were personally informed of the aims and methods of the project. They were then asked if they wished to participate. Group-home staff were first personally informed and then asked to sign a written statement if they wished to participate in the project. By signing the statement they agreed to participate in the project even if it meant extra work-load and more responsibility. Participation was agreed by 20 group-home staff, 11 parents of children (3 couples and 4 mothers), 14 schoolstaff (7 teachers and 7 teachers-assistants) and finally 12 children. Approximately 7 people participated in each child's "sphere".

#### **The first assessment of the functional communicative ability of the children:**

As a first step in the project all groups of participants in a child's "sphere" i.e. group home-staff, school-staff and parents were asked to complete assessment-schedules independent of each other. Of a total number of 35 sets of assessment-schedules administered 33 were completed.

The assessment-schedules were taken from Granlund & Olsson (1988) "More Communication" — an Assessment and In-Service Training Package. The areas assessed were: Communicative Functions, Functional Use of Senses, Functional Motor Ability and Social and Physical Aspects of the Communicative Environment.

In the assessment of Communicative Functions an adapted version of Seibert & Hogan's (1982) "Early Social Communication Scales" was used. The ESCS taps the perceived functional levels of the communicative functions Social Interaction, Joint Attention and Behaviour Regulation the child uses in responding to, initiating and maintaining interaction.

In the schedule "Functional uses of senses" questions are asked how carers perceive that the child uses his senses to gather information about the environment.

In the schedule "Functional Motor Ability" questions are asked about carers' perceptions of what physical support the child needs in different positions to have an optimal level of voluntary movements, what ability the child has to direct its body and attention in different directions, if the child is independent in mobility and, finally, what ability the child has to manipulate objects motorically.

All the above mentioned schedules give qualitative information but not information of the frequency of use of different functions.

In the Communicative Environment schedule questions are asked about the general quality of the social environment, the individual compared to the group, aspects of dyadic interaction, communication intervention, daily routines, general quality of the physical environment, adjustments of the physical environment and finally about individual stimulation using objects. The environment schedule gives both qualitative and quantitative information of how carers perceive the environment of the handicapped child.

Independent of the above mentioned judgments the cognitive ability of each child was judged by a clinical psychologist.

The purpose of administering assessment schedules in the project was three fold. First, to encourage observational behaviour and active discussions in participants concerning the functional communicative abilities of the children. Second, to create a basis for joint knowledge about the children and a common terminology of knowledge in all participants. Third, to evaluate the effects of the project on the participants' perceptions of the children's communicative ability.

The different groups in a child's "sphere" were also asked to identify at least one problem that they thought was important to discuss with the other groups.

The information from the different assessment schedules and the identified problems was analysed and summarised for each child. A written summary was sent to each participant in a child's "sphere". According to the judgments the children had the following characteristics (see Table I):

TABLE I

age		Characteristics of the 12 children participating in the project						intellectual level	
		sex	motor handicaps		visual deficits				
age group	n	n	n	n	n	n	n		
8-13	8	female	7	with	12	with	7	within sensory motor stage	8
14-18	4	male	5	without	0	without	5	above sensory motor stage	4

**Each "sphere" meets to interpret the information:**

The written summaries sent to each "sphere" focused on the functional communicative abilities of the child. The identified problems were integrated with the information from the assessment schedules. A special point was made of disagreements in the perceived abilities of the child when judged by different groups in the "sphere".

Each "sphere" was called to a meeting to discuss "their" written summary. The group-leader was one of three specially informed group-home staff.  
**Formalising a plan for interventions:**

A second meeting for each "sphere" was called for the purpose of forming an intervention plan. These meetings were led by a clinical psychologist.

In the meeting the child's functional communicative abilities were discussed in conjunction with the child's motor, visual and cognitive abilities and the environmental conditions. Three problem areas based on identified problems were discussed. The discussion focused on existing communicative behaviours with a low frequency or few naturally occurring contexts.

One identified problem was selected for intervention and operationalised using positively formulated goal-attainment scales. A continuum of outcomes possible by the end of a three-month intervention period was specified. The continuum consisted of five steps, each of which was assigned a numerical value, from "-2" (Worst expected outcome) to "+2" (Best expected outcome). Initial performance of the child in the goal-variable was used as "-2" (Worst expected outcome).

A method or technique to be used to reach the goal was designed by each child's "sphere". It was stressed that the method should be as simple and time-saving as possible. It was also stressed that it must be possible to implement the method in at least three naturally occurring situations. Implementation was started directly after the meeting. A written summary of the formalised plan was sent to each member of a child's "sphere".

**The second assessment of functional communicative abilities:**

Approximately 1½-2 months after implementing the interventions a new set of assessment schedules were sent to all participants along with goal-attainment scales. Each group in a child's "sphere" completed the schedules independent of each other. Of a total number of 35 sets of assessment schedules, 31 were completed.

The schedules and the goal-attainment scales were analysed and a feedback and evaluating meeting was called for each child's "sphere".

