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An Examination of the Psychological and Behavioural Factors in the Development of Language Retardation in Twins

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Abstract. Using therapeutic intervention, the psychological and behavioural factors in the development of language retardation in two pairs of 4-year-old MZ twins have been examined. Although some factors are common to those found in singletons with language retardation, the factors peculiar to the twin situation are highlighted.

Key words: Language retardation, Twin situation

A great deal of work has been done in the area of language delay in twins [2,14,6,9] which has highlighted the need for appropriate forms of early intervention [5]. Whilst mother-child interaction has been studied [8,13], the role of the whole family has not been examined in this context. However, a previous paper on family relationships throws light on the fathers' close relationship with their twins [11]. It was therefore decided to study in depth two families who were referred to us, where the presenting problem was severe language delay in both twins (one MZ male and one MZ female pair, both 4 years of age) and where there appeared to be no apparent biological reason for this delay. Both families came from middle class and included an older sibling (as well as a younger sibling in one family). Neither family felt that their needs were being met by other agencies.

All members of the family attended family therapy sessions at approximately monthly intervals over the period of one year. The initial assessment interview with Family A (twin girls) indicated that the twins' responses to verbal and nonverbal stimuli appeared to be normal. This was not so clear in the case of Family B (twin boys), as the twins were out of control and had acquired no language. They were neither clean nor dry. However, there were certain characteristics that were common to both families (Table 1).

Table 1 - Characteristics common to both families

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1. Twins presented a united front in their determination not to speak.
 2. Perfectionist older child who took on a parental role vis-à-vis the twins.
 3. Father's close relationship with the twins.
 4. Parental expectations of the twins were low and age inappropriate leading to:
 5. A greater degree of nonverbal communication, ie, smiles, cuddles, sitting on laps, as well as baby talk.
 6. Great value was placed on the twins' special relationship, thus encouraging togetherness with little time given to the twins individually.
 7. Parents found it difficult to be consistent and to control the twins.
 8. Twins appeared to find nonverbal communication more rewarding than verbal because of the attention it received.
 9. All family members were skilled at interpreting the twins' nonverbal cues, so speech was unnecessary.
 10. Twins had a short concentration span.
 11. Twins were unwilling to cooperate in other areas, ie, sitting on chairs like their siblings.
 12. Parents had no time for their own relationship.
 13. Twins received a disproportionate amount of time and attention from their parents. Other siblings had difficulty in finding space.
 14. Parents were gaining satisfaction from their baby twins.
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The parents differed in the extent to which they saw the speech delay as a serious problem. There was a high level of anxiety in Family A, whereas initially Family B felt that the twins would develop speech in their own time.

Family therapy sessions focussed on changing family interaction and working on a behaviour modification programme (Table 2). The therapists supported and encouraged the family, particularly at times when progress was slow. Parents were also encouraged to separate the twins in the school and preschool situation to provide one-to-one verbal communication with adults and peers and to give an increased sense of personal identity.

In addition to family therapy, the girls received speech therapy on a regular basis in a language unit and the boys received help at home from the Portage scheme.

Family A

When the girls first entered treatment aged 4³/₄, verbal responses were minimal and were approximately at the 18-months age level. At the age of 6 years, their play is imaginative: they have reached Piaget's representational stage [10] and are speaking in sentences. They answer the telephone clearly and communicate freely at approximately the 3¹/₂-year level. However, their other skills and concentration level have increased considerably and are nearly age-appropriate. An earlier breakthrough with one twin has resulted in some division of skills, both verbal and social, reminiscent of the work done by the Russian researchers Luria and Yudovich [7]. The present focus of treatment is on helping the parents, to equalise the girls' skills. Some success has been achieved in this area. It is considered that further separation within the education system would be beneficial.

Table 2 - Focus of family therapy sessions

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1. Parents taking control.
 2. Parents giving the twins clear, consistent messages.
 3. Parents rewarding the twins' verbal responses (praise and sweets).
 4. Parents discouraging nonverbal responses.
 5. Parents encouraged to have more age-appropriate expectations of twins.
 6. Parents giving each child in the family individual attention.
 7. Putting the older child back in the role of child.
 8. Encouraging parents to play word and action games with the children – again, rewarding correct responses.
 9. Parents encouraged to show pride in the childrens' achievements, however small.
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Family B

This family was initially not so committed to intervention, but is now enthusiastic about the treatment. The boys at age 4 had neither social nor verbal skills. Eight months later, they are cooperative, respond to verbal instructions, are clean and dry, and are consistently putting two words together and occasionally more. Concentration levels are much improved, together with motor skills, but they are still operating considerably below their chronological age with little symbolic play. The present focus of treatment is on increasing and encouraging verbal communication. In line with previous research, the problem was more severe in the case of the boys than the girls [4,9].

By working with the whole family and using behaviour modification techniques, the confidence of parents and children in both families has increased. The parents feel more in control and have more realistic expectations of their children, to which the children have responded positively. The psychological barrier to speech has been breached.

CONCLUSION

In the two cases discussed, there appears to be a causal relationship between poor parental control, low parental expectations, behaviour problems, and language delay. These factors have also been observed in single children with speech delay seen at the Child Guidance Clinic "and it has been suggested that consistency in adult-child relationships may be as important for language as for affective development during the child's early years" [3]. It has been shown that, for a number of reasons, twins can assume a powerful position within the family, thus making it more difficult for parents to be in control [12]. In the families studied, the twins' special relationship led to reduced verbal interaction with other members of the family and reinforced their own nonverbal communication, which was in turn reinforced by their families. The twins also became more powerful as a pair and resisted parental efforts to encourage speech and more age-appropriate behaviour. The girls were cute, the boys puppy-like and boisterous, and this made the parents initially reluctant to change behaviour, particularly when the older (and youn-

ger) children were fulfilling parental expectations. Thus, the required environment for speech delay was created. The situation where only one twin has language difficulty has not been examined, but, if there appears to be no biological reasons for the delay, the expectation would be that it would not be as severe as in the above cases. Role differentiation and task allocation would have a greater influence [14,12].

The two cases illustrated show that when working with twins who have language delay, it is important to include the whole family in treatment, as the pattern of family interaction may be reinforcing the delay.

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