

COMMUNICATION PATTERNS IN FAMILIES WITH PRESCHOOL DEAF
CHILDREN — A SURVEY

A Thesis submitted for the degree of Doctor of Philosophy

by

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Abstract

This thesis presents the results of a survey of 113 parents of preschool deaf children living in England and Wales. The sample included 18 deaf parents and 115 hearing parents from all walks of life. All the families had been exposed to parent guidance based on the importance of amplified speech in the education of the deaf. The Lewis Report (1968) recommended that a survey of communication used by parents and very young deaf children should be done.

The survey aimed to provide information about modes of communication used by parents and very young deaf children. The data was gathered by systematic interviews, tape recordings and direct observations in people's homes.

The results support the hypothesis that a mixture of verbal and nonverbal procedures are typical in such families. 68% of hearing parents used a mixture of pointing, showing objects, esoteric gestures and short simple sentences with the children. Child-parent communication was dominated by physical contact, esoteric gestures and pointing. The data suggests a negative association between speaking and use of natural gestures. 65% of the children did not develop connected speech in spite of much exposure to amplified speech.

Parent guidance was evaluated in terms of support for parents, information for parents, direct teaching of parents and child teaching. 57% of mothers and 70% of fathers asked for more child teaching rather than more information or support for themselves.

Hearing parents reported difficulties in holding the child's attention (67%) communication problems (52%) child unco-operative (45%) when attempting to apply guidance principles with their own children.

Information from the deaf parents suggests that such problems are greatly reduced by use of a shared sign language in such families. Several ways of improving parent guidance are discussed in the light of these findings.

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Chapter 1

The Invisible Handicap

No one has stated more clearly the isolating effects of profound deafness than Helen Keller herself:-

" The problems of deafness are deeper and more complex if not more important than those of blindness. Deafness is a much worse misfortune. For it means the loss of the most vital stimulus - the sound of the voice that brings language, sets thought astir, and keeps us in the intellectual company of man."

(Helen Keller to James Kerr-Love M.D., March 1910).

Head and shoulders above any other deaf person, Miss Keller spells out for all to see the mental and emotional isolation of minds cut off from the sound of human speech (Kerr-Love 1911).

For the hearing majority the social isolation of the deaf is not immediately obvious. What strikes the hearing person at once is that the deaf look normal but sound odd. At once they are so near and yet so far from being human. From age to age the speechlessness of the deaf has challenged, haunted and defeated the efforts of hearing people (Bender 1960).

Deafness is singularly unchanging. The handicap itself presents a communication demand, that the hearing can not meet without effort. Attempts to accommodate the difficulties of communicating with the deaf, and educating them, swivel on the choice of whether it is better to insist on teaching the deaf to speak, and assimilate them wholesale into hearing society; or to assume that the deaf are happier left to their own society, including their own special sign language.

For most of recorded history, mankind has remained ignorant about the sign language of the deaf. Almost all of the accumulated knowledge about cognition, speech, and language development is based on studies of the hearing by the hearing for the hearing (Brown 1973, Gesell 1925, Kofka 1928, Lewis 1936, Piaget 1959, Stern 1930, Valentine 1946, Vygotsky 1962). Studies of these processes in the deaf are relatively recent (Furth 1966). Due to this lopsided situation speech teaching (oralism) has dominated the education of the deaf on the grounds of its alleged superiority over sign language (manualism). This has created a bitter controversy amongst educators which has damaging effects on parents and children alike.

This particular study took place against the background of a government investigation *vis-a-vis* communication methods in the education of the deaf (D. E. S. 1968). To appreciate

the tenacity of these irreconcilable philosophies a review of the history of the deaf is essential. One modern, scholarly attempt to trace the communicative behaviour of deaf people, shows that European deaf communities have used signs and finger alphabets since the Phoenicians sailed the Mediterranean (Evans 1979). His findings demonstrate the stability of sign language. Conversely the history of past attempts to teach the deaf to speak testifies to the strength of the hearing parents' longing for speech from their baby and the response of generations of speech teachers who tried to fulfil that desire (De Land 1931). The continued use of signs suggests the strength with which the deaf defend their right to their sign language.

The Ancient Civilizations

In the beginning many of the deaf did not survive. Such evidence that we have from the past points to the fact that the handicapped were simply put to death in the early Mediterranean civilizations (Bowen 1972, Pritchard 1963, Thucydides 1954, Zimmern 1961). Zimmern draws attention to the endemic warfare of the Greek city states which created a chronic demand for fighting men: "It is not surprising that the Greek parent rejected, except in a few favoured instances all who were crippled or deformed or exceptionally delicate".

All new born infants were routinely examined for deformities but fourth century Greek medicine was limited largely to the observable; deaf infants had a marginally better chance of surviving the examination than those infants born with obvious physical defects. Many deaf did survive and they were observed to be dumb. Aristotle's views on the relative contribution of sight and hearing to intellectual growth come close to Helen Keller's. He said

"Indirectly, hearing makes the largest contribution to wisdom. For discourse, which is the cause of learning, is so because it is audible; but it is audible not in itself but indirectly, because speech is composed of words and each word is a rational symbol. Consequently, of those who have been deprived of one sense or the other, from birth, the blind are more intelligent than the deaf and the dumb" (Aristotle : on Sense and Sensible Objects).

The Greeks of this period did not educate women, slaves or the handicapped. The deaf remained outside the educational system. Thus they had no chance to disprove popular belief that the naturally deaf were also naturally dumb. This interpretation fitted the assumption that speech was a spontaneous activity not an acquired art. The overriding view was that speech depended on hearing and it followed that those who, from birth could not hear, could not speak. In a society which took it for granted that education proceeded through speech and hearing the fate of the deaf was a miserable one; their condition regarded as incurable and they themselves beyond the reach of ordinary schooling.

"Ordinary schooling" in the fourth century B.C. consisted of boys learning their letters (Herodotus). The letters were used for numbers and writing (Bowen 1972). The Greek teachers treated the learning of the alphabet as a simple mechanical skill and boys spent a good deal of time initially, memorizing and copying their letters. The Greeks also had a secret religious alphabet. The Irish Olaves made it into a manual alphabet for deaf people in which the finger joints were used to indicate the letters (Graves 1955). Recent research in this area shows a remarkable consistency between the earliest recorded finger spelling alphabets of European monasteries and those in current use (Evans, 1979).

The Romans adopted the Greek model of education. The aristocrats had Greek slaves as family doctors, household stewards and tutors to their heirs. For these boys once they had learned their letters, education consisted of learning the history of their culture in established books in Latin or Greek.

Galen (A.D. 130-200), a Latin physician, advanced a "common cause" type of explanation for the deafness-dumbness syndrome. He held the view that a common area of the brain was responsible for both speech and hearing. He reasoned that damage in that area (lesions, tumours, & clots) could cause both dumbness and deafness. Galen's medical theory buttressed the existing hypothesis that dumbness was the inevitable consequence of deafness; therefore speech could not be taught as an independent articulatory activity. In consequence the deaf as a class remained beyond the educational process (Bender 1960). By the sixth century A.D. the ill defined civic status of the uneducated deaf aroused concern amongst the Roman Jurists. Justinian devised a legal code to accommodate all known combinations of deafness-dumbness. These five classes were:-

1. The deaf and the dumb, with whom the infirmity was natural.
2. The deaf and dumb with whom the double infirmity is not natural, but the effect of causes occurring since birth.
3. The deaf who are not dumb, but whose deafness is natural.
4. Those who are simply deaf, from causes occurring since birth.
5. Those who are simply dumb, either naturally or adventitiously

(Arnold 1901).

Those who could conduct their affairs by writing were free to do so. For those who could not carry out their legal responsibilities as a result of any combination of deafness/dumbness, the code provided legal guardianship for their own protection (De Land 1931). This code was the first step towards social emancipation.

The Middle Ages

These reveal few glimpses of the deaf. Bede mentions Bishop John of Hagulstead (St John of Beverly) teaching a young man to pronounce his letters. This was one of many miracles attributed to St. John of Beverly (Bede 1848, Ch 2). Hamilton refers to the last chapter of a posthumous book by Rudolph Agricola (1443-1485) in which he describes having met a born deaf individual who communicated by writing (Hamilton 1853). Ludovic Vives(1492-1540), the Spanish humanist, commented on Agricola's example as being the one which disproved the Aristotelian hypothesis (Vives 1948, 1970, Noreña 1970). The notion of an educated deaf person was something of a miracle throughout the centuries when education still consisted of verbal repetition of classic texts.

The Renaissance

A renewed interest in non-book forms of learning and healing led to a shift in perspective on the condition of the deaf. The Italian anatomist, Eustachi (1521-1574) teased out the structure and functions of the Eustachian tubes. The philosopher/physician Cardan (1501-1576) had read Agricola and proposed substituting sight for hearing. He maintained that the deaf could be educated by substituting writing for speech as a means of education. This constituted a significant theoretical advance but there is no evidence Cardan ever put his ideas into practice. In spite of isolated instances of privileged deaf persons being trained in poetry or painting the deaf as a group remained unlettered (Arnold 1901, Bender 1960, Wright 1967).

The Sixteenth Century Spain (1520-1620).

The first successful attempts to educate the deaf came about in Spain as a response to the restrictive feudal laws of inheritance derived from the Justinian Code. According to the Spanish codes, the dumb could not inherit property or enter into contracts. Inbred, wealthy Spanish families knew that without speech their children would be disinherited. These parents turned to the monasteries for help and the monks turned to traditional monastic methods. The book-based scholastic tradition yielded nothing which could be used directly with illiterate deaf children. The finger alphabets of the silent monastic orders proved to be the key to their education. The alphabets were used to establish primary communication with the child.

The first monk to educate the deaf successfully was Pedro Ponce De Leon (1520-1584) a Benedictine who taught many deaf children in his monastery at Oña near Burgos. His pupils were the children of wealthy aristocrats. Two of the most famous were Pedro and Francisco De Velasco of the family of the Constable of Castille. Arnold (the British historian of the deaf) states that De Leon succeeded in teaching many pupils to speak to the extent that they could pray, assist at Mass, make their confession by speech, and also read and write. "From which" adds Ponce De Leon "Aristotle excluded them" (Arnold 1901). Pedro De Valesco's education was so successful that he inherited his title after the legal objections had been cleared away. Hamilton, by way of Franciscus Vallesuis (1590, a physician friend of De Leon) notes that "Pontius" taught the deaf to speak by "instructing them to write, then pointing out to them the objects signified by the written characters, finally guiding them to those motions of the tongue, which corresponded to the characters" (Hamilton 1853). De Leon's method was merely the standard technique of the time; the child was required to copy the written names of objects, to articulate the letters and, finally, match written words with their articulate forms. Writing was the salient means of instruction and in that respect the method is an extension of the classical model and an application of Cardan's theory. Arnold, in a critique written in 1872, states that De Leon also taught mutes to converse without speech (Arnold 1872). This is possible: As a monk De Leon could hardly have been ignorant of the common signs in use throughout the monasteries during silent retreats (Brewer 1870, p1140, article on "Signs instead of words").

Spanish history records only those who learned to speak because they were the ones who inherited titles. De Leon was a very successful teacher. By demonstrating the deaf could be taught to speak he shattered the Aristotelian belief that speech was an instinctual process. He died in 1584 having established the precedent for teaching speech to the deaf. The first treatise on the education of the deaf emerged from Spain one hundred years after the birth of De Leon.

In 1620 Juan Pablo Bonet, Secretary to a later Constable of Castille, published his "Simplification of the Letters of the Alphabet and Method of Teaching Deaf Mutes to Speak" (Bonet 1620). Bonet was concerned with the education of two year old Luis De Velasco whose great uncles had been tutored by Ponce De Leon. Bonet does not indicate if he carried out the actual teaching himself or if he supervised the work of a certain Ramirez De Carrion. Contemporary authors are divided on this point (De Carlo 1964, Bender 1960, Wright 1969). What is beyond doubt is Bonet's knowledge of the method.

The book is a description of a method of teaching deaf children to read, write, understand, and articulate Spanish. Bonet simply dispensed with the rote learning of the conventional alphabet

and substituted the rote learning of the finger alphabet of the Spanish monks . He says:-

" Before teaching him the spoken names of the letters he must be well acquainted with them and know the manual signs which represent each one. We have placed the manual alphabet at the close of this chapter showing the position of the hand for each letter, with the symbol written above it - both the capital and the ordinary form, so that he may know both of them." (Bonet, p. 153.)

It is interesting to note that the English translators, Dixon and Farrar in 1890, omitted these illustrations on the grounds that this alphabet was now in general use. Bonet associated the letters with the articulate sound for reading aloud. He recommends a quiet room for the articulation teaching which consisted of direct imitation of the vowels and demonstration of the consonants by leather or paper tongues. The pupil formed the letter on his fingers then attempted the articulation. The object was to have the child read out loud in the shortest time possible "without the written letter contradicting the articulation". Bonet quotes an astonishing 10-12 days for learning to read by this meaningless method (op. cit., p. 70). However Farrar in his introduction to the English translation of the book reminds the reader that Luis De Velasco was not born deaf but had gone deaf at age two. Perhaps the reading exercises merely mapped on to his auditory recall of a language he had heard for two years.

Bonet then reduced existing Spanish grammars to three basic classes: the verb, the noun, and the preposition. All three classes were reduced to the obvious: nouns matched with the appropriate real objects, verbs with the the appropriate actions, and comparisons drawn by contrasting of actual situations. Once the pupil had mastered these basic distinctions Bonet reverted to rote learning for the compound verbs, adverbs etc. This was a major weakness of the method. In order to help the child generalize from lessons which were essentially meaningless, Bonet insisted that the entire household expose the pupil to natural conversation by finger spelling. Random signing was prohibited. In order to develop the child's reasoning ability Bonet required the household staff to engage the pupil in question/answer type conversations about issues arising from daily life.

Bonet made no attempt to train lipreading. It is clear from his own comments that there were children who had been so trained and he knew of them. He states his view as follows:-

"The reduction of the motions to a system to enable the deaf-mute to understand by the lips alone, as it is well known many of them have done, cannot be performed by teaching, but only by great attention on their part: and it is to this that their success is to be attributed, and not the skill of the master."
(op. cit. chap 25.)

Bonet made no claims to originality nor does he refer to the work of Ponce De Leon, or any

of his own contemporaries. The alphabet he described was the traditional alphabet of the Spanish monasteries. This had become a universal silent alphabet for the deaf by the nineteenth century and is still in use today in many countries.