**Feedback, evaluation and future plans:**

Approximately 2-2½ months after implementing the interventions each "sphere" had a meeting led by the clinical psychologist to analyse goals, methods and results. Feedback was given to each group in a child's sphere on how their perceptions of the child's abilities had changed. Problems in conjunction with implementation and effects of the intervention were discussed. Finally a plan for future co-operation around the child was formalised and a date for a follow-up meeting with the psychologist was decided upon.

### **Evaluation:**

An evaluation of the project was made using a quasi-experimental one-group design. In measuring the outcome of the project the assessment schedules completed by the participants before and after the project were used. Semi-structured interviews with the participants and a questionnaire with open-ended questions completed by all participants after the project were also used. The semi-structured interviews were conducted by an independent interviewer.

In the semi-structured interview the participants were asked three questions:

- When, during the project period, have you learned the most about your child?  
What have you learned?
- Has your co-operation with other participants changed during the project period, when and how?
- When, during the project period, have you analysed your own behaviour?  
What have you analysed?

In the questionnaire the participants answered the following questions:

- What have you learned about your child?
- Was it possible to fulfill your tasks concerning the intervention methods?  
What were your problems?
- Do you think you have learned anything about planning and implementing interventions? What have you learned?

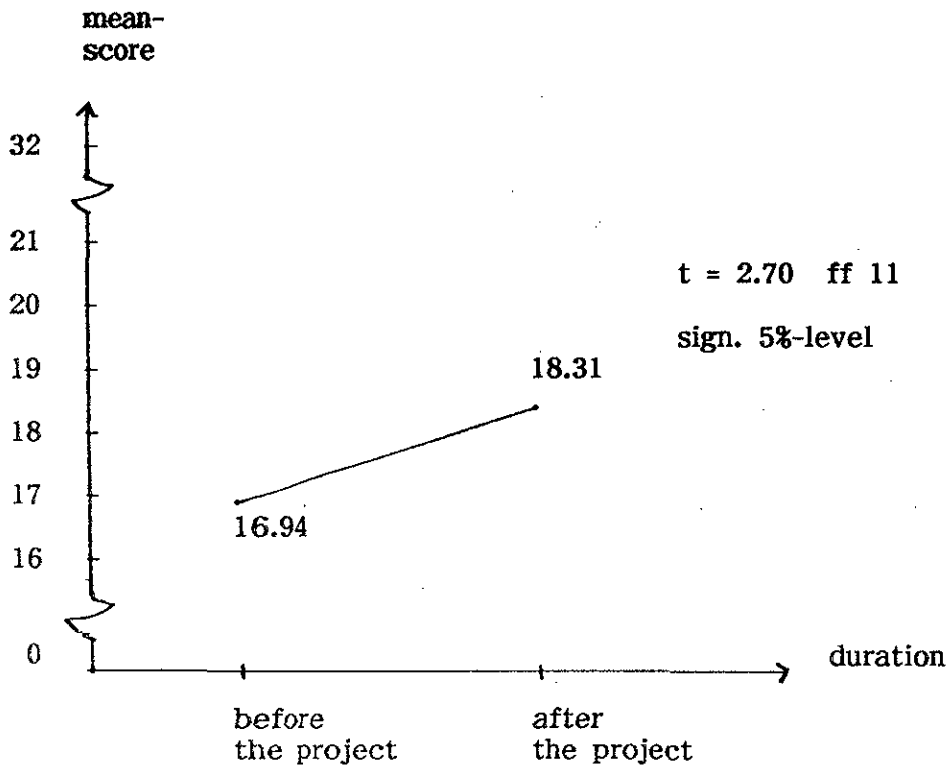
## **RESULTS**

### **To increase knowledge of the children's present communicative abilities in carers**

The abilities of the children, as perceived by carers, before and after the project was compared using a T-test for dependent measures. The comparison was made using the assessment schedules of communication, functional use of senses and motor ability.

Considering the limited time-period and that all assessment schedules used tapped the quality of functions in the children using indirect measures it was hypothesised that significant changes found would be the result of changed perceptions of the children among carers. The changed perceptions may also lead to better adjustment of communicative behaviours in carers and consequently the children would have more opportunities to use existing skills.

