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Criteria for Appropriate Treatments

This letter is intended to address the question of what constitutes an appropriate therapeutic intervention for a child diagnosed with autism.

A consensus has emerged among scientific researchers and practitioners that appropriate (not ideal) treatment contains the following elements (e.g., Simeonson, Olley, & Rosenthal, 1987):

1. A behavioral emphasis: This involves not only imposing structure and rewarding appropriate behaviors when they occur, but also applying some more technical interventions such as conducting discrete trials, producing shifts in stimulus control, establishing discriminations between SD's and S-deltas, and so forth (Koegel & Koegel, 1988).
2. Family participation: Parents and other family members should participate actively in teaching their child. Without such participation, gains made in professional settings such as special education programs, clinics, or hospitals rarely lead to improved functioning in the home (Bartak, 1978; Lovaas, Koegel, Simmons, & Long, 1973).
3. One-to-one instruction: For approximately the first six to twelve months of treatment, instruction should be one-to-one rather than in a group because children with autism learn largely in one-to-one situations (Koegel, Rincover, & Egel, 1982). This training needs to be supervised by degreed professionals trained in applied behavior analysis, but can be administered by people who have been thoroughly trained in the behavioral treatment of autistic children, such as undergraduate students or family members (Lovaas & Smith, 1988).

4. Integration: When a child is ready to enter a group situation, the group should be as "normal" or "average" as possible. Children with autism perform better when integrated with typical children than when placed with other children with autism (Strain, 1983). In the presence of other children with autism, any social behavior that they may have developed usually disappears within minutes (Lovaas & Smith, 1988), presumably because it is not reciprocated. Mere exposure to typical children, however, is not sufficient. Children with autism require explicit instruction from trained tutors on how to interact with their peers (Strain, 1983).

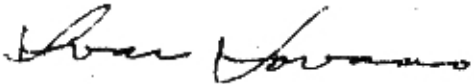
5. Comprehensiveness: Children with autism initially need to be taught virtually everything. They have few appropriate behaviors, and new behaviors have to be taught one by one. This is because teaching one behavior rarely leads to the emergence of other behaviors that were not directly taught (Lovaas & Smith, 1988). For example, teaching language skills does not immediately lead to the emergence of social skills, and teaching one language skill, such as prepositions, does not immediately lead to the emergence of other language skills, such as pronouns.

6. Intensity: Perhaps as a corollary for the need for comprehensiveness, an intervention requires a very large number of hours, about 40 hours a week (Lovaas & Smith, 1988). Ten hours a week is inadequate (Lovaas & Smith, 1988), as is twenty hours (Anderson, Avery, Dipietro, Edwards, & Christian, 1987). The majority of the 40 hours, at least during the first six to twelve months of the intervention, should place a major emphasis on remediating speech and language deficits (Lovaas, 1977). Later, this time may be divided between promoting peer integration while continuing to remediate speech and language deficits.

7. Individual differences: There exists large individual differences in the children's response to behavioral treatment. Under optimal conditions, a sizable minority of children will gain and maintain "normal" functioning (McEachin, Smith and Lovaas, 1993). These are children who can be labelled "auditory learners". The remaining children, "visual learners", do not recover with

behavioral treatment at this time, and will require intensive one-to-one treatment for the remainder of their life, in order to continue to develop and to prevent relapse.

Sincerely,

A handwritten signature in cursive script, appearing to read "Ivar Lovaas".

Ivar Lovaas, Ph.D.
Professor of Psychology

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