His matter of fact description of the method suggests that he was simply documenting the established methods of his day. The Spaniards were limited by their brief to producing speaking deaf children. They used the pedagogical principle of going from the simple to the complex. The technical tool for reducing the corpus of the language into simple elements, learnable by young deaf children, was the existing finger alphabet. This alphabet had the advantage of being isomorphic with both spoken and written Spanish. The approach has been criticized on the grounds of the low priority given to providing the pupil with a meaningful model of the language (Peet 1851). However, more recent data of an autobiographical nature (Hofstater 1959) and experimental work from Moscow shows that such a method is a sound basis for the development of articulate language (Titova 1960, Moreva 1966). The dactylographic method of the sixteenth century Spanish teachers of the deaf was based on what is now known to be a sound linguistic principle.

The apparent artificiality of the learning sequence was offset by all the benefits of individualised tuition over many years (Bonet 1620, Chap 5). The tutor had time to resolve misunderstandings as they occurred at every stage of the teaching. They were working with children who came from wealthy families: The parents paid high fees and expected results. The ultimate rewards were very high; a title for the pupil and an enhanced reputation for the tutor. There was every reason to pursue any method which produced the desired results. Bonet's pupil, Luis De Velasco, grew up to be a favourite at the court of Phillip IV of Spain, who made him Marquis of Fresno in 1628, a living example of the speaking deaf for future teachers (Bender 1960, Hodgson 1953).

One difficulty for the modern reader trying to assess the Spanish methods is the absence of any accurate records about the failure rate. Another difficulty is the lack of any adequate measurement of deafness; in each case the severity of the original impairment remains an unknown factor. The social pressures to produce talking deaf may well have resulted in exaggerated accounts which stressed the severity of the original deafness beyond its true state in order to emphasize the talents of the tutor.

Seventeenth Century Men of letters(1620-1700).

The seventeenth century was characterized by a spirit of scientific controversy wherever

literate men met together. They were interested in the origins and structure of language and intrigued by accounts of deaf individuals who had learned to speak, read, and write language. In England men such as Dr. Bulwer, Professor Wallis from Oxford, and Dr. Holder, a Philosophical Divine, all dabbled in the education of the deaf.

They were all Fellows of the Royal Society who learned of the Spanish achievements from Sir Kenelm Digby's glowing account of his 1623 meeting with Luis De Velasco, in Madrid. Digby's "Treatise of Bodies" (published some twenty years after his visit) contains a description of Luis and his tutor (Hodgson, 1953). The account had a marked effect on Bulwer, a physician whose first book (Bulwer 1644) lauded finger spelling as a form of universal communication. He cites a Mr. Babington whose wife communicated with him by spelling out letters on the joints of her fingers. John Bulwer's second book contains Digby's account of Luis De Velasco. Bulwer uses it to buttress his belief that the deaf could be taught to lipread and to speak (Bulwer 1648). He advised a Mr. Gostwicke to follow Bonet's procedures fairly closely, but this marked the limits of his involvement with his deaf patients.

Dr. Holder and Professor Wallis both got involved in the actual tutoring of deaf individuals. Both men invented pronunciation charts and both wrote books about their method. One pupil, Alexander Popham, was tutored by both of them at different times which led to an exchange of letters in the transactions of the Royal Society, concerning primacy of teaching and methodology (Holder 1668, 1669, Wallis 1653, 1698). The original edition of Wallis's book (1653) was a grammar for foreigners with a preface on speech. In later editions he suggests it could be used to educate deaf people. Holder's publication was a very detailed text on speech teaching (1668). Unlike the Spaniards of the previous century who had to get the job done under powerful social pressure, the English scholars built up reputations as intellectual innovators by publicizing experiments with the deaf. This had the positive effect of drawing attention to the plight of the deaf and giving rise to sporadic attempts to teach them. The philosophical basis of the instruction was that without speech there could be no thought (Dr Kerr-Love 1911). Hence the emphasis on articulation charts and absence of any studies of the gesture language of the deaf. The finger alphabet was included as a means of rapid communication. The only differences between the approaches were those of emphasis. They were best suited to the deafened adults and teenagers mentioned in the literature; Wallis's first student was a twenty five year old Mr. Whaley! Conversely Holder's formal analysis failed to help the born deaf Master Popham, and Admiral Popham transferred the boy to Wallis. Nothing is known of the untutored deaf.

The only departure from the formal methods derived from Bonet originated from George

Dalgarno, an Oxford schoolmaster. Like his friend Wallis, Dalgarno had a philosophical interest in the universal aspects of language. His first book "*Ars Signorum*" was a classification of characters to represent ideas independently of any particular language (Dalgarno 1661). Nineteen years later he published "The Deaf and Dumb Man's Tutor" in which he proposed that the "mother-method" of talking to hearing infants should be reproduced in finger spelling by mothers of deaf infants. To accomplish this he invented a simple alphabet in which the letters were distributed over one hand ready to be spelled out by the finger and thumb of the other hand. He said:-

"I conceive there might be successful addresses made to a dumb child, even in his cradle; when he begins *risu cognoscere matrem*: If the mother or nurse had but as nimble a hand as commonly they have a tongue" (Dalgarno 1680).

His was the first suggestion that education of the deaf might proceed differently to anything that had gone before. These first thoughts on how to establish a mother language in a deaf infant indicate the influence of the educational reformer Comenius, who advocated love instead of punishment and experience before words in the care and education of infants (Comenius 1633). Comenius spent 1641-42 in England sharing his ideas with the Oxford group of linguists and phoneticians to which Dalgarno belonged. In the "Great Didactic" Comenius refers to their common interest in a universal language (Comenius 1657 p. 47). Dalgarno, like Cardano was in advance of his time but seems to have been content with advancing the theoretical basis of the maternal approach and never tried to apply his ideas. According to a later Scot, Dalgarno died in 1687 and the memory of him perished (Hamilton 1853). In researching the history of the education of the deaf from classical times Hamilton noted that every generation of teachers claimed to be the original inventors of Ponce's method. Hamilton states it had all been done before Wallis with equal success and that Wallis had simply "plundered" Dalgarno - even to his finger alphabet. Sibscota published a translated history of the education of the deaf in which he calls himself the author (Sibscota 1670, p. 62) without ever mentioning the real author, Antony Deusing (Bender 1960).

In Europe the ideas of Comenius and Locke surfaced in the work of the Swiss physician Amman who tried to help some of his deaf patients. Amman treated the deaf mute as "a piece of white paper, or as a young child." According to an eye witness account Amman succeeded in teaching a born deaf girl to "speak very intellibly" (Ellis 1703), and published his method in *Surdens Loquens* (1692). Amman gave precise descriptions of the anatomical placement of the speech organs plus a comprehensive table of sounds as they are pronounced in several European languages, together with techniques for obtaining correct articulation. The book was translated many times and the French edition became part of the *Cours Élémentaire*

d'Education des Sourds et Muets. The 1770 edition contains a copy of Wallis's letter to Amman claiming Wallis had already carried out Amman's methods. Amman replied that he did not know if his methods were the same as those derived from the Spanish monks. A century later, Charles Baker, the principal of the Doncaster School for the Deaf, in his preface to the 1873 extended version, says that the Spanish methods were frequently lost and re-invented (Amman 1873).

Amman was the first teacher to admit failure and the first to provide a profile of the type of student who would learn by his method. His prerequisites were a "quick, docile disposition", an ideal age of 8-12 years, and perfect speech organs. Together with Bonet's text, Amman's books were the most influential sources for future generations of teachers of the deaf.

Eighteenth Century (1700-1800)

The eighteenth century development in the education of the deaf was marked by extremes of secrecy and publicity. The secrecy was associated with the rise of professional teachers of the deaf, the publicity with the continuing acrimonious debate about methods. The early 1700's were dominated by a few enterprising individuals who had access to the dwindling pool of established texts and the articles in scholarly journals. For these individuals the teaching of the deaf was their chosen profession, unlike the academics of the previous century for whom the occasional training of a deaf person constituted an experiment in applied semiotics.

The private tutors established private, family type academies associated with wealth and patronage. Towards the end of the century the first endowed schools opened, for the children of the poor.

The first English teacher of the deaf to levy cash securities (£100) from his pupils against revelation of his methods was Henry Baker (1698-1774). Baker was a microscopist and Fellow of the Royal Society. He was also married to a daughter of Daniel De Foe, the journalist who had published an entertaining yet informed account of a deaf man - Duncan Campbell (De Foe 1893). De Foe's book reproduces the letters of Wallis to various members of the Royal Society and illustrations of the two-handed alphabet. Henry Baker may have been led to Wallis's method through this, the first popular exposition of the education of the deaf. Baker began teaching a deaf relative Jane Forster, in 1720, the same year De Foe's book was first published (Hodgson 1953). Baker charged high fees and was very selective about his pupils, but had very little influence on the field as a whole due to his extreme secrecy.

Thomas Braidwood (1715-1806) was a mathematician and principal of a small school in Edinburgh. In 1760 he was asked to teach a young deaf boy Charles Sherrif. Opinion is divided as to whether Sherrif was born deaf or went deaf (Arnold 1901, Bender 1960, Wright 1969). Braidwood succeeded in getting the boy to write and talk. Apparently he began the work knowing nothing of previous methods. His success attracted other deaf pupils, he consulted the established textbooks and by the time of Boswell and Johnson's visit in 1773, he had an academy of 12 pupils. According to Johnson, the students were lively, one repeated long words for the visitors, another used finger spelling. On that occasion Thomas Braidwood created the impression that he was unacquainted with the manual alphabet. In a footnote, Johnson, complained of the secrecy of Henry Baker (Johnson 1775, p 162-4).

By the 1780's the school included Thomas Braidwood, senior and his nephew John Braidwood. The school had expanded to include American children. Francis Green, the father of one of them was so pleased with his son's progress and the general conduct of Braidwood's Academy that he published an account of the school based on a ten week observation period. According to Green, the school had 20 children, some of whom were not deaf but had speech disorders (Green 1783). It is clear from his description that the Braidwoods followed a combination of methods culled from the established sources. The full five year curriculum included articulation training in association with written characters, syllabic drills, and the composition of words. A basic vocabulary was established by association of words with objects and qualities. Finally simple sentences were constructed. Lipreading and finger spelling were encouraged. Green believed that a silver tongue manipulator was used at the school. If this is so it was the first of its kind (Op. cit.).

Green left his "speechless" eight-year-old with the Braidwoods in February 1780. In May 1781, the boy communicated with his father by signs and speech. He could repeat his prayers and read slowly but distinctly. His father noted that he had not yet got the "meaning of many words" but that his understanding was increasing daily. By September 1782, connected language had emerged: The boy could write English, his speech had improved, and he had made a good start in arithmetic. At that visit he communicated in sign with one of his classmates on the grounds that that boy was deaf (Op. cit.). This is one of the first recorded examples of a child code-switching.

Green became a well informed parent: He researched the history of the subject and found that books were rare. On those grounds he included large extracts of all the major texts on the teaching of the deaf. He wanted to use his book to persuade public funds into a school for poor deaf children and completed a rudimentary survey of incidence of deafness in the British Isles.

He cites details of 31 neglected deaf persons (some also blind) who could benefit from schooling (op. cit. p. 159). In order to avoid the charge of partiality he included a number of eyewitness accounts of the school by distinguished visitors (op. cit., Appendix, p. 256). Mr. Green failed to raise the funds for a school in England and returned home where he generated sufficient interest to organise the first survey of incidence of deafness in America. The Braidwood family benefitted enormously from all the publicity consequent on the publication of the book and moved the Academy to London in 1783 (Pritchard 1963).

In London Thomas Braidwood prospered and trained a second nephew Joseph Watson to teach in the school. It took nine years for Green's book to take effect, but finally a publicly endowed Asylum for the deaf and dumb opened in London in 1792. Joseph Watson was appointed principal. He remained in post 37 years and was succeeded by his son Thomas Watson in 1829. Thomas held the post for 27 years being succeeded by his son, the Rev. James Watson in 1857. The school moved from the original site in Bermondsey to the old Kent Road and then to Margate but always with a Watson in charge for 64 years. A third generation of Braidwoods headed up other schools. Grandson John Braidwood opened the Edinburgh Institute in 1810 and then accepted an invitation to start a school in the United States in 1812. In the same year a second grandson (another Thomas) took charge of the Birmingham Institute for the deaf and dumb, where he remained until his death in 1825. The Braidwood/Watson family were synonymous with education of the deaf for over a 100 years. They preserved their monopoly by the simple expedient of treating their skills as a family secret, in spite of the fact that their methods were drawn from a common pool of texts. The official policy of all their schools was oralism (no signs) which appealed to wealthy parents anxious to have the child normalized through speech. The financial arrangements of these charitable institutes paid the board and lodging of the poor children but did not include a salary for the principals. The Watson's and Braidwood's personal incomes came from private fee-paying students (Porter 1848) and public demonstrations. They also took half of the fees earned by the assistant teachers they trained in the schools. These teachers were subjected to a three or four year apprenticeship and bonded to a seven year secrecy contract on graduation (Bingham 1928).

Thomas Braidwood lived till his 90's. It was only after his death in 1806 that Joseph Watson felt free to publish a description of the family's methods (Watson 1809). Watson referred to Wallis as authoritative. This is consistent with Green's account and the popular version by De Foe. According to the Watson account the Braidwood bundle of communication techniques included the two handed alphabet of Dalgarno, via Wallis, the vernacular sign language of the pupils themselves and articulate speech to which reading and writing were added. That the language teaching was based on the natural signs of the children was an unexpected revelation.

The objective was to replace spontaneous signs one by one with words, then came "the study of letters". The children learned to spell on their fingers and on paper. They were allowed to demonstrate their understanding in natural signs until they could reply in words. Apparently the use of spontaneous signs did not count as signing any more than the finger alphabets.

All parts of grammar were treated as nouns and presented in association with appropriate examples. Rote learning was reserved for the final stages of language development. Articulate speech was constructed out of sensory impressions with vibration taking the place of sound in most instances. In all areas the teaching went from the simple to the complex. Watson's account suggests that the method succeeded because it was carried out in an individualized manner; "Lessons were individualized to suit the occasion, temper, disposition and capacity of the learner" (Watson 1809). Historically this has always been the key to success. The majority of the poor institutional children in these overcrowded asylums were not taught individually, however. This, and the revelation that the Braidwoods used signs, contributed to a lack of confidence in these institutions by the turn of the century. In 1825 Thomas Braidwood died and the Birmingham asylum passed into the hands of a Frenchman De Puget (Bingham 1928). In 1878 James Watson resigned in favour of the reformer Richard Elliot (Pritchard 1963). Much of the family expertise was lost when the new generation took over.