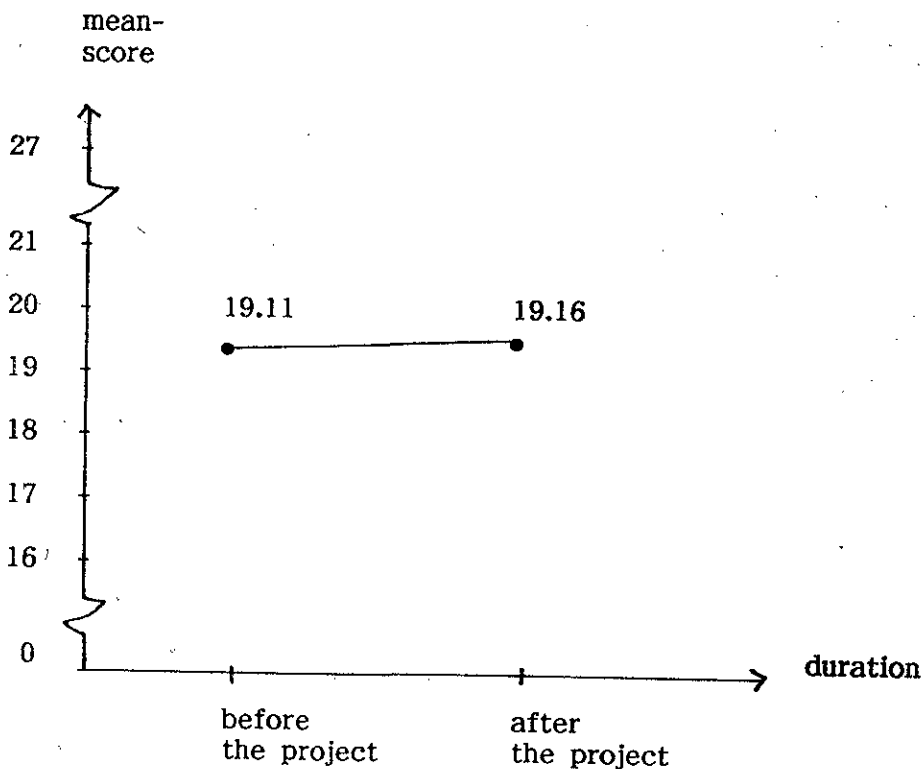
In Figures 1a, 1b and 1c the mean scores of the children's functional communicative abilities, use of senses and motor abilities as perceived by the participants before and after the project are displayed.



**Fig. 1A**  
**Mean-score of the children's functional communicative abilities as judged by the participants before and after the project.**

Carers perceived the communicative abilities and the motor abilities of the children as more advanced after the end of the project as compared with the position before the project started. A further analysis revealed that especially the abilities of the children to maintain Social Interaction and Joint Attention and to initiate Joint Attention were perceived as more advanced after the project had ended.

The analysis of the answers of the post-project interviews and questionnaire gave support to the idea that perceptions and communicative behaviours of participants had changed. Group-home staff reported that completing the assessment schedules, especially the first time, initiated discussions and actual changes of physical environment. School-staff reported that completing the assessment schedules and implementing intervention initiated more aimed observations and changes of the physical environment. Parents reported more aimed observations.

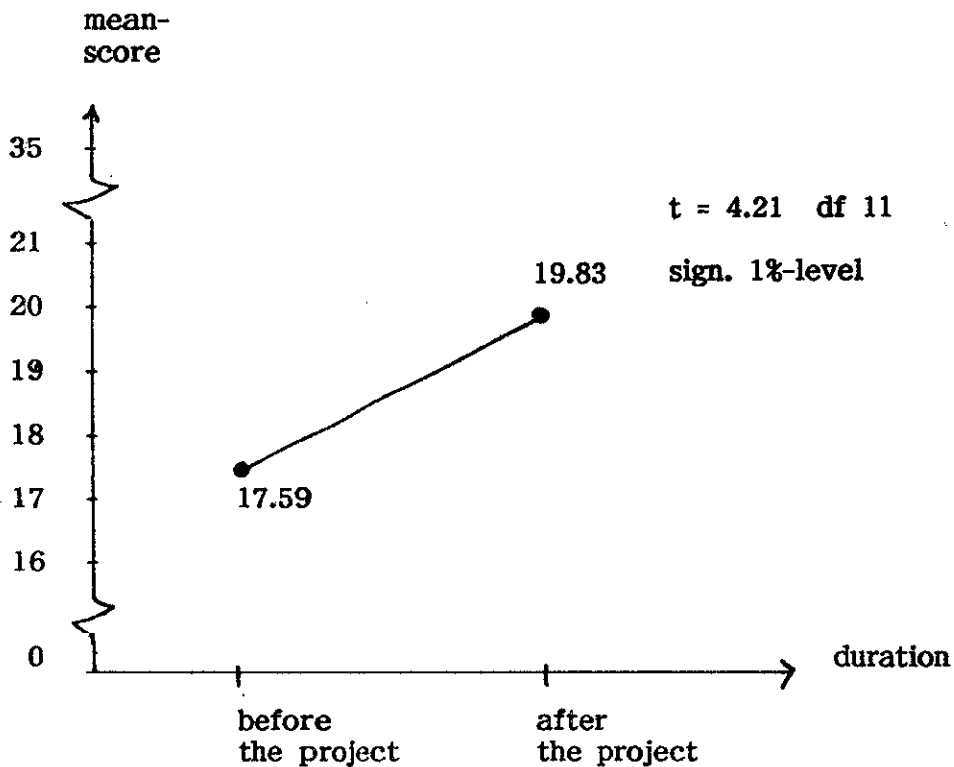


**Fig. 1B**  
**Mean-score of the children's functional use of senses as judged by the participants before and after the project.**

**To obtain a consensus among carers in their perceptions of the children's functional communicative abilities**

To analyse the degree of agreement among carers in their perceptions of the children's functional communicative abilities two methods were used. First, the degree of interrater agreement before and after the project was compared using a T-test for dependent measures. Secondly, the degree of difference in perceptions of the child, operationalised as the difference in number of points on the assessment schedules, was calculated and compared between different groups within a child's "sphere" before and after the project.