European Developments in the Eighteenth Century

Watson's exposé of the Braidwood method was unusual. A more typical eighteenth century pattern was the one in which the eminent tutor took his skills to the grave with him, leaving a select group of talking deaf behind, unable or unwilling to reveal the techniques by which they were taught (Vaisse, 1878, 1883). This was the case of Braidwoods' contemporary, Pereire (1715-1780). Raised in Spain and French by adoption, Pereire's achievements were legendary (Seguin 1866 p. 22-28). In his own lifetime he was lauded by scientists and royalty. He received a pension from Louis XV and was elected to the Royal Society in 1760 (Lane 1976, Thomson 1912). Unfortunately Pereire's professional secrecy prevented his techniques from passing into general use and the deaf as a class did not benefit from his genius. It was not until Edward Seguin published his books on the physiological method and his 1875 report on education that Pereire's methods were revealed (Seguin 1866, 1875).

Seguin's account confirms that Pereire's genius combined scientific curiosity about the development of mental life with an intimate knowledge of deafness in all its forms. He took medical courses and read the established texts about teaching the deaf. His work with children was fuelled by a series of experiments between 1734 and 1749 involving the substitution of

vibration for the lost sense of hearing. His collaborator was a deaf friend whose insights added valuable dimensions to his results. To these he added the results of many careful observations of babies (Seguin 1875 p. 56-59). He concluded that deaf infants stopped babbling and forgot their beginning words when they started to walk and get beyond the range of the vibrating vocal cavities (chest/throat/abdomen) of the adults. He hypothesized that no amount of deafness could prevent an infant from sensing the vibrations of vocalized speech throughout the chest of the adults as they talked and carried the child about (Seguin 1975 p 57). Pereire reconstructed this situation in his tutoring to develop the perception and articulation of speech in deaf pupils. This was the unique aspect of his method. Seguin confirms that in 1831 he heard Pereire's oldest surviving pupil speaking intelligibly some 50 years after Pereire's death. There were many living witnesses who heard aging students reproduce the Gascon accent of the master tutor (Seguin 1866).

Pereire's researches led him to refine the Spanish one-handed alphabet into a unique set of syllabic hand signals to convey the articulatory movements of speech in action. Seguin states there were 40 such signals. Pereire's famous student Saboureaux De Fontenay, claimed that this dactylogy conveyed sounds, punctuation, numbers and arithmetic (Saboureaux De Fontenay in Arnold 1901). This was his lifelong secret. Pereire developed a series of word discrimination exercises using a specially constructed ear trumpet (Goldstein 1933). Seguin commented that Pereire was using electricity by 1753 (Seguin 1875). Pereire's most important results were demonstrable proofs for the Lockean Hypothesis that all knowledge is derived from sensation (Locke 1690).

Seguin maintains that many of Pereire's sense training experiments surfaced in "Emile" (Rousseau 1911). Seguin wrote "So identical are the theories of the book with the practice of Pereire" (Seguin 1866 p. 25).

Pereire seems to have uncovered the psychological and physiological laws governing the sequence of teaching in individual cases (Hamilton 1853). According to Saboureaux De Fontenay's notes Pereire used the mother-infant model to interact with the pupil and establish a basic communication system. This model requires that the tutor learn the child's communication system before the child learns the adult form of the language (Vaisse 1878). Once basic communication was established, Pereire introduced the one handed Spanish alphabet, followed by his own dactylogy, followed by writing. Grammar was taught after the meaning of words had been developed through practice in many different situations.

Later authors agree that Pereire's grandchildren managed to obtain a copy of the dactylogy

from Pereire's 80 year old graduate, Mlle Marois. Isaac Pereire did not understand it and donated a copy to the director of the National Institute for the Deaf and Dumb on Rue St Jacques, where it was lost by the person who received it (Seguin 1875, Vaisse 1883).

Throughout his lifetime Pereire was plagued by other practitioners who tried to emulate his results without his skills. Disputes about methods were endemic. Ernaud made claims to teach by speech only, as did Des Champs (Wright 1969). Ernaud and Epée (1712-89) both wanted details of the dactylology and failed to get it (Peet 1890-91, Seguin 1875). Heinicke (1720-90) from Leipzig argued with Epée about methods (Garrett 1968). Philosophers opined on the subject (Diderot 1747, Condillac 1790). For the first time the untutored deaf took up combative positions in the debate. Deslogues advocated sign language over pure oralism on the grounds that the Parisian deaf community debated abstract topics very adequately in their own sign language (Deslogues 1779).

Of them all, the Abbe De L Epée is the distinctive character of the century. Unlike the professional articulation tutors Epée was catapulted into the education of the deaf late in life, when he volunteered to visit the parishioners of a Father Vanin who had died. Father Vanin had tutored Saboureaux De Fontenay and the two deaf sisters in religious knowledge. Epée was challenged by the communication problems and decided to try to educate the two girls. He began tutoring them at his home in the Rue Des Moulins, by the 1760's he had attracted many of the poor deaf children of Paris. Epée was unaware of the Spanish tradition and simply turned to empirical methods to solve the problem. He was influenced by Condillac's theory of signs and decided that a signed version of French was the best way to help the deaf to think and to analyse ideas in an orderly fashion. He was the first teacher to disassociate teaching the deaf from the teaching of speech.

He learned his first signs from the sisters themselves. Each sign was paired with its referent: pictures, objects, etc. and then paired with the appropriate written word. The teacher demonstrated the verbs and matched nouns to objects by pointing. This yielded a meaningful vocabulary of original or "natural" signs. To this Epée added a set of artificial signs designed to represent the grammar of the French language. Once signs and written words were associated the pupils could take dictation from the signs of the teacher. Epée's method of teaching abstract or metaphysical concepts owes much to Condillac's analytic method; abstract ideas were broken up into their most obvious aspects, labelled by signs which in themselves were irreducible and recombined (Epée 1784). All the signs were translated into the written French equivalents. The entire system he called "Methodical Signs".

His work attracted attention. Saboureaux De Fontenay visited in the early 70's and argued against the continued use of Epée's artificial sign system, gave him a copy of Bonet's book and taught him the Spanish alphabet. De Fontenay and Pereire refused to reveal the dactylogy (Wright 1969). Epée set out to prove that his methodical signs were adequate to convey abstract ideas. Epée staged a series of demonstrations between 1771 and 1774. His students fielded metaphysical questions from a live audience in several different languages. His work was observed with scepticism by Pereire (Epée 1784) and astonishment by philosophers including Condillac and royal visitors from all parts of Europe (Lane 1976). The demonstrations so impressed the Emperor Franz Joseph that he decided to establish a similar school in Vienna and sent the Abbe Stork to Paris for training. This aroused the anger of a German articulation teacher, Samuel Heinicke, who tried to dissuade Stork from following Epée's methods (Garnett 1968). Epée appealed for judgement on the issue to the Zurich Academy. Part of Epée's second book "*La Veritable Maniere d' Instruire les Sourds et Muets, confirme par une longue experience*" contains the correspondence between the two men and the judgement of the Zurich Academy which favoured Epée (op. cit.). The argument centred on the issue of the natural vehicle of thought for the deaf: speech or sign. Epée argued that signs were to the deaf what speech was to the hearing. Heinicke argued that speech was essential if the deaf were to take their place in the world. The Academy found for Epée, possibly because (1) his method was open to scrutiny (2) his first account of his work unambiguous (Epée 1776), (3) his results impressive, and (4) his instruction free. Heinicke was very secretive, worked for profit, and relied on obscure derivations from Locke to drive a theory of substitution of senses to justify the use of taste in speech teaching.

Epée died in 1789 leaving behind a legacy of social responsibility toward the deaf. He was the first educator to adopt a non-elitist attitude toward the deaf as a class. He established the first free public school for the deaf and invented a methodical system of communication. Heinicke died a year later, a champion of oralism, leaving behind a small school which became the monopoly of his family. He is regarded as the founder of Pure Oralism or the German Method. Epée is venerated as the Father of the Deaf (Peet 1890-91)

By the end of the eighteenth century the educability of the deaf was beyond doubt. The controversy about communication methods gave rise to two distinct philosophies: One based on Epée, which held to the principle of educating the deaf for their own sake in signs of one sort or another and finger spelling. This manual system dominated the education of the deaf wherever French was spoken for almost a century after Epée's death until the Milan Congress of 1880. Following the charitable example of Epée, manualism was associated with the provision of large residential institutions for the deaf, supported by public funds.

The speech specialists followed the philosophy of Pereire and Heinicke by educating according to parental wishes. Invariably this meant meeting the hearing parents' desires for speech teaching carried out in tutorial situations or private schools. The characteristic secrecy of the oral schools influenced the direction of deaf education in unexpected ways in the next century.

The Nineteenth Century: Proliferation of Methods.

In his lifetime Epée insisted on the right of the deaf to an education. His successor Abbe Sicard insisted on the need for public support for a national school for the deaf in France. In 1791 the first national school for the deaf was established by decree of the New National Assembly with Sicard as director. The institute produced the first deaf teachers of the deaf (Clerc 1848), the first auditory training experiments (Matson 1972), refined the teaching of sign language to include vernacular grammar, and housed the Wild Boy of Aveyron (Lane 1976).

Sicard emphasized the need to make French grammar more meaningful and devised techniques for making it visible to the deaf. His prize pupil Massieu (1772-1846) was living proof of his principles and a mine of information about the mind of the untutored deaf. Massieu's memoir reveals that before instruction he used invented signs, sensed that speech conveyed thoughts, and was capable of abstract ideas himself (Massieu in Lane and Phillips 1984). Massieu was a one man revolution flying in the face of all *a priori* assumptions about human nature. He began life as a deaf mute shepherd boy, became the first deaf mute instructor at the Institute, married a hearing woman and directed his own school before he died. Clerc recalls Massieu as a lively teacher and a linguistic innovator of signs (Clerc 1848). When Sicard helped design the post french revolution course of instruction for teachers he injected into it the techniques for teaching grammar derived from his tutoring of Massieu. The French deaf were influential in the organization of schools and the spread of systematic sign language throughout Europe and America. They were living proof that speech did not make man civilized. Later authorities attribute the powerful analytic quality of the French system entirely to Epée (Peet 1890-91)

In a state of the art discussion of deaf education in the nineteenth century, Dr William Scott of the Exeter Asylum emphasized that all the educational systems in Europe shared a common inheritance of signs, methodical and vernacular: pictures and models flourished everywhere (Scott 1844). At the Paris Institute for the Deaf, Bebian had returned to vernacular signs, but outside of Paris the Institutes developed highly inflected sign systems. The Germans followed Heinicke and imparted knowledge by "little signs" (finger alphabets), speech reading, and articulation. The decline of oralism was related to the rivalry between the French and Germans.

The German System was disliked because of its secrecy and its perceived aim of turning the deaf into hearing people (Arnold 1872, Arrowsmith 1819) This, and the loss of Pereire's documentation created a gap in the knowledge and practice of physiological methods in deaf education. In consequence valuable developments in ear training by the French physician Itard at the Paris Institute were ignored. Between 1801 and 1806 he pursued a programme of discrimination listening with six pupils who were originally deaf mutes. This was an extension of his attempts to civilize "Victor" the famous wild boy via a detailed programme of sense training (Matson 1972). Itard's results convinced him that those children who could hear speech at the ear could benefit by auditory training. Following public demonstrations of his students at the French Academy in 1868 the medical faculty recommended the establishment of an articulation class at the Institute. Itard in his will left a fortune for the establishment of such a class, but anything suggestive of "German Methods" was opposed. Clerc observed the articulation class in 1846 when Voisse was lone speech professor at Paris. Clerc commented that the boys were distracted (Clerc 1848). By 1873 when Seguin visited, the speech class was not fit to be seen (Seguin 1875 p 66). Itards physiological training was taken up by succeeding physicians; first Seguin made it the basis of special education and then Montessori generalized sense training to the education of all children (Montessori 1912). Like Dalgarno memories of Itard faded rapidly and only the ear, nose, and throat specialists remember him as the founder of their profession (Whetnall 1954).

The French system attracted interest in the nineteenth century as it had in the eighteenth century and for the same reason - it demystified the education of the deaf. With the end of the Braidwood Dynasty in England a new generation of teachers took over, some trained by the French. De Puget became head at Birmingham after Thomas Braidwood and trained teachers and students in the French system. Charles Baker took the French system to Doncaster in 1829. Large schools for the deaf and the dumb were built at Manchester (1823) and Newcastle (1838). Both used sign language in their instruction (Evans 1978).

Arrowsmith complained of the secrecy and lack of published guidelines to help parents help the child at home. He published a copy of Epée's book following a visit to Paris seeking help for his deaf brother (Arrowsmith 1819). The residential schools themselves were not always attractive to parents. Children were rarely admitted to them before the age of seven and came to school completed untrained. Scott, principal of the Exeter school commented on the "Savagery" of the asylum mutes and recommended that parents set a good example at home to cure this problem (Scott 1844, 1870). The Poor Law Act of 1845 financed the very poorest children in these institutions and frequently upper class parents enticed the gifted teachers right out of the schools or hired them as tutors rather than leave their children in such places. Bingham

relates how he left the headship of the Exeter school in 1841 to start a private college for the deaf and dumb at Rugby in response to the pleas of wealthy families (Bingham 1920). Across Europe, parents seeking alternatives to large institutions joined forces with the practitioners of a new philosophy of education derived from the child centred ideals of Rousseau.

The Revival of Oralism (1860-1880)

The 1860's were decisive years for the revival of Oralism in Europe due to the influence of Frederick Moritz Hill (1805-1874) a leading German educator and his followers. Hill had trained as a teacher under Pestalozzi before going to the Heinicke Institute in Berlin to train as a teacher of the deaf in 1830. Pestalozzi was inspired by Rousseau's "Emile" and derived his mother centred method from that impractical text. Hill applied Pestalozzi's version of Rousseau's version of Pereire's practice to the oral education of the deaf (Blyth 1965, Pinlocke 1902). Hill's basic premise was that speech could be associated directly with objects, so the deaf could learn language by associating words with the world around them, exactly as hearing children do. He made speech the basis of all instruction. This direct application of Pestalozzian principles to education of the deaf resulted in a conversational style of teaching in which everything in the environment became content for language learning. Following Pereire, Hill utilized the spontaneous gestures of the children to establish initial communication. Hill trained the next generation of oralist teachers, some of whom rejected signs of any kind.

One of Hill's followers, David Hirsch of Rotterdam, held the view that if speech was to become the principle form of expression for the deaf then signs and writing should not be allowed to interfere in the development of spoken language. This was a unique hypothesis but Hirsch influenced practice wherever his teachers worked. Many were hired by wealthy families, and started their own academies later. The resurgence of Oralism in England followed this pattern. The first two German teachers to arrive in England were Van Asche: a tutor to a wealthy Mancunian family, and Van Praagh who introduced Hirsch's pure oralism into the Whitechapel school for the Jewish deaf at the invitation of Baroness Rothschild in 1867 (Kerr-Love 1911). This was the first attempt to educate pauper deaf children orally (Pritchard 1963). So successful were the results that the Baroness formed the Association for the Oral Instructors of the Deaf and Dumb to publicize the oral system. In 1872 the Association opened a teacher-training college and demonstration school in Fitzroy Square. Van Praagh was appointed director. In the first 17 years, 23 students were trained as Pure Oralist teachers of the deaf. The demonstration school had 60 pupils of both sexes between the ages of 7 and 16 years (Pritchard 1963, Arnold 1901, Wright 1969).

In 1877 the "Society for Teachers of the Deaf and for the Diffusion of the German System" was

founded by Mr. St. John Ackers M.P. Mr. and Mrs. Ackers had a daughter who had gone deaf in infancy. Because of this they had made an extensive tour of educational facilities in Europe and the United States and were convinced of the superiority of the German system. In 1877 they sent Arthur Kinsey for training in Osnabruck and in 1878 appointed him principal of a second training college and demonstration school (in Ealing). The vice-principal was Susannah Hull whose private Oral school became the demonstration school.

By the late 1870's oralism had re-entered the boarding schools. In 1878 James Watson retired from the Old Kent Road Asylum and the school came under the direction of Richard Elliott an oralist and reformer, who was determined to raise the standards in the asylums. In 1876 another oralist, Mr. Howard, took over the Doncaster school and in 1882 Mr. Patterson introduced oralism into the Manchester school (Kerr-Love 1911). Richard Elliott and Dr. William Stainer of the London School Board Classes for the Deaf promoted the idea of a union for the teachers of the deaf. This eventually became the College for the Teachers of the Deaf and Dumb in 1885. The purpose of this college was to break down the isolation of teachers in the asylums, raise standards within the profession, and award certificates of competence based on examinations (Pritchard 1963).

The most successful and famous of the English private educators was the Rev. Thomas Arnold of Northampton (1816-1897). Typically he became interested in the field by a chance contact with a deaf boy in his youth. In 1840 he trained in the French system under Charles Baker at Doncaster, then went to teach at the Liverpool Institute. There he had an opportunity to teach speech. He established his private school at Northampton in 1860. In 1868 he took on the education of Abraham Farrar who had gone deaf at age three. Arnold made history by getting Farrar through matriculation and into London University. Arnold then devoted the rest of his life to oral education and the higher education of the deaf (Pritchard 1963, Wright 1969).

According to Abraham Farrar, Arnold followed the German method initially and permitted natural gestures, later he was converted to Pure Oralism. He utilised the sense of touch in speech teaching and gave "careful training in lipreading, the elements of which he analysed with a minuteness that almost went beyond practical necessity" (Farrar's Arnold 1901, p78). Succeeding headmasters (Dixon, Ince-Jones, & Mundin) maintained a Pure Oral tradition in which signing was a punishable offence (according to a former pupil) until the school closed in 1944 (Wright 1969). Arnold's school then became the Mary Hare Grammar School for the Deaf in 1946, thus continuing the tradition of higher education for the deaf into the twentieth century.

The emergence of a punitive attitude towards signing results from the conviction of European teachers of the deaf that Oralism was the best way of educating deaf-mutes. This led teachers into imposing a speech-only form of communication in the classroom, which could only be maintained by punishment. The Pure Oralist movement culminated in four international congresses at Paris (1878), Milan (1880), Brussels (1883), and Paris (1900) (Brill 1984).

The popularity of oralism was based on the empirical success of the private practitioners, such as Arnold and Susannah Hull. However many of their pupils were not born deaf but were deafened by childhood fever. The educator's task in such cases was one of restoring speech, not teaching language *ab initio*. A second pressure towards oralism came from wealthy parents intent on keeping their deafened child as "normal" as possible. The resolutions of the Milan Congress reflected the parents' interest in social integration:

"Resolution 1: The congress, considering the incontestable superiority of the articulation over signs in restoring the deaf mute to society and giving him full knowledge of language, declares that the oral method should be preferred to that of signs in the education and instruction of the deaf". (Kinsey 1880)

This ignores both the sixteenth century Spanish experience and the eighteenth century French revolutionaries. There was no scientific evidence for these hypotheses. The literature about the deaf population in Europe and the United States showed that 15% to 30% of deaf children were only "semi-deaf" and "semi-mute" and many children were deafened by childhood diseases (Kerr-Love 1911, Scott 1844, 1870). These children did benefit from oralist teaching. For the totally deaf, the difficulties of acquiring spoken language were unrelieved. Later, Kerr-Love a Glasgow physician, deplored the practice of lumping all grades of deaf children together and made the case for different types of education for different degrees of deafness (Kerr-Love 1911). The enthusiastic delegates to the 1880 Milan Congress made no such distinction. Resolution 2 explicitly rejected the simultaneous use of signs and speech by which the totally deaf had been helped in the past:

"The congress, considering that the simultaneous use of speech and signs has the disadvantage of injuring articulation and lipreading and the precision of ideas, declares that the pure oral method should be preferred". (Kinsey 1880)

The Italians, led by Father Tarra, had rejected the combined system prior to congress and simply ignored the votes of the deaf delegates (Brill 1984). Twentieth century research indicates that the relation of signs and speech is more complex than the nineteenth century oralists believed (Bellugi et al 1972, 1974, 1978).

Resolution 4 declared that the congress favoured the "intuitive method" of teaching thus reflecting the popularity of the maternal method (Curtis 1967). The only concessions congress made to the difficulties of teaching by the pure oral method appeared in resolution 7 which recommended limiting class size to 10 pupils and suggested lowering the school entry age to 8 (Kinsy 1880). By the 1900 congress in Paris the Pure Oral Method was the official method of education for the French deaf.

In England, the swing towards Pure Oralism was not so abrupt owing to the reservations by the Royal Commission (1885-1889) about methods of teaching. The Commissioners applied a utilitarian argument in their deliberations. They recommended that the 1870 Education Act be extended to include the deaf, this resulted in the Elementary Education Act of 1893 which provided for the education of the deaf from 7 to 16. The commissioners took the view that teaching language to the deaf could not be done profitably before the age of 7. They recognised that the partially deaf could be taught by speech. They suggested that deafer children should have a one year trial of the oral system to indicate which methods were most profitable in each case (Elementary Education Act of 1893). This was the English compromise.

Toward the end of the nineteenth century there were 22 schools for the deaf in the United Kingdom (Scott 1870). Some had a school for the deaf and the blind, on the same site, as at Stoke-on-Trent and Manchester. Arnold, noted that out of a total of 3,163 residential students, just over half (1,677) were being educated orally, 533 were being taught by a combined system (signs & speech), and 953 were taught manually (Arnold 1901). At this time there were 600 children in London's day classes for the deaf and another 1,074 children in various day schools. Of these Arnold remarked "the oral method is followed more or less" (op. cit.). Sixty-eight years later another survey showed similar results (Lewis 1968).

Of all the institutions replying to Arnold's enquiry only the training colleges at Ealing and Fitzroy Square classed themselves as "Pure Oral" (Arnold 1901). Although the resolutions of the Milan Congress outlawed sign language, nothing could be done to stop deaf people using sign language. Their deaf children automatically introduced sign language and finger spelling into schools. Even where speech is the primary means of instruction by the teachers, signs and finger spelling flourish among the pupils. This has always cast doubt on the validity of the claims of the Pure Oralists (Scott 1870, Day et al 1928, Wright 1969).

The turn of the century witnessed the growth of parent-power, teachers professional associations, and legislation sympathetic to the deaf. This was the launching pad for the new university department specializing in the modern educational treatment of deafness at

Manchester. That department was triggered off by the benevolence of a wealthy parent Sir E. Lloyd-Jones.

Deaf Education in America - A Different Pattern.

Before the eighteenth century the education of the deaf in the United States was outside the United States. Wealthy Americans simply sent their deaf children to Europe to be educated. Americans knew about various European schools of thought on the treatment of the deaf, the blind, and the feeble minded from the pioneering work of Dr. Howe of Boston and Mr. Green's book in 1783. Howe began working with blind patients in his father's Boston home (later moved to Mr Perkin's house) then developed an interest in deaf-blindness through his experimental teaching of Laura Bridgeman. He then took up the cause of the deaf. His detailed notes in the Archives of the Perkins Institute for the Blind were the earliest recorded attempts of consistent teaching in the U. S. A. These show that he used the Spanish alphabet with Laura as soon as he learned of it (Howe-Hall 1904, Dickens 1851). Mr Green's survey showed 84 mutes in New York. The Reverend Stanford took note of that and of Green's book and made efforts on behalf of the deaf in almshouses.

The trend to send deaf children out of the country was reversed with the arrival of John Braidwood in the United States in 1812. Thomas Bolling had sent three deaf children to Braidwood's Scottish academy in 1771. In 1812 his son William Bolling hired John Braidwood as tutor to his own deaf children, instead of sending them to England. John Braidwood made several abortive attempts to organise an oral school but failed to do so before he died in 1819.

A solution to the lack of home grown teachers was to send someone to Europe for training. This was the solution of Dr. Mason Cogswell of Hartford. Cogswell's daughter, Alice had gone deaf from a bout of scarlet fever. She had been helped by a neighbour, Thomas Hopkins Gallaudet (who had obtained a copy of the French signing system). Cogswell convinced a number of influential Hartford people that a school for deaf children was needed and raised subscriptions to send Gallaudet to Europe for training. The group opted for oralism and decided to send Gallaudet to the Braidwoods. Gallaudet, a Yale graduate and a licenced preacher accepted, and arrived in England in 1815. There he encountered the clannish Braidwoods who proposed he undertake a lengthy apprenticeship with them (while John Braidwood established a monopoly in the United States). Gallaudet wanted take the best features of the French and English methods back with him. He went to the Edinburgh Institute to try to persuade one of the Braidwood graduates, Mr. Kinneburgh, to share the method, but Kinneburgh was bonded to secrecy and the Braidwoods would not release him. At that time Sicard was in London presenting a series of

lectures and exhibitions of his prize pupils. Gallaudet went to London, attended the exhibitions and met the famous Jean Massieu and Laurent Clerc. Sicard following the charitable tradition of Epée offered to train him if he could come to the Paris Institute. Gallaudet accepted and travelled to Paris in 1816 (Wright 1969).

In the meantime Cogswell busied himself with raising the necessary funds for a school. Towards the end of the year Gallaudet hired Laurent Clerc to go back to Hartford with him. Clerc became the first deaf teacher of the deaf and the first trainer of teachers for the deaf in the United States. Due to Clerc's influence sign language was highly regarded from the beginning. The Americans appreciated the cultivated Frenchman and responded by learning his sign language, donating money, and sending their children to the Hartford school which opened in 1817. Gallaudet and Clerc travelled the country giving demonstrations, presenting their case to the legislature, and publicising the needs of the deaf. In 1819 Congress allocated funds to the Hartford Asylum. Gallaudet was Superintendent and Clerc principal sign instructor. Clerc remained at Hartford for 40 years teaching French sign language to all Americans wanting to teach the deaf. Gallaudet also remained faithful to the French system from 1817 until his retirement in 1830. By 1888 there were 73 public institutions for the deaf in the United States following the French system (Peel 1981, Lane 1976, Bruce 1973). Gallaudet's youngest son Edward Minor Gallaudet followed in his father's footsteps by becoming the superintendent of the Columbia Institute for the Deaf in 1857. In 1864 President Lincoln allocated Federal funds to the Institute. It was renamed Gallaudet College in 1895.

The reputation of the College grew steadily among the deaf and the hearing. However, Dr. Samuel Grindley Howe at the Perkins Institute was opposed to monastic type institutions in Europe or the United States and from time to time he petitioned the legislature for financial support for a day school for deaf children. In 1843 Howe joined forces with Horace Mann to press for a day school after both men had returned from a tour of the German articulation schools. The expertise of the prestigious Hartford school defeated them. The same thing happened in 1864 after Senator Hubbard had contacted Howe for help for his daughter, deafened by Scarlet Fever. Hubbard hired Miss Harriet Rogers as a private tutor. Miss Rogers sister had taught the deaf-blind mute Laura Bridgeman and taught Miss Rogers the alphabet. Three years later through the generosity of Mr John Clarke this fledgling attempt at tutoring became the Clarke School for the deaf at Northhampton, Massachusetts. Two years later a second oral school opened in Boston with Rogers assistant, Sarah Fuller in charge. This eventually became the Horace Mann school. These first articulation teachers copied their techniques from the teachers of the deaf-blind at Perkins Institute, which included the one handed Spanish alphabet.

Both these schools (Northampton and Boston) were oral. According to Senator Hubbard articulation was taught in almost every class. However, articulation was not used as the "instrument of instruction" (Hubbard 1884). It is probable that one handed finger spelling was used to convey subject matter together with lipreading in these early schools. Many of their early success stories involved pupils who were not born deaf.

The development of speech training in the latter half of the nineteenth century was due to the life long efforts of Alexander Graham Bell. Born in 1847, Bell came from an Edinburgh family of speech scientists - phoneticians & elocutionists. Bell's father, Mr. Melville Bell shared Dalgarno's interest in a universal language. Bell devised Visible Speech by reducing the movements of the speech organs to a series of line drawings which looked like an alphabet. Melville Bell's work was known to the people in Boston. When the Bell family moved to Canada in 1870 Melville Bell was asked to try out Visible Speech at the Clarke School. Melville sent his son, Alexander Graham Bell instead. Since childhood, Alexander Graham Bell had been proficient at interpreting his father's Visible Speech symbols. From his mother, who was deaf and unable to lipread, Alexander had learned the two handed finger spelling alphabet. Bell gave courses at the Clarke School and then at the Horace Mann School. Such was the enthusiasm that Bell was invited to the Hartford School as well. It was there that Bell learned some Sign Language.

Bell's approach was to draw a face in profile on the blackboard, have the children identify the features, then erase all the non-movable parts. This left the tongue & lips plus markers to indicate voice. He succeeded with some children but failed with an evening class of adult deaf men. In 1872 he opened his school of vocal physiology. At this point Bell turned from the analysis of the physical appearances of speech to an analysis of the acoustic properties of speech. He also made a deliberate choice to tutor the deaf. His patients included deaf children from some very wealthy families: George Sanders (aged 5) and Mabel Hubbard (who ^mhe later married). Senator Hubbard and Mr. Sanders advised and financed Bell during the experimental period which led to his invention of the telephone and later and more importantly, for the deaf, the audiometer. During the day he worked in the Physics Laboratories at M.I.T. and in the evenings he tutored George Sanders.