The comparison of the pre-and post-project degree of interrater agreement revealed no significant differences when calculated on the total score for each assessment schedule. When calculated separately for each variable in the communicative abilities schedule a higher agreement was revealed in the variables "responding to Social Interaction" and "Initiating Behaviour Regulation". A lower



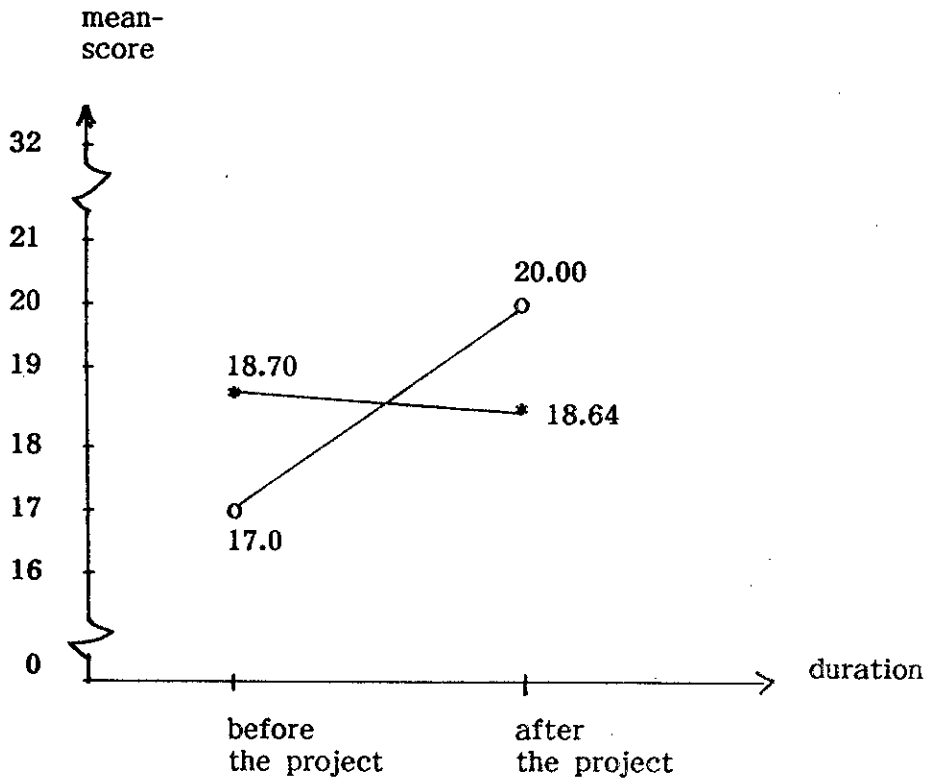
**Fig. 1C**  
**Mean-score of the children's functional motor abilities as judged by the participants before and after the project.**

degree of agreement was revealed for the variable "responding to Behaviour Regulation". All changes were significant on the 5% level.

The comparison of differences in the number of points on the assessment schedules was calculated on pairs of participant groups i.e. parents-group-home staff, parents-school staff and group home staff-school staff. In Figure 2 the pre- and post-project mean-scores on the communicative abilities schedule for the parents and group-home staff are displayed. The mean-scores were calculated on the 7 children whose parents participated actively in the project.

The difference in mean-scores between parents and group-home staff was lower after than before the project. Only the group-home staff had changed their perceptions of the children's communicative abilities during the project-period. An analysis of each child's sphere revealed that the differences in perceptions of the child's communicative abilities were lower than before the project in 5 "spheres" out of 7.

**Fig. 2**  
**A comparison of the pre and post project meanscores on the communication schedule as judged by parents and group-home staff.**