In his work with George Sanders, Bell combined the principles of Dalgarno and Froebel to devise games by which the child became familiar with written language (Lawrence 1952, Bell 1886). He transcribed Dalgarno's alphabet onto a glove to fit George's hand. The Sanders family could spell to George following Bonet's procedures with the Velasco family two centuries earlier. Bell also exposed George to complete vernacular written English. Bell had reservations

about the use of vernacular sign language with young deaf children but allowed finger spelling, which he perceived as writing with the fingers. He believed that the hypothesis that born deaf children could learn a language through speech reading was a fallacy (Bell 1884).

In 1883, Bell opened a small private preschool for deaf children with classes for parents and friends. Written language and Visible Speech symbols were every where, unfortunately Bell was unable to give the program the attention that it needed. After two years he had to close it. According to the literature this was "the greatest disappointment of his entire life"(Bruce 1973). Bell's vision of the education of the deaf centred on the provision of small day schools with parental involvement, children living at home, and high quality articulation teaching. In his own tutorial work Bell belonged the tradition of Bonet, Pereire, and the Braidwoods. He took the view that the vernacular sign language of the deaf might develop into an inferior version of the spoken language. This was Epée's theory as well. Bell's remedy was to expose the child to a complete model of the language through finger spelling and written forms. The failure of his experimental school suggests that the elements of success in a one-to-one situation are not easily generalised to group work. This short lived school was the first in the United States to experiment with parents as teachers of their own children.

Meanwhile, in the early 1870s Bell devoted energy to mobilising articulation teachers. In 1874 they met in Worcester, Mass. In 1884 there were over two hundred articulation teachers at the meeting. In 1887 he used the bulk of his Volta Prize money (won in 1880 for the invention of the telephone) to found the Volta Bureau which was devoted to the dissemination of information about the deaf. In 1890 he formed the Association to Promote the Teaching of Speech to the Deaf. As President, Bell donated \$25,000 to the Association to finance a teacher training program at Clarke School. In 1910 the offices of the Association moved to the Volta Bureau Offices and its magazine merged with the Bureau's periodical "The Volta Review".

The Bureau functioned as Bell intended. The information service answered parents' queries individually, provided pamphlets (for example Garrett 1886), and published articles in the Volta Review. The first forty-one volumes (1899-1932) published over 1,500 articles and letters dealing with the concerns of parents of pre-school deaf children (Clarke, W. 1953).

The schools were under pressure to provide parent guidance. The Wright Correspondence course, the Volta Bureau's information services, and a series of articles about home teaching by Sarah Fuller were three alternatives to institutionalised education (Buchli 1963). In 1888 Bell gave evidence in favour of oralism to the Royal Commission in England. In 1890 he persuaded his wife, Mabel Hubbard, whom he married in 1877, to speak to the Association

about success in speech reading. Her paper indicated that successful speech reading depended on grasping the thought of a whole sentence which in turn depended on familiarity with vernacular language. Her paper effectively destroyed the word-by-word analytic methods of the previous generation of oralists (Bell, M. 1890). Analysis of anatomical positions gave way to analysis of continuous speech. In 1907 Bell himself gave a series of lectures to the association outlining the synthetic approach to speech reading and speech teaching (Bell, A. 1907).

The Association of Articulation Teachers of the Deaf benefitted from the spread of nursery school education and the fact that Helen Keller had learned to speak through the efforts of one of its members - Miss Sarah Fuller (Alcorn 1932, 1933, Vivien 1966, Hansen 1930, Lash 1980). In 1893 the Union of Kindergarteners was formed. Many of the Association members belonged to the Union and shared Bell's philosophy about the benefits of early oral education for the deaf. The school age was dropping. Bell's School took in four and half year olds in 1883, the McGowan School in Chicago took in three olds in 1883, Sarah Fuller excepted three year olds in 1888, and the Garret School taught two year olds in 1892 (Guthrie 1945). The education of young deaf children was taken over by women teachers who proved to be very enthusiastic teachers of speech and lip-reading (Vernon 1972). Analytic methods of lip-reading based on German methods faded away (Bruhn 1920, 1942).

Before he died in 1922 Bell witnessed the establishment of many well equipped day schools with high standards of speech teaching. The trend towards earlier education and involving parents continued. In 1932 Kilpatrick found that a majority of teachers favoured younger school entry. 8% of the schools in his sample sent out materials to parents of deaf children (Guthrie 1945). The Volta Bureau prospered and in 1954 it was renamed the Alexander Graham Bell Association of the Deaf in his memory.

In parallel with the development of excellent oral teaching (Greenaway 1958) the sign language teachers also achieved high standards in the United States, in spite of the polarization of philosophies among teachers. Bell, as President of the Association to promote articulation teaching, added prestige and enormous financial support to the speech teaching movement. Edward Minor Gallaudet as President of the Convention of American Instructors of the Deaf became the leader of those who argued that sign language was a necessary means of instructing the deaf. As the Volta Bureau grew into the worlds largest repository of information on deafness, Gallaudet College became the world's most famous institute of higher learning for deaf people and amply justified Gallaudet's belief in sign language as an instrument of abstract thought.

The accelerated emancipation of the handicapped in the United States came about through educational procedures derived from direct study of the handicapping condition as it exists in the individual. This was a result of an infusion of French Enlightenment ideals which explicitly rejected *a priori* ways of doing and thinking about human limitations including blindness, deafness, and mental retardation (Brumfit 1972, Dickens 1852). Intellectual giants such as Grindley Howe, Edward Seguin, Bell and Gallaudet led the way to full emancipation for the handicapped in distinctive ways. Howe at Perkins, donated the tradition of documentation to the tutoring of the deaf blind, which made possible the phenomena of Helen Keller. The Hartford school showed the nation a way to emancipate deaf people through sign language. Seguin's physiological methods became the basis for enlightened treatment for the insane and the mentally retarded. Alexander Graham Bell transformed the diagnosis and treatment of the deaf into a series of solvable technical problems.

Twentieth Century Technology: Teaching and Research.

The audiometer Bell invented brought a standardized measure for describing deafness into the vocabulary of diagnosis (decibels) and assisted in the classification of deaf children for educational purposes. Application of the Simon Binet test of mental abilities with deaf children demonstrated the need for revision and standardization (Pintner & Patterson 1916, Pintner & Patterson 1918) Pintner removed all the verbal items and replaced them by performance tasks drawn from the language independent tests of the immigration service, plus others of his own design. Directions were given by pantomime and the various tasks were grouped in small sets which could be scored separately instead of one long scale. A large scale survey of the abilities of children in American schools for the deaf involving a battery of tests led to further refinements and a set of performance tests was published in 1925 (Day, Fusfeld & Pintner 1925, Pintner & Patterson 1925). All the tests showed deaf children were between two and five years below the school norms for hearing children. Using a large variety of tests and large numbers Day et al. showed an average two year mental retardation score for the deaf. Pintner and his colleagues reported difficulties in applying standardized tests with the younger ages and this remained characteristic of the field until clinical psychologists brought existing performance type materials within the grasp of infants. Kent questioned the use of actuarial type norms and the fixed I.Q. concept in interpretation of results of tests of preschool subjects. She pointed out that clinical experience demonstrated that infants developed in spurts rather than the linear type progression tested by I.Q. tests and recommended extreme caution in the interpretation of test results of infants (Kent 1950). Levine suggested that an all round picture of the deaf can only be obtained by workers with experience of deafness using a variety of approaches (Levine 1960).

Of 32 intelligence tests given to deaf subjects between 1930-1966 approximately 50% showed an I.Q. distribution slightly below the norms for hearing subjects and the other half showed a slightly higher set of scores for the deaf than the norms for hearing subjects. Four of the studies involved preschool deaf subjects. Replication of Randall's performance tests showed changes in I.Q. scores for the same subject. The Drever-Collin's test results varied depending on different scoring methods. The Leiter performance tests showed a 96.32 score for subjects having a 108.86 score on the Hiskey tests. Vernon analyzed the results against the experience of the tester and pointed out that the most consistent results were obtained by people with experience of deafness (Vernon 1967). The results support Kent's conclusions (Kent 1950). However, massive language defects were apparent in all the results.

Personality Studies of the Deaf.

Pintner also pioneered studies of the concept of "deaf personality" through self inventories, teacher rating scales, and matched pair designs. The results pointed toward positive association of hearing and "normal" profiles whereas scores for the deaf were biased in the direction of instability, introversion and less dominance than norms for the hearing. School aged subjects with 15 decibel loss were better adjusted to school norms in ordinary schools than children with losses greater than 30 decibels (Pintner 1937, 1940, 1942). Pintner acknowledges the established difficulties of rating for "neuroticism". Levine, cautions against stereotyping the deaf as problematic and maladjusted on the basis of comparisons with hearing teenagers. To avoid stereotyping Levine recommended personality evaluation should be based on data drawn from clinical observation, autobiographical material, case histories, and careful use of projective instruments such as the Rorschach test. Levine's clinical experience indicate a heavy environmental component in all personality studies of the deaf. The socially competent deaf will also be the educational successes and the average deaf will still be academically handicapped in spite of normal or above normal intelligence. Across the board investigations show no single personality denominator (Levine 1960, Levine 1969 in Rainer et al, Levine 1981 in Liben).

Demographic studies and Personality Profiles of the Deaf.

The results of a five year demographic study of the deaf population of New York State (N=10,335) showed that most deaf people marry other deaf people, in spite of the fact that

90% had hearing parents. Intermarriage rates (cousins) were higher than normal (8.7% vs. 0.5%) but only 30% of the marriages with two deaf partners produced deaf children. A random sample of one in eight of the complete list of subjects yielded 700 persons for in depth study. A number of subsamples (twins) were included and 225 hospitalized deaf individuals plus 300 normals. I.Q. tests, projective tests, case histories, personal and family interviews, and home visits were the chosen methods of investigation.

Areas of agreement across the three subsamples were:

- The sample showed a 3-4 year language retardation
- The deaf showed normative performance on tests of motor and mechanical ability.
- The group had larger variance on the verbal items of the Weschler-Bellevue Scale .
- The average verbal I.Q. scores of the hearing twins were 22 points greater than the average I. Q. scores of the deaf twins.
- Performance scale differences amounted to only two points, confirming Pintner's earlier findings.

Psychological testing of a subsample using projective techniques (Rorschach and T.A.T.) showed a characteristic Personality Profile:

- a. Pronounced underdevelopment of conceptual activity independent of evident high mental abilities.
- b. Emotional immaturity.
- c. Little grasp of interpersonal relations.
- d. Egocentricism.
- e. A noticeably restricted life space.
- f. Standards of feeling and behaviour of an etiquette book type.

(Levine 1960, Dinnage 1964 , Schlesinger and Meadow 1972)).

Although these personality characteristics appear in the non-deaf population as well, in the deaf population they seem to be derived from the deafness itself and add up to absence of thoughtful introspection and lack of internalised control. Altshuler noted many instances of, temper tantrums in the case histories of the clinic sample, in which the parents gave up the struggle and confirmed the child's coercive control of others. The research group decided to test the impulsivity-deafness hypothesis on a non-clinical population using three subcultures in different countries and the U.S.A. (plus hearing controls). All subjects were adolescents with early profound deafness and matched on I.Q. and socio-economic indices. They found the deaf were more impulsive than the hearing (Altshuler, Deming, Vollenweider, Rainer, & Tendler 1976). Many disturbances were based on inability to communicate rather than formal mental

disorders or mental retardation. Major recommendations arising from this study focussed on prevention of stress in the lives of deaf children

Starting from a non-deviant model of the deaf, Furth carried out a series of Piagetian type studies designed to clarify the thinking processes of the deaf (Furth 1963). Furth argued that the adult deaf are remarkably normal in their adult life styles in spite of all the imputed difficulties of growing up deaf in a hearing world. He aimed to show that thinking skills operate independent of language skills. His results indicate that the deaf follow a pattern of thinking which equals the hearing on conceptual control and cognitive shift (reversals, transfers). The deaf are weak on inferential learning, discovery type tasks, and opposites. Furth argued that the negative results are the result of experiential deficiencies, but failed to tease out any direct relationships. He argued that the poor reading scores of the deaf on the Metropolitan reading test showed the top limits of linguistic skills of deaf subjects and these might be improved by providing deaf children with signs from an early age (Furth 1966).

Achievement Assessment in the U.S.A.

In 1962 Wrightstone, Aronow and Moskowitz used the Metropolitan Reading test to assess the reading levels of pupils in 73 schools. They included ages 10-16 and showed that the average gain in reading for those five years was less than one school year. The 16 year olds were at the 3.4 grade level and 80% of the 16 year olds could only read at the level of 4.9 (see Furth 1966). A much larger report in 1965 involving 23,000 children in Residential schools showed that deaf school leavers reached a 5.9 grade level on the Stanford Achievement Tests (Babbidge Report 1965, Furth 1966 chap 1). Lipreading studies carried out at John Tracy Clinic documented the absolute difficulties of understanding conversation by lipwatching. Elementary age subjects understood 29.93% of filmed speech, college age subjects 49.17%. The hearing adults obtained better scores than the hard of hearing and they had better scores than the deaf. A priori knowledge of language and knowledge of results through hearing were important factors for success (Lowell 1959, Woodward & Barber 1960, Woodward & Lowell 1964). A 1964 study designed to track down the effects of preschool training on the later development of lipreading and of reading skills showed no significant differences in favour of the deaf preschoolers (Craig 1964). Craig emphasized the need for objective evaluation of preschool training.

These reports were cause for worry in the residential schools which followed the combined system: younger children were taught by lipreading and speech teaching in the primary

classes, switching to fingerspelling and signing in the secondary classes. Hester reported low achievements in 1,104 school leavers from 55 residential schools and 9 day programmes from 1961-62. These results were very unsatisfactory in view of the number of years these children could remain in high school to complete the course. Furthermore these were the products of well equipped schools with powerful hearing aids and well qualified staff (Greenaway 1958). When the Babbidge Committee reported its findings about the underachievements of American deaf school children, the report spurred practitioners and researchers into discovering better methods of educating the deaf (Babbidge 1965).

This situation prompted American interest in reports of success by Russian workers who had remedied the low school achievements of their own deaf population by neo-oralism. Disappointing results with the oral method in Russia (Rau 1935, Morozova 1959, Morkovin 1960) prompted the return to the simultaneous presentation of speech and finger spelling. Eye witness accounts gave good reports of neo-oralism with very young deaf children (Kirk 1965, Mulholland 1965). Progress reports indicated the importance of a highly structured approach in which results of experimental work with 2 and 3 year olds was extended to nursery classes. After three years of exposure five year olds understood grammatical constructions and used 70% of them expressively (Moreva 1960, 1966). Morezova emphasized that speech reading was not treated as a global process-the aim was to provide an accurate representation of speech from the beginning (Morezova 1960). Titova reported on the peculiarities of matching spoken Russian with the fingerspelt forms and details of a speech teaching programme based on successive approximations (Titova 1960, 1963, Rau 1958).

A number of experiments involving young deaf children began in the early sixties. The children were exposed to finger spelling and speech and made significantly better progress in learning language than the previous groups (Hester 1963, Brill & Fahey 1971). University based studies of patterns of communication used in different families with deaf infants showed that early use of sign language (as between deaf parents and deaf infants) showed positive effects on academic achievement. Stevenson analyzed the school records of the California school for the deaf at Riverside for the years 1914-1961. Out of 134 deaf children of deaf parents and 134 children of hearing parents 38% of the deaf parents group got to college, only 9% of the hearing parents' deaf children got to college (see Stevenson in Liben Chap 8 1978).

An analysis of the communication skills and social well being of 120 deaf day pupils and 120 deaf controls showed that the day students had more intelligible speech and higher speech reading scores than the residential controls. There were no differences in decoding finger spelling or range of vocabulary. There was no evidence for hypotheses concerning the "psychological

deprivation" of residential life on deaf children. Analysis of the school's problem behaviour records show higher incidence of recorded problem behaviours for male day students than all others. These same boys had worse scores for intellectual achievement and adjustment than the resident boys and the day girls (Quigley and Frisinal 1971).

Analysis of a unique pattern of scores of 16 day pupils of deaf parents and the scores of 70 students from hearing parents showed that the deaf students of deaf parents had higher scores for decoding finger spelling, and vocabulary range was greater than the children from hearing backgrounds. Their speech was worse than that of the children of hearing parents. Lipreading scores were the same for both groups. The deaf children from deaf homes had higher academic scores on the Stanford achievement test but the differences were not significant. The authors interpreted these results as meaning that the use of manual communication at home had helped these 16 children in vocabulary development, but not in speech intelligibility (Quigley & Frisina 1961).

Two similar *ex post facto* studies using matched pair design yielded a similar pattern of results (Stuckless & Birch 1966, Meadows 1968). Both studies involved careful matching of deaf children of deaf parents with deaf children of hearing parents on critical variables of age, I.Q., sex, onset and degree of deafness, and use/non-use of sign language at home. The studies focussed on early use of manual communication at home and its effects on later academic achievements. Stuckless and Birch found that the socio-economic matching based on the occupation of the father favoured the hearing families. Theoretically these children should have the linguistic advantage. The results showed a positive association between educational achievement and manual communication independent of social class; deaf students from deaf families had significantly higher scores on measures of reading, lipreading, and written language (Stuckless and Birch 1966).

Meadows extended the variables to include measures of social functioning, family climate, and the formation of positive self image in a sample of 56 matched pairs from the California residential school for the Deaf at Berkley. Meadows aimed to evaluate some basic sociological processes in family socialization as they operate in families of deaf children. The process of developing a self image was examined from the perspective of symbolic interaction theory. Drawing on the theoretical constructs of George Mead, Meadows reasoned that the presence of significant others who sign in the baby's life would be the critical factor in establishing early communication and social functioning. Results showed deaf children of deaf parents made more positive self evaluations and received higher staff ratings on an index of social functioning. Differences favoured the deaf children from deaf parents on maturity, responsibility,

independence and sociability. Stanford Achievement Scores were higher for these children also. Children of deaf parents had significantly higher ratings for written language, receptive and expressive finger spelling and expressive sign language. The mean I.Q scores were higher for the deaf children of deaf parents than the other children (111.5 vs 108.9). For 32 pairs where the deaf parent's children had higher scores on the Stanford Achievement Test it is unclear if these children were the ones with the advantageous I.Q.'s. High academic scores, and positive self image bunched to favour the deaf families.

These results are particularly impressive as socio-economic matching showed an apparent social class advantage in favour of the children of hearing fathers. Contrary to conventional sociological wisdom this did not produce higher scores for these children. However as I.Q. correlated with family climate, the overall relationship of academic achievement to family classification was approached with caution. Meadows learned that her sample had the highest scores on the Stanford Achievement Test for the entire population of the California School for the deaf at Berkley, that year - independent of the hearing status of the parents. Experimental artifacts may have produced some of the contrary results.

The poor showing of the deaf children of hearing parents with positive family climates indicated that stable family background was not sufficient to produce high academic achievement or positive self image in the children. Meadows proposed that high expectations at home may simply prove too much for particular deaf children. She further argued that self image is related to communicative competence and that rejection of the language of signs represents a rejection of deafness. Where this happens stigma operates through the parents to the disadvantage of the deaf child. In contrast the self images were higher in deaf children whose deaf parents participated in the deaf sub-culture and lower in those who did not participate. Meadows argued that immaturity is not a necessary consequence of deafness.

Meadows found a significant positive relationship between high speech reading scores and knowledge of manual language, she concluded that children who are most likely to be judged as having good communication skills in school are those who were exposed to oral and manual communication at an early age.

A major weakness of studies carried out in the California schools for the deaf at Berkley and at Riverside relate to the biased nature of the populations in these schools. It is known that many successful oral graduates of the John Tracy Clinic do not attend the two state residential schools. Conversely many oral failures are present in these schools. Vernon commented on the presence of substantial numbers of oral failures in the Riverside population at the time he

carried out a Meadows type study from which he concluded that early manual communication had significant positive effects for academic achievement (Vernon 1970, Vernon & Koh 1971). A later study of the entire population of school achievements showed that all the children of parents who had attended the clinic had higher Stanford Achievement Scores than those who had not attended (Balow & Brill 1975). Lowell argues that the positive effects of early manual communication have been mistaken for the positive effects of early communication *per se* compared with the absence of communication entirely on the part of hearing parents who may not realise the importance of early communication (Lowell 1975).

Major problems involving experimental control emerged in a study of several residential schools across the nation carried out by Quigley. The object of study was the use of finger spelling in schools (The Rochester Method). The original design allowed for two comparison schools for each experimental school. Efforts to involve purely oral schools failed. Of the remaining schools the research group discovered a linguistic free-for-all at work. Out of the classrooms children used signs, fingerspelling, and speech independently of the media of communication used for classroom instruction (Quigley 1969). Attempts to isolate the independent variable (finger spelling) necessitated the establishment of two self contained nursery schools, control of teacher variable and tight control of communication media with 16 matched pairs of preschool experimental subjects. The children exposed to fingerspelling and speech were superior on fingerspelling at the .001 % level & superior on speech reading at the .01 % level. The experimental subjects had superior scores on seven measures of reading ability but in the discussion of results Quigley emphasized that real differences were small in spite of statistically significant differences between control and experimental results.

The large school survey showed minimal differences in grade levels between schools and no consistent differences in speech reading and speech intelligibility over five years. The "experimental" schools had higher fingerspelling scores than the "comparison" schools but absolute differences again were not large, this is true of the Meadows study and of the Stuckless and Birch results. The variability of speech intelligibility is not easily accounted for. The poor speech of the 16 day pupils of deaf parents was interpreted as an effect of lack of speech stimulation at home. The inconsistency in oral ability in the survey, they interpreted as the product of variability in speech teaching in schools and saw this as independent of the communication methods used for classroom instruction. Quigley felt that when good oral techniques are employed in conjunction with fingerspelling there need be no detrimental effect on the acquisition of oral skills, but cautioned that fingerspelling is a useful tool not a panacea.

In the late sixties, Meadows attempted to resolve the tangle of issues surrounding the question

of early communication methods by mounting an observational study of early child raising practices and communication habits. According to Meadow's thesis the crucial differences relate to the presence or absence of early communication and the quality of family relationships (Meadows 1967, 1968). The study involved training hearing parents in the use of signed and spoken English with profoundly deaf preschoolers. The results showed that bimodal communication in young deaf children is possible without accompanying pathology (Corsun 1973, Schlesinger & Meadows 1972, Schlesinger 1978, Meadows 1976). Analysis of individual case histories showed that deaf children preferred bimodal (speech+sign) communication and that hearing preschoolers used sign and speech earlier than the deaf (Schlesinger & Meadow 1972). The authors claim that this is possible where parents practice an easy form of signed English from the beginning and avoid the stigma of having to resort to signs once the child has graduated to the status of oral failure. Progress of individual deaf infants showed that early manual communication can serve as a sufficient basis for second language learning of a formal kind (Collens- Ahlgren 1975).

Psycholinguistic studies of deaf and of hearing infants interacting with deaf parents showed that mothering by deaf mothers is virtually indistinguishable from mothering by hearing mothers as reported by Schaffer (Mayberry 1976, Moores 1980, Schaffer 1977, Schaffer et al 1977). The mothering process was marked in all cases by multi-sensory contact, communication, warmth, and sensitivity toward the infant. This data represented a serious challenge to the oralist assumption that the deaf home is automatically psychologically inferior to the hearing household. Moores analysis of "baby sign" suggests it follows the same psycholinguistic pattern of development as "baby talk" (Moores 1980). The cumulative results of the studies confirmed that deaf homes have psycholinguistic advantages for deaf infants. A way of extending these psycholinguistic advantages into hearing families with deaf infants had been outlined by Meadows experimental sociology. Teaching sign language to hearing parents addressed two problem areas (1) the communication gap (2) the stress. The varying abilities of hearing parents to learn sign language called forth a number of novel solutions from the research laboratories at Gallaudet College (Bornstein 1974, Stokoe 1974, Cornett 1967, 1970, Gustason et al 1974), all designed to make the learning of some system of visual communication easier for hearing parents (Hawes and Laver 1980).

A swing of the educational pendulum took funds away from study of the classroom as the unit of research and into the preschool. Many different kinds of programmes were created (Buchli 1963, Brill & Fahey 1971, Brinich 1980, Freeman, Malkins, & Hastings 1975, Lowe 1963, Luterman 1967-73, Northcott 1967, 1974). Developing evaluative tools proved to be a labour intensive task where preschoolers were concerned (Geers 1979, Hyde, Elias, & Powers 1980,

Kretschmer & Kretschmer 67-79).

By 1975 there was widespread agreement the United States that there was no one educational philosophy applicable to all deaf children (American Organization for the Education of the Hearing Impaired 1975). The 1975 passage of the "Education for All Handicapped Children Bill" legislated individualized education for all handicapped children and effectively buttressed the rights of parents to individualized education for deaf children(Sametz & McLoughlin 1975).

Manchester University(1919-1980) and "The Modern Educational Treatment of Deafness"

In England, the Lewis Committee (Department of Education & Science 1968) came into existence as a result of documented "disquiet" by a previous administration about the poor educational achievements and unintelligible speech of deaf school leavers (Ministry of Education Report 1961). The disquiet referred to by the Lewis Committee, came from a group of professionals whose duties brought them into contact with deaf children graduating from a cross section of educational facilities in England and Wales. This group as a whole felt that the time was ripe for an investigation of educational alternatives for those deaf children who could not be educated by spoken language. As in the United States there had been a long and bitter controversy between the oralists & manualists. However, in England there was a unique situation: The oralists were based at Manchester University which trained the teachers and did the research. There was no equivalent institution for the manualists. The opposition came from professionals who did not teach the deaf & felt a need to remedy the problems they noticed by introducing some form of visual communication into the instruction of the deaf. In 1948

"an experiment approved by the Ministry of Education had to be abandoned owing to the opposition from the leading centre of the pure oral advocates. This opposition was based not on factual evidence concerning the proved superiority of the existing oral teaching, but on sentimentalism" (Sir Richard Paget in Hodgson 1953).

Until Epée formalized sign language for the deaf, the emancipation of the deaf was a process of acquiring speech for a privileged few. From that time onwards the education of the deaf, by manualism or oralism had all the markers of an educational system adapted primarily to the eye. Stimulation of the other senses was used to corroborate information obtained by watching. The development of the theory and practice at Manchester University was unique in that all this yielded to amplification. The Department began in 1919 with an oralist, I.R.Ewing(née I.R.Goldsack)as the director. According to A.W.G. Ewing's accounts I.R. Ewing's philosophy of pure oralism was based on three elements,

- (1) An analysis of her own increasing deafness,
- (2) Her successful teaching of lipreading to adults.
- (3) Sensitive observation and teaching of children,
(Ewing 1955, 1960, Whitton 1959).

From the beginning Irene Ewing, together with other pure oralists of the German tradition rejected the syllabic drills of the analytic method of speech teaching in favour of the global approach to speech teaching and speechreading (Goldsack 1920, Haycock 1920, Story 1913). In her first book: "Lipreading" she rejected fingerspelling (I.R. Ewing 1930). In common with many adults who have gone deaf in later life, sign language had no place in her private or professional life (I.R. Ewing 1941). She recognised that hearing was the natural basis for speech and language: "The Oral method is but an artificial means of education" (I.R. Ewing 1930 p 52). Deafness for I.R. Ewing was the experience of vanishing words. Lipreading and later, lipreading plus amplified speech was the way to recapture words (I.R. Ewing 1944). This personal philosophy became the policy of the department: Words were presented to deaf children as the functional elements of a social situation (I.R. Ewing 1930). The children were to learn language via lipreading. In the early writings she advised that such a rigorous method of learning language should be pursued only with those who had the aptitude for it, but never addressed the question of alternative methods of learning language for those children who had no aptitude for oralism (I.R. Ewing 1930, 1951, 1958).

Before the advent of mechanical hearing aids I.R. Ewing and her husband A.W.G. Ewing, included auditory training in their private practice. This was a relatively simple process consisting of speaking words into the child's ears and then saying the same words to his eyes. Later multiple speaking tubes were used. By the 1930's a powerful group hearing aid was in use. The Ewings reported that valve-aids speeded up the process of language learning, but the examples they quote concern adult subjects who already knew the language. The analogy of listening to speech over a poor telephone line (without the aid) then over a good telephone line (with the aid) was appropriate for adults; the redundancies of the language helped these subjects guess the missing components correctly (Shannon & Weaver 1948). The child born deaf does not have the language resource to learn a language by guessing. Many of the audiograms illustrating the Ewings' successes show these subjects had gone deaf or still retained hearing for most sounds of speech. Later workers noticed excellent speech was associated with audiograms showing partial deafness (Montgomery 1968, Conrad 1979). Montgomery concluded that "Much research on deafness was vitiated by loose definitions of deafness." In "The Handicap of Deafness" the Ewings themselves emphasize that the results were obtained by experimental teaching on a daily basis using skilled teachers. The amplified speech was very loud and the subjects had to watch and listen for best results. Speech had to be delivered close into the microphone as in radio

broadcasting. The techniques of the broadcasting studio were translated directly into the teacher training programme as "special expertise" from the 1930's onward (Ewing A.W.G. and I.R. 1938).