N = 7 parent - group-home staff comparisons

\* - \* = parents

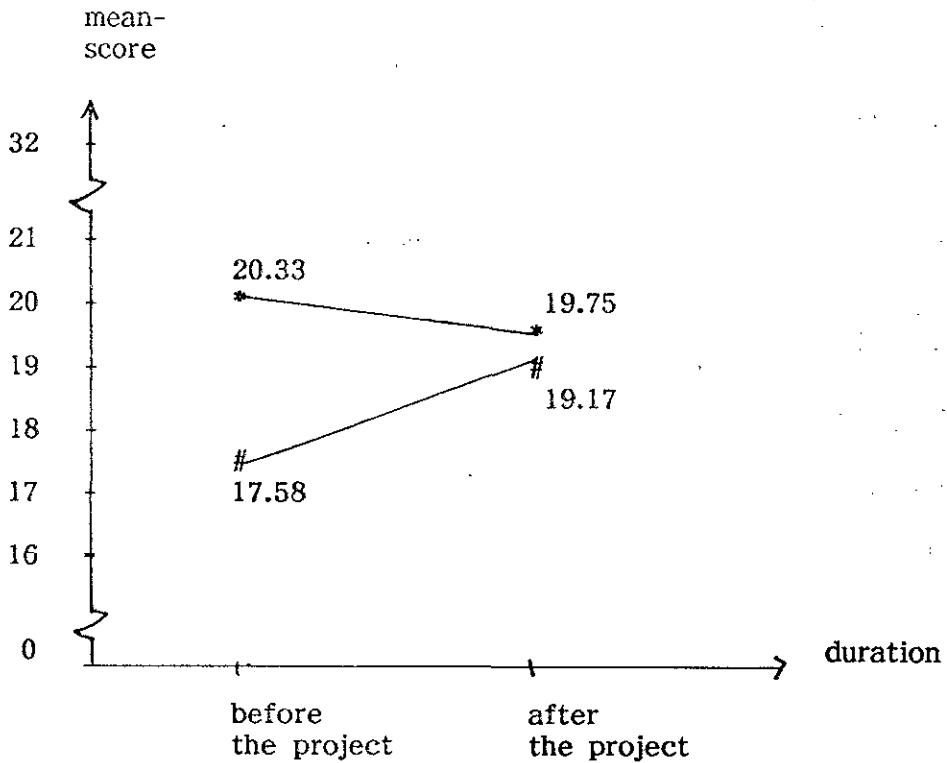
o - o = group-home staff

In Figure 3 the pre- and post-project mean-scores on the communicative abilities schedule for the parents and school-staff are displayed. The mean-scores were calculated on the 6 children whose parents and school-staff participated actively in the project.

The difference in mean-scores on the communicative abilities schedule between parents and school-staff was lower after than before the project. The school-staff had changed their perceptions of the children's communicative abilities more than the parents during the project period. An analysis of each child's sphere revealed that the difference in perceptions of the child's communicative abilities was lower after than before the project in 5 spheres out of 6.

In Figure 4 the pre- and post-project mean-scores on the communicative abilities schedule for the group-home staff and school-staff are displayed. The mean-scores were calculated on the 11 children whose group-home staff and school-staff participated actively in the project.

**Fig. 3**  
**A: comparison of the pre and post project mean-scores on the communication schedule as judged by parents and school staff.**



N = 6 parent - school staff comparisons

\* - \* = parents

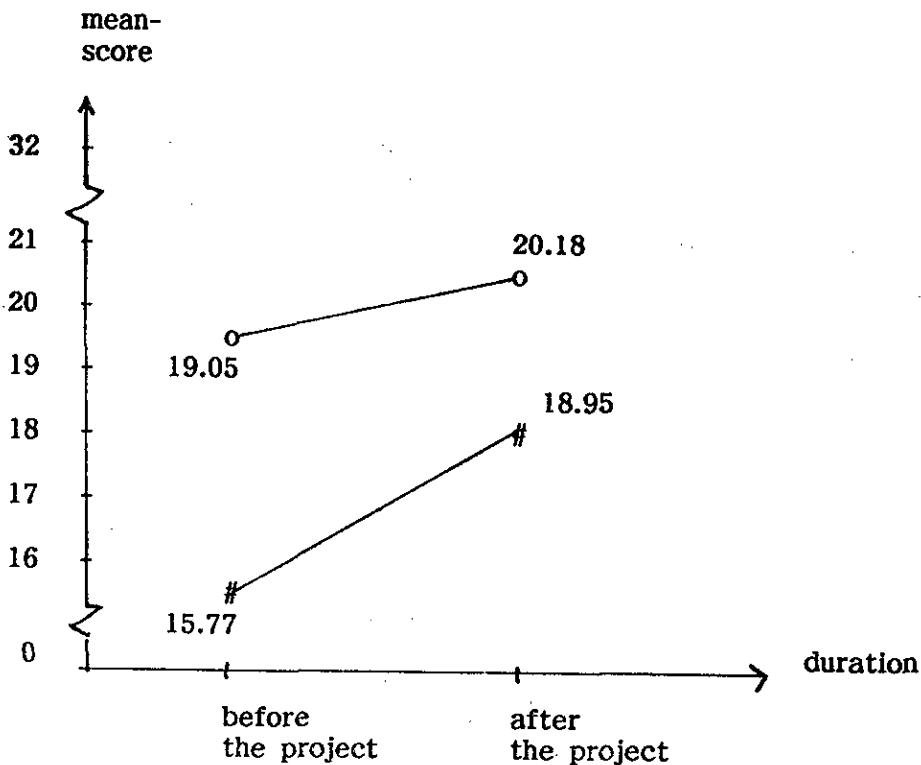
# - # = school staff

The difference in mean-scores on the communicative abilities schedule between group-home staff and school-staff was lower after than before the project.