In 1943 the A.W.G. Ewing had reported that deaf school children having a 100 decibel loss could not be reached by human voice and beyond four feet speech was unintelligible to the partially deaf (Ewing and Stanton 1943). In spite of these findings they extended the look and listen methods from adult work to the education of the infant deaf.

Deafness in Infancy.

The 1940's saw the development of screening techniques for use in welfare clinics, (A.W.G. Ewing & I.R.Ewing 1944, 1947, Humphrey 1954), the development of a National Health Service Hearing aid for general distribution (Royal National Institute for the Deaf 1948, 1949), and the beginning of parent guidance services based on the audiological approach (I.R.Ewing & A.W.G. Ewing 1947, 1954, A.W.G. Ewing 1951, 1957, 1958). In this second phase the goal was to bring the benefits of good quality amplified speech to the child early in life and promote natural speech and language at home. I.R. Ewing believed that the best way to help parents help their children at home was to reproduce the speech development of hearing children. In "Opportunity and the Deaf Child" the Ewings emphasized that home guidance is not teaching but the provision of opportunities to Look-and-Listen to speech in the domestic environment. On pages 2-3 they discuss the applicability of the Look-and-Listen method to those born deaf. The goals were that the child should think in words (p. 6). On page 80 they admit the silent child cannot be helped unless the mother is a trained teacher of young deaf children already. On page 112 they state that where the child makes no progress after an undefined trial period, he should be transferred to "silent" methods of instruction (I.R. & A.W.G. Ewing 1947).

In "New Opportunities and the Deaf Child" the Ewings reported on the results of the Look-and-Listen Method(I.R.Ewing and A.W.G.Ewing 1958)in eight preschool cases.

The present writer noted that the Ewings emphasized that fine discrimination of speech depends on the ability to hear high frequency formants such as in the vowel "EE." Out of 8 cases (all preschoolers) six had this kind of hearing and all were taught privately (I.R. & A.W.G. Ewing 1958). They recommend aids for the severely, profoundly, and subtotally deaf "whether or not a particular aid will help them to hear their own voices and speech." In the same text the Ewings noted that they had worked with deaf children (from deaf families) who had developed

bilingually using speech at school and sign at home, but they advise hearing parents not to use signs as this works against the acquisition of speech. Similar inconsistencies can be found in the writings of Ewing's followers (Fry 1966, Whetnall and Fry 1964).

From Oralism to Auralism

The International Congress on "The Modern Educational Treatment of Deafness" held in Manchester University in 1958 reflected the Aural approach to the education of the deaf. The only demonstrations involving children were associated with aids and auditory training devices (A.W.G. Ewing 1960). Of 72 papers delivered at the Congress one only mentioned the numbers of Oral Failures produced by the educational system (Henderson 1958 in A.W.G. Ewing 1960). Greenaway noted that Congress did not review all legitimate efforts to educate the deaf. It ignored the high attainments of the North American deaf where methods other than pure Oralism are pursued. The factual evidence of the British deaf was unrepresented (Greenaway 1958).

The content of courses for teachers and parents was oriented exclusively toward amplification (Dale 1958, 1962, A.W.G. Ewing 1955, 1958, E.C. Ewing 1964, Pickles in A.W.G. Ewing 1957, D. Watson 1953, T. Watson 1961, 1962, D. Kendall 1953, 1960, D. Sanders 1961). By 1955 the Department provided the machines for student practice. The writer recalls a machine oriented course. All student teachers had to be able to carry out audiometric tests of hearing and master microphone techniques. It was easy to accept that the machines were indispensable. Beginning teachers found themselves in schools without the basic machinery to carry out the specific tests needed to implement a method based on individualised amplification for each pupil. Most children could not speak intelligibly. Simple observation confirmed that the children signed in the Refectory, the dormitories and the playground, but sign language was a forbidden topic in the staffroom. The signing teachers had retired a generation before. For a Manchester trained teacher, the only way to learn sign language was to copy the children. In the realities of the schools for the Deaf the intuitive method of "Speech and the Deaf Child" and "New Opportunities for Deaf Children" were reduced to the established Chalk-and-Talk method (Wright 1969).

PARENT CENTRED GUIDANCE

Historical Development

This paper¹ traces significant changes in the concept of guidance developed at the Department of Education of the Deaf at Manchester University. Originally the concept meant educational guidance of deaf children by oral means. The strength of the oral approach lay in unity of theory and practice. The theory was founded on Miss Irene Goldsack's demonstrably successful direct teaching of deaf children. This was passed on to an intimate group of students by precept and example.

By the 1950's Manchester's reputation had attracted large numbers research had accumulated amplification had entered the picture. Oralism became a complex affair at the theoretical level practice emphasized the natural approach. As a result theory outstripped practice. Educational guidance itself passed from the cadre of demonstration teachers into the literature as "expert guidance" to be studied by later generations of teachers.

The 1970's have ushered in other approaches to parent guidance involving consultation with the parents themselves. Deaf people are also speaking out on education. Centres other than Manchester are involved. The results of this study support the findings of others; that there are important non-educational elements involved in parent guidance. These are amenable to study in a systematic manner. The findings of the study support the case for a

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differential packaging of parent services. The hypothesis that a mixed type of communication pattern is common to parents of hearing impaired children is a viable one to test.

The Problem

Professional practice these days is to recommend that handicapped children stay home (Sheridan 1965). The problem is how to help the parents cope. Parents of deaf children are no exception. When deafness is incurable medically, the modern approach to the problem is by educational treatment via the oral method. The oral approach (Ewing A.W.G. 1951) depends for success on helping the parents establish the necessary domestic environment for the Oral way of life around the baby.

Ewing. I.R. (1951) described this process in a series of articles in the *Teacher of the Deaf* in the 50's, in which she emphasized that everyone who comes into contact with the child must penetrate to his brain by speech. This is easier said than done.

First, there is the matter of an accurate and early diagnosis. In this respect the G.P. the health visitor and the peripatetic teacher of the deaf are key people in the family. In the case of families of pre-school deaf children these services have been criticised by Sheridan as often taking place only on paper.

Sufficient evidence of shortcomings has been provided by parents (D.E.A.F. 1974) that a committee of Inquiry under Warnock, has been established to look into the matter (Hansard 1975)

Gregory (1974) of Nottingham University after three years of study

of the families of deaf children concluded that there was no "best buy" service-wise for such families. The findings of two local studies, (Dodds. 1974, Worthington 1975) support Gregory's findings re variability of services.

The parents themselves state that they require a training programme they can understand and follow themselves, with ample opportunity for discussing progress with an experienced teacher of the deaf (D.E.A.F. 1974). In view of the importance of the trained teacher of the deaf to the parents one looks to the teacher training programmes for enlightenment.

A D.E.S. survey (1969) showed that most of the peripatetic teachers in practice were trained in the oral method at Manchester. A further 270 were trained at London University between 1965-75 also oralist in approach (Dale 1975).

In the opinion of the writer, present dissatisfaction with the sort of parent guidance associated with oralism and the present generation of oralist practitioners can be traced to a conflict in training. This is the failure of training programmes to pass along the successful techniques of oralism in an unambiguous and demonstrable manner. At the same time great emphasis is placed on the need for parent guidance and early training at theoretical levels.

Historically this situation developed at the first training programme at Manchester. In the 1920's a unique situation prevailed there as described by Ewing A.W.G. (Ewing A.W.G. 1955). The teacher training department was established by I.R. Ewing, in whom

successful oral teaching of deaf children was personified. She demonstrated first and described later (Goldsack.I.R. 1920). Later on when she established the parent training programme at the University, it was characterised by a virtually demonstrationless form. Watson, one of Lady Irene Ewing's research students, described a typical parent guidance session of the period as follows (Watson 1953)

The practical work was done by the parents

A commentary by the teacher

Demonstration of new techniques

This tradition of training parents on a minimum of professional example still continues as described by Lady Ethel Ewing "During the greater part of the time in guidance sessions parents are working with the children, not watching staff members teach" (Ewing E.C. 1967). Under these circumstances "parent guidance" for student teachers is not the demonstrable transfer of successful techniques from a special teacher to a parent in need, but rather something to be studied from the literature. That there are some things not learned best from books is evident from this study, in which the parents rated good demonstration teaching very high and books rather low, in terms of parents coping with deaf children.

A further source of fuzziness in training teachers of the deaf lies in the emphasis on the "natural approach" toward language teaching with deaf children. The Manchester approach relied heavily on the personal wearable hearing aid to bring the sound of natural continuous speech to the children. Sanders, another research

student found that parent guidance and teacher training focussed on the use of an aid to a large degree (Sanders 1961). Thus the inherent difficulties of transferring knowledge by oral means in the case of deafness have been underemphasized with both parents and students. Another notable educationalist (Greenaway 1958) has described the time spent on educating profoundly deaf children via auditory training as the law of diminishing returns. He emphasized the craft type aspects of training the deaf, aspects of training which seem to have got lost in the present emphasis on amplification in the training programmes.

The most devastating criticism of undiluted oralism and its unrealistic expectations of parent guidance comes from Denmark who points out that the results of auditory training with a successful few have been generalized to mean that all deaf children can be similarly trained (Denmark 1973). He goes on to say that in spite of evidence provided to the Lewis Committee (D.E.S. 1968) that there is a place for manualism in the education of the deaf the teacher training programmes remain oralist in their approach. Manualism is the term applied to an educational philosophy which advocates the use in schools of sign language developed by, or for the deaf.

British Sign Language is that set of conventional signs recognised by the community of British Deaf Adults. Denmark recommends that parent counselling be done by social workers trained in the problems of deafness. In view of the weaknesses in the teacher training programmes it is not surprising that the Lewis Committee noted that "preschool training and arrangements for giving guidance to parents

were not of a uniformly high standard". They felt that a systematic study of the parent child communication process should be done. It is in that context that this pilot study was undertaken.

Population

The sample consisted of 10 parents and 12 children, six of whom had hearing losses. There were no deaf parents in the sample although an invitation was sent to a parent group. The parents came from all social levels: farmworkers (2) skilled trades (2) business executives (1) medically/scientifically trained (5) They all lived in the south-east of England.

Methodology

A combination of pre-arranged questions, interviewing and tape recordings were used to elicit information about diagnoses and professional management of treatment procedures and parent guidance. Features of communication patterns between parents and children were examined. Interviews were conducted by appointment each parent being interviewed individually on the identical questions as the spouse. Answers were coded in a form suitable for computerization. Without the co-operation of the parents the study would not have been possible. The men on the whole were more talkative than the women, perhaps because they were seen in their own homes by a person (the writer) with a definite interest in the needs of fathers.

The early questions were non-threatening in nature being concerned with dates of birth, diagnosis, etc. Table 1 represents the time intervals between parental suspicion diagnosis and treatment.

Table No 1

Time Intervals in the Management of Deafness in Preschool Children

No.	Parental Suspicions	Diagnosis at (months)	Delay of	Treatment by	Delay from diag.	
1	0-6 mths	Severe Deafness	6+2 wks by E.N.T.	2 wks	Aid + Teaching	2 weeks
2	0-12 mths	Severe Deafness	18 E.N.T.	6 mths	Aid + Teaching	4 months
3	18 mths	Partial Deafness	48 E.N.T.	30 mths	Surgery	2 months
4	7 mths	Progressive	12 E.N.T.	5 mths	Aid + Teaching	1 month
5	9 mths	Unilateral Deafness	30 E.N.T.	21 mths	Teaching	Immediate
6	48 mths	Conductive Deafness	59 M.o.H.	11 mths	Surgery	Pending

E.N.T. = Ear, Nose and Throat Specialist

M.o.H. = Medical Officer of Health

In cases 1 and 4, maternal rubella was the cause of the child's deafness. In no's 2, 5, and 6, the cause of deafness was unknown. Case no. 3 was "Glue Ear". As Table 1 shows severe hearing losses were detected by the parents themselves in the first year of life. Early suspicions were related to severe and profound losses, less delay

in reaching a firm professional diagnosis. This pattern is confirmed by other researchers in Canada and the U.S.A. (Freeman, Halkin and Hastings 1975, Fellendorf 1974). It pays to trust the parents' suspicions until a clear diagnosis has been obtained.

Longer delays were involved in the identification of unilateral, progressive and middle ear deafness. Since slow learning is frequently associated with these types, it is the parents' belief in their suspicions plus their persistence which often secures an accurate diagnosis. For these parents (3) and (5) prediagnostic pattern was that of a slow progression through health visitors, GP.s, clinics, and pediatricians to an Ear, Nose and Throat specialist. In the pursuit of a satisfactory examination four of the mothers of this sample complained of being labelled as "fussy mothers". It is significant that they were the professionally trained women. The tendency toward judgemental labelling of this kind has been correctly condemned by Mackeith, in a sensitive paper describing the wide range of natural parental reactions to a handicapped child (Mackeith 1973). It should not be necessary for a parent to defend his or her emotions about a child's handicap in the presence of professional persons. Three of the parents in this sample said they felt psychological help should be available for parents.

Ways of Helping Parents

Sheila Hewett in her study of families with handicapped children found that where mothers perceived the family doctor as helpful, it was not because of any specific action but based on three qualities

of the physician. (Hewett 1970).

the physician's ability to listen to the parent,
to convey understanding to the parent,
to convince the mother that they were working with, rather
than against the mother.

In this sample the parents rated the "concerned attitude" of the specialist staff rather than the G.P.'s. Invariably the parents in this sample were quick to recognise skills at their disposal once they had reached specialists.

It would seem that the invisible quality of deafness is particularly vulnerable to poor management below specialist level, especially in connection with poor hearing tests. Five out of six diagnoses were made by Ear Nose and Throat specialists.

Help and Information Services

Most of these parents saw medical specialists on hospital visits only and then very briefly. They depended on the local authority for all other services except the G.P.s services. All of them had been exposed to various forms of help and information.

Table No.2 Parents' Rating of Five Ways to Help Parents

	Parents with Experience	Order of Preference
Reading Books about deafness	8	4th
Watching a teacher of the Deaf work with the child	7	1st
Discussions with experts on deafness	8	3rd

	Parents with Experience	Order of Preference
Visits to local schools for the deaf	2	0
Meetings with other parents of deaf children	6	2nd

Visiting schools for the deaf had the least attraction, only two parents had made such a visit. In the course of interviewing it became clear that most of these parents were hoping for local schooling. Three people made it clear that they would have visited schools if a professional person had proposed this to them.