The school-staff had changed their perceptions of the children's communicative abilities more than the group-home staff during the project period. An analysis of each child's "sphere" revealed that the differences in perceptions of the child's communicative abilities were lower after than before the project in 7 spheres out of 11.

The answers of the participants on the post-project questionnaire and in the interview gave support to the results. All participant-groups reported that from the time when discussing assessment findings and formalising interventions plans they perceived co-operation as more intense than before the project. Group-home

**Fig. 4**  
**A comparison of the pre and post project mean-scores on the communication schedule as judged by group-home staff and school staff.**



N = 11 school staff - group-home staff comparisons  
 ○ - ○ = group-home staff  
 # - # = school staff

staff reported "a better ability to consider the other person's point of view", "easier to co-operate when discussing a specific topic" and "higher consensus with school-staff in the perceived communicative abilities of the children". School-staff reported "a higher degree of consciousness concerning the needs of the children in all participants". Parents reported "more concrete discussions" and "discussions more focused than before the project on the present situation of the child".

**To set and prioritise goals for intervention:**

As a part of the Communicative Environment Schedule the participants were asked questions about the goals of communicative intervention for their child. The number of points on these questions before and after the project was compared using a T-test for dependent measures (see Figure 5).

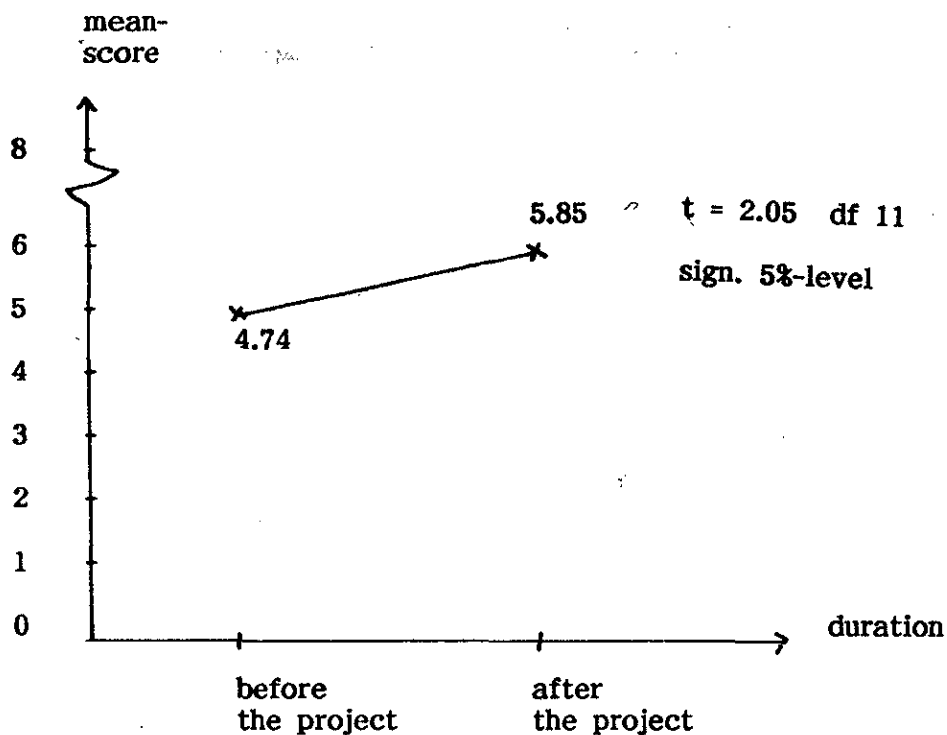


Fig. 5  
 A comparison of scores on the communicative intervention scale before and after the projects as judged by the participants.

The participants perceived that they had more and better defined goals and better integrated methods of communicative interventions for their children after the project.

To evaluate the outcome of the interventions goal-attainment scales were used. Each participant independently judged the degree of goal attainment. The reliability of the judgments of goal-attainments was calculated for each child using the formula: number of agreements divided by the total number of judgments. The inter-judge agreement was  $x = 0.66$  (0.44 - 0.88). The mean level of goal-attainment was  $x = -0.47$  (+0.50 - -1.25) at the end of the project period.

To further analyse the outcome of the interventions the judgments of the communicative environment made by the participants after the project period and the inter-rater agreement in judgments of the children's functional abilities after the project were correlated with the degree of goal-attainment using Pearsons Product-Moment Correlation. (See Table II).

**TABLE II**

**Relationships of goal-attainment to the second environmental assessment and to inter-rater agreement on the post-project judgments of the children's functional abilities**

Post-project environmental assessment	Goal-attainment	
	r	df
General quality Social Environment	0.06	11
Individual compared to group	0.37	11
Dyadic Interaction	0.02	11
Communicative Intervention	0.47*	11
General quality Physical Environment	0.41	11
Adjustment Physical Environment	0.45	11
Individual Stimulation Physical Environment	0.52*	11
Inter-rater agreement	r	df
Communication	0.09	11
Use of Senses	0.0	11
Motor Abilities	0.48*	11

\* = Significant on the 5% level

The correlations revealed that children, where their sphere had judged that they had clear goals for communicative intervention and a high degree of individual stimulation in the physical environment, had reached a higher degree of goal-attainment. The correlations also revealed that children, where their sphere showed a high inter-rater agreement in their judgments of the child's motor abilities, had obtained a higher degree of goal-attainment.

These results were supported by reports from school-staff and group-home staff that they, during the project-period, had made changes in the physical environment of the children, e.g. adaptations of wheel chairs, provision of adapted toys and switches and changing furnishing.

## DISCUSSION

The described project is unusual in that it was initiated by group-home staff. This fact may explain the high degree of motivation and active participation by all participants. The drop-out rates in completing the sets of assessment-schedules and questionnaires before and after the project were low. Consequently, the reported results of the project must be considered representative of the perceptions of the participants.

The results revealed that carers perceived the communicative abilities and the motor abilities of the children as more advanced after the project as compared to before the project. These results gave indirect support to the notion that receiving feed-back on and discussing completed assessment schedules of a handi-capped child with other persons involved increases the knowledge of the child's abilities. Further support to the notion was found in the participants' changed

perceptions of the Communicative Environment and their reports of actual changes of the social and physical environment during the project period. It can be inferred that changed perceptions of the children's abilities in the participants had consequences for their actual behaviours in observing the children and in interacting with the children. Yoder and Feagans (1988) have reported that the degree to which mothers of handicapped children attributed communication to their handicapped children had consequences for their ability to interact effectively with them.

The outcome of the project indicates a higher degree of consensus among carers after the project in their perceptions of the children's communicative abilities. This was especially seen in areas of communication focused on in the project. The results indicate that if participants of in-service training and intervention are able to influence the goals set for intervention it is easier to reach consensus in the perception of a child's abilities. This is especially the case if participants have opportunities to "act out" new knowledge in real life situations.

An interesting result was that parent's perceptions of the children's communicative abilities changed to a lesser degree than did group-home staff's and school-staff's perceptions. Both group-home staff and school-staff perceived the children's communicative abilities as more advanced, i.e. in agreement with parents, after the project. The result indicates that parents have accurate perceptions of their children's communicative abilities even if the children have lived away from home for several years. Consequently perceptions of problems articulated by parents not only need to be acknowledged by professionals but are probably also a good starting point when formulating intervention-plans concerning handicapped children.

In this project group-home staff's perceptions of the children's communicative abilities changed less than the school-staff's perceptions of the children. Furthermore, the consensus was higher among parents and group-home staff than among parents and school-staff. Probably people that interact with the children in many instances, in a 24-hour fashion, develop a more comprehensive view of the children's communicative abilities. It is therefore very important that people initiating interventions, i.e. teachers and other professionals, work in close co-operation with parents and direct care-staff.

Finally, the results of this project revealed that children, whose "sphere" had a high inter-rater agreement in their judgments of the child's motor abilities after the project, had a higher degree of goal attainment. Children with a high degree of goal attainment were also characterised by the fact that their "spheres" perceived clear goals for communicative interventions. These results stress the importance of clearly defined goals for intervention and consensus among carers in their perception of a child's needs and abilities.

In the project parents and group-home staff, i.e. people around handicapped children with less theoretical knowledge, experienced both increased knowledge and increased self-confidence in interacting with the children. School-staff, i.e. people with more theoretical knowledge, experienced better co-operation with parents and group-home staff but did not gain more knowledge or self-confidence. Considering the fact that school-staff showed the largest changes in their perceptions of the communicative abilities of the children ( $T = 3.59^{**}$  df 10), these results are interesting.

An explanation may be that parents and group-home staff gained more knowledge because the project provided them with a terminology to report already existing knowledge. If so, the result stresses the importance of developing a common set of terms when co-operating on handicapped children.

The findings in this project need to be confirmed in studies using a control-group design and direct measures i.e. observations of participants and handicapped children. Studies using a dismantling design to analyse factors stressed in the literature as important for a good out-come of inservice-training and implementing interventions are called for.

### Summary

This paper describes a project initiated by the staff of a group-home for 12 children with profound multiple disabilities. The aim of the project was first of all to increase carers knowledge of the children's present communicative abilities. Secondly, to obtain consensus among carers in their perceptions of the children's communicative abilities and finally to set and prioritise goals for communicative intervention and to implement intervention.

The outcome of the project was evaluated using assessment schedules of the perceived functional abilities of the children and the communicative environment as judged by participants. Comparisons of pre- and post-judgments were executed using a quasi-experimental one-group design. After the project, participants were interviewed and a questionnaire was completed.

The results revealed that the participants perceived the functional communicative abilities of the children as more advanced after the project. A higher agreement among carers concerning the functional communicative abilities of the children was at hand after the project. Finally, the results revealed that children, whose carers perceived, after the project, clear goals for communicative intervention and had a high agreement in their perceptions of the children's motor abilities, had a higher degree of goal-attainment.

### REFERENCES

- BAILEY, D. B. (1984). A Triaxial Model of the Interdisciplinary Team and Group Process. *Exceptional Children* 51, 17-25.
- BAILEY, D. B., HELSEL-De WERT, M., THIELE, J. E. and WARE, W. B. (1983). Measuring Individual Participation on the Interdisciplinary Team. *American Journal of Mental Deficiency*, 88, 3, 247-254.
- BAILEY, D. B. and SIMENSSON, R. J. (1988). Assessing needs of families with handicapped infants. *The Journal of Special Education* 22, 1, 117-127.
- BAILEY, D. B., SIMENSSON, R. J., WINTON, P. J., HUNTINGTON, G. S., CANFORT, M., ISBELL, P., O'DONELL, K. J., and HELM, J. M. (1986). Family-Focused Intervention: A Functional Model for Planning, Implementing, and Evaluating Individualized Family Services in Early Intervention. *Journal of the Division for Early Childhood*, Summer, 156-171.
- DUNST, C. J., LEET, H. and TRIVETTE, C. M. (1988). Family Resources, Personal Well-being and Early Intervention. *Journal of Special Education* 22, 1, 108-116.
- GRANLUND, M. and OLSSON, C. (1987). *An Evaluation of In-Service Training in Communicating with the Profoundly Retarded* (in Swedish). Stockholm: Stiftelsen ALA.
- GRANLUND, M. and OLSSON, C. (1988). *More Communication*. Stockholm: Stiftelsen ALA.
- GRANLUND, M., WINLUND, G. and OLSSON, C. (submitted for publication). *The Effects of In-Service Training related to the Working Tasks of the Participants* (in Swedish). Stockholm: Stiftelsen.
- GRANLUND, M., OLSSON, C. and JADNE, K. (submitted for publication). *Individual Feed-back as a Mean to Increase the Effects of In-Service Training* (in Swedish). Stockholm: Stiftelsen ALA.

- GUSTAVSSON, A. (1986). *The Ideals of Society and Parents Responsibilities* (in Swedish). Doctoral Dissertation. Stockholm: University of Stockholm.
- KUNZ, G. G. et al. (1982). Evaluating strategies to improve careprovider performance on health and developmental tasks in an infant care facility. *Journal of Applied Behaviour Analysts* 15, 4, 521-531.
- MacDONALD, J. and GILLETTE, Y. (1988). Communicating with Persons with Severe Handicaps: Roles of Parents and Professionals. *Journal of the Association for persons with severe Handicaps* 11, 4, 255-265.
- MAHONEY, G. and POWELL, A. (1988). Modifying Parent-Child Interaction: Enhancing the development of handicapped children. *The Journal of Special Education* 22, 1, 86-96.
- MONTEGAR, C. A., REID, D. H., MADSEN, C. H. and EWELL, M. D. (1987). Increasing Institutional Staff to Resident Interactions through In-Service Training and Supervisor Approval. *Behaviour Therapy* 8, 533-540.
- PALMER, A. J., HARPER, G. and RIVINUS, T. M. (1983). The "Adoption Process" in the Inpatient Treatment of Children and Adolescents. *Journal of the American Academy of Child Psychiatry* 22, 3, 286-293.
- RENLUND, C. and WESTER, M. (1987). *To leave your handicapped child in an institution for the handicapped* (in Swedish). Stockholm County Council.
- REPP, A. C., FELCE, D. and de KOCK, U. (1987). Observational Studies of Staff Working with Mentally Retarded Persons: A Review. *Research in Developmental Disabilities* 8, 331-350.
- SEEBERT & HOGAN (1982). *Procedures Manual for the Early Social Communication Scales*. Mailman Center for Child Development, University of Miami, Florida, U.S.A.
- SPREAT, S., PIPER, T. et al. (1985). The impact of Supervisory Feedback on Staff and Client Behaviour. *Education and Training of the Mentally Retarded*. September, 85, 196-203.
- YODER, P. and FEAGANS, L. (1988). Mothers' Attributions of Communication to Prelinguistic Behaviour of Developmentally Delayed and Mentally Retarded Infants. *American Journal on Mental Retardation*, 93, 1, 36-43.
- ZIARNIK, J. and BERNSTEIN, G. (1982). A Critical Examination of the Effect of In-Service Training on Staff Performance. *Mental Retardation* 20, 3, 109-114.
- WARD, L. (1987). After Induction — Then What? Providing on-going Staff Training for "An Ordinary Life". *The British Journal of Mental Subnormality* 33, 65, 131-142.