Watching a teacher of the deaf work with the child ranked as the most helpful experience for this sample. Eight of these parents had experienced more than one teacher of the deaf and recognised levels of competence. The parents explained the teachers failures in relation to their own children in two ways. First the child's age "There's not much you can do with a child that young" and second "They (teacher/child) simply didn't get along". That a specially trained teacher should be trained in ways of "getting along" with deaf children as part of the training seemed not to feature in the minds of the parents of this group. Specifically designed ways of training preschool deaf children in illustrated readable form such as Lassman (1950) or Groht (1958) were not known to this group. Books on deafness were rated fourth in order of helpfulness. This state of affairs seemed to indicate poor guidance on reading matter

for a group, eight of whom were skilled or professionally trained people.

Discussions with experts were rated third. Where teacher-counsellors had been encountered the men felt that they were made to feel responsible for the child's upbringing without practical demonstrations of child management. The women were better acquainted with the theoretical and applied aspects of educational guidance. Two felt that training sessions had been a waste of time for their own child.

Specialist Elements

In answer to the question about general help for parents of deaf children there were eleven responses. Six of these related to the superior quality of specialist staff, these included teacher-counsellors psychologists and house staff of centres for parents of deaf children. These comments correlated closely with comments of the helpfulness of specialist staff. Deafness is best managed by specialists at all levels is what these parents were saying.

Unhelpful Elements

In answer to the question of general unhelpfulness there were ten replies. Six comments related to organizational delay. Two comments related to conflicting educational advice and the general lack of knowledge about deafness drew one comment. One comment centred on too early contact with multiple handicaps associated with deafness.

Parents to Parents

In view of the rated helpfulness of parent-meetings the advice which parents gave to each other is significant. The most frequent piece of advice to other parents was to listen to as many sources of

information as possible, then select what is relevant to your own situation. The most frequently mentioned vehicle for guidance was the parent group. The parents of this sample recommended joining groups over any other form of help. On the basis of these replies, the special interest group approach to coping came off best. With respect to advice and information this group preferred more rather than less of both. It seems that parents are better prepared than we thought to deal with conflicting advice.

Communication Patterns

An attempt was made to obtain some objective impressions of the process of communication between parents and their children, in three respects. Questions were asked about style of communication before and after diagnosis: the direction of change consequent on professional advice about communication: and finally communication between child and strangers currently.

A list of eleven possible ways of communicating with deaf children was presented as follows:

- (1) Talking
- (2) Finger Spelling
- (3) Gestures
- (4) Drawings
- (5) Miming
- (6) Moving the child
- (7) Pointing
- (8) Writing
- (9) Showing him things
- (10) Sign Language
- (11) Any other way

Table 3. Patterns of communication before diagnosis by fathers

Father

- No 1 Talking+Pointing+Showing things to the child (easiest).
 2 Pointing (No easiest way).
 3 Talking (the easiest way) + Showing things to the child.
 4 Talking (the easiest way)
 5 Talking (the easiest way) + Gestures + Moving the child about +
 Showing things to the child

Only one man found that he could rely on talking alone to get the message across to the child easily. The child in this case had a conductive loss which was cured by surgery. For all the others Talking+Showing things closely followed by Talking+Pointing were the easiest ways to ensure the child understood the adult's intentions. Where gestures were used the parents made haste to stress that these were natural gestures approved by their advisors.

Father No 2 said there was no easy way of communicating with the child - he stamped his feet to get the child's attention. None of the fathers used any of the manual codes developed by and for deaf people such as Finger Spelling, Miming, or Sign Language. Ordinary means of communicating such as Writing or Drawing were not used at all.

Table 4. Patterns of communication before diagnosis by mothers.

Mother

- No 1 Talking+Gestures (easiest way)+ Pointing+Showing things to child
 2 Gestures+Moving the child about+Showing things to the child
 (the easiest way).
 3 Talking (the easiest way).
 4 Talking (the easiest way).
 5 Showing things to child (the easiest way).

Only two of the women found that talking was the easiest way to make themselves understandable by the child. As in the case of the men they employed combinations of showing natural gestures and pointing, together with speech to make themselves understood. In this respect the communication patterns of both sexes were identical.

Changes in Communication

In reply to the question "Did you change your way of communicating after you knew about the deafness?" two men reported changes in the direction of face to face conversation, visual emphasis and repetition. Four of the mothers reported changes after the diagnosis. One changed in the direction of increased exposure to sound. A second dropped the use of gestures and touch. The others changed in the direction of increased talking to the child on a face to face basis. All the parents were talking to their children at the time of interview, although the majority of them relied on denotative, physical actions to make themselves understood. It is difficult to estimate the value of these private "family" gestures in linguistic terms, as none of these families were acquainted with alphabetic based codes or formally structured sign languages. All of the parents hoped that by exposing the child to continuous spoken language the child would come to use spoken language. At the time of the study most parents had played a guessing game to understand the deaf child. As with pre-lingual hearing children, facial expressions, body language and tone of voice were the main clues to the child's state of mind.

The Children's Communication Patterns

Two of the children communicated by speech alone with both parents and strangers. These were (5) and (6) neither was severely or profoundly deaf. Of the others one had a few words to use with adults, but not unexpectedly they relied on gestures, pointing and bodily contact together with situational clues to communicate.

Generally the children's communication patterns reflected those of the adults. These had been influenced to a significant degree by experts in deafness in the direction of a face to face stance, increased talking and the use of amplification. Parental use of gestures is common. Barsch in a comparative study of the communication patterns of parents of variously handicapped children found that it was parents of deaf children who were high modifiers of communication. He noted two characteristic modifications: the use of gestures and insistence on eye contact with the children during speech (Barsch 1968).

It seems that hearing adults respond to the need to communicate with the hearing impaired child by inventing a range of personal dynamic actions in association with speech. These are modified according to the educational advice of professionals, in this case oralists. However, no instances of pure oralism i.e. speech alone were encountered. No examples of pure manualism were encountered either. Further study will show how typical the mixed type is.

The results of the pilot study showed that parents of deaf

children are more than willing to participate in this kind of research. The results also showed that it is possible to examine elements in the communication process in a systematic manner. The close relationship of parental communication styles and philosophy of parent guidance indicated that specialists are in a very influential position relative to such families. It is likely that parent guidance of a different orientation would have been equally powerful. The interviews with the pilot study families showed that damaging elements of services can be identified. On the basis of these results the interview schedule was expanded to permit the expression of negative and positive appraisal of all aspects of services. The pilot study was followed by a larger study in 1976. In 1977 18 deaf couples parents of deaf children joined in. Copies of the invitations sent to parents and a copy of the questionnaire are contained in the Appendices together with a detailed discussion of the sample itself.

Chapter 3

Theory and Practice.

The peripatetic service began in 1948 with a relatively simple brief beamed at the discovery of deafness and the organization of help. By 1969 it had accumulated all the paraphernalia of a hardware audiological orientation (Dalziel 1954, Fossey 1968, D.E.S. 1969). The writer argues that this reflects the dominance of hardware in parent guidance in teacher training departments. Methods of helping parents are deliberately non-didactic, participatory and informal (Blackstone 1971, Blyth 1965). An Oxford Research team found none of the groups they studied had a home teaching component as do many American programmes (Smith 1979). Though the peripatetic service is seen as valuable, the parents themselves feel underestimated and underchallenged (Shephard 1973, Periere 1963). Hall noted little movement toward a systematic body of thought on Parent Education (Hall 1973). The evidence points to confusion of thought and practice at the preschool level, with no satisfactory definition of audiology among these teachers (D. E.S. No 6 1969). The writer submits that where the teachers are confused the parents are likely to be confused also and this works against the best interests of the children. This situation reflects the lack of structure in the training of teachers of the deaf and in classroom practice (Magnor 1956, Robson 1963, King 1978).

"There is in fact an extraordinary dearth in the literature of any information about the preschool experience of deaf children; they appear to have sprung into life ready-made, ready-matched with hearing controls, in uniform batches of school age children" (Dinnage 1972)

The Lewis Committee noted a lack of information about preschool deaf children and their early communication media. The Report recommended that a study should be done in which parents could describe the media of communication used by their children in different circumstances and tell something of the early communication processes between parents and children. (D.E.S. 1968). In 1974 there were three significant studies of parent guidance and home training as it was practiced at Manchester (1952-55)

These were:

- to assess factors in successful guidance and home training
(Watson 1953);
- to assess the effects of hearing aids on home training for preschool deaf children
(Pickles 1957);
- to study the Mental Development of preschool deaf children
(Kendall 1953).

The objective of the parent guidance, according to Watson, was to get the parent into an active talking relationship with the child. Watson measured progress by two capacity scales derived from Gesell's developmental scales. Of 112 children under three Watson found half were profoundly deaf (80 decibel loss), the other 50% were severely deaf (65 decibel loss). Speech performance counts showed all the children who could understand up to 10 words had less than 65 decibel loss. These subjects had no hearing aids. Linguistic development was conceptualised only as speech development. None had more than twenty expressive words and none had begun to talk. Parent Guidance sessions were organised on an informal basis in groups or one to one. Watson's discussion indicates that parents who asked questions about linguistic development (speech) were judged as having grasped the basic principles of guidance. Parents asking questions concerned with discipline or social consequences of deafness were judged as having less grasp of the guidance principles. The quality of the parent rather than the quality of the guidance appears to be the critical factor in Watson's account (Watson 1953).

Between 1952-55 Pickles exposed a similar group of preschoolers (age up to 36 months) to very loud sound. Parent guidance included the skills of the broadcasting studio. Predictably it was the partially deaf who learned to discriminate speech on the powerful group aid. 15 profoundly deaf children responded to sound at the limits of the machine (120 decibels) but only one could discriminate vowels. No child reached the 21 month level on the Gesell scale (Pickles 1957).

Kendall investigated the mental development of 392 deaf and 392 hearing controls. He found that deaf children displayed many behavioural difficulties in spite of the home training and early parent guidance. He reported that deaf children exhibited more social withdrawal, sleeping irregularities, temper tantrums, over dependence, and extended toilet training than their hearing peers (Kendall 1953). Caplan and Gregory show similar results (Caplan 1955, Gregory 1974). More importantly none of the five year old severely or profoundly deaf group had attained the speech standards of the average hearing child of two. Kendall noted widespread use of gestures even though earlier guidance had prohibited gestures (Kendall 1953). Kendall observed that the referential use of gestures was rare and only reached the symbolic level in families with deaf parents, none of whom were included in the research sample.

This continues an earlier trend noted by Hood. He found school age children with high intelligence and zero vocabulary scores (Hood 1949). Gaskill using the Watts oral language development scale found that the three pupils (out of 400) ahead on all measures were privately tutored. Out of 64 children, 21 failed to reach 4 year old standards. Of the 65 pupils in the grammar school for the deaf, the partially deaf and those who had gone deaf made the best

progress in school subjects (Gaskill 1952). A followup study by Sanders of children exposed to early guidance showed minimal gains, he concluded parents had not understood the importance of the hearing aid in speech development (Sanders 1961).

These studies of school age children showed that early parent guidance carried out in the clinic failed to transfer to the home and school situation. A close examination of Watson's and Pickles' accounts suggests that the clinic did not generalise its guidance into the homes of the families. This writer takes the view that the clinic workers underestimated the difficulties that parents encountered in the complexities of the domestic situation (Botting 1976). In "Speech and the Deaf Child" (I.R.Ewing and A.W.G.Ewing 1954) the Ewings expressed the view that it was not possible to pass along the specialist skills to parents in a guidance clinic and confined the role of the parents to that of providing a "talking environment". In subsequent literature they continued to talk about "expert guidance" as though it was a characteristic of the field. Much of the evidence of this study points to lack of training in skill transfer and overgeneralizations drawn directly from the Ewing texts.

Of those involved in the 1950's studies of guidance and home training Kendall was the only worker who visited the families at home. In a later set of observations of deaf children in unselected families in rural areas he found these families experienced the same class of problems he had identified in his University population; behavioural and management problems and communication difficulties, plus in some cases difficulties in travelling to and from services. The generic problem in all families was the breakdown of communication caused by deafness. He noted that this was slightly modified where parents were nicer, more tolerant, more insightful in their handling of the children or in a small family. Kendall took the view that "Many parents saw correctly that the difficulties sprang from situations frustrating to the child - unable to communicate by speech" the parents also could not communicate by speech and felt unequal to the task of teaching their child to talk. Kendall cautioned professionals against the *a priori* use of stereotyped terms such as "good" family and "bad" family to account for the failure of the child to learn. He concluded that:-

"Advice that was given in the clinic or centre did not seem to the parent to lead to a reduction of problems of behaviour and management, nor did it seem to be followed by a development of communication that was adequate to meet the child's needs in his home environment"
(Kendall 1960)

Kendall went on to say that advice to be effective must be seen to work: that is, it must reduce the effects of the disability. He cautioned against assuming that the professionals' way is best

and suggested that most problems are capable of resolution if we ask the right questions in the right way (Kendall 1960). Kendall's conclusions and recommendations marked a departure from previous investigations centred on questions of amplification and speech. In 1964 the Carnegie trust conducted a series of unstructured interviews with parents of deaf children in their homes. The report confirmed Kendall's findings: Communication is the major problem (Carnegie Trust 1964).

The design and intent of the present study was greatly influenced by the above studies and the writer's experience and professional training: From the Manchester course the writer had an understanding of the philosophy based on amplification (Auralism) and from the John Tracy Clinic (Los Angeles) had an expertise derived from the physiological tradition of Pereire. Additional experience of generalising clinical work into the home setting proved to be advantageous (Botting 1976). Private tutoring in America and Europe had provided a wide experience of parents of different social and financial backgrounds. This experience buttressed the writer's belief that in the presence of the massive communication gap presented by deafness the parenting role dominates social class divisions. Therefore this writer made no attempt to search for social class effects on educational achievement. The writer was influenced by the Meadow's thesis which was supported by her experimental results (Chapter 1). The writer does not belong to that school of thought which treats interview data as deceptive, but is inclined to accept the Popperian perspective of science as being close to the common sense perspective (Popper 1977). For example: it is not common sense to go to the trouble of interviewing parents of handicapped children, interpret the results on the basis of chronic doubt in the validity of the raw data and then admit that the investigator could have reached the same conclusions without collecting any data at all (Yosey 1975).

The purpose of the survey was to provide much needed information about communication modes used by parents and preschool deaf children. Another objective was to relate the patterns of communication to the educational guidance that parents had received. With no tradition in this area, the first step was the construction of an interview schedule which would be acceptable to parents and elicit the necessary facts. The need to include the viewpoints of non-oralists on the subject of how deafness is to be managed by hearing parents led the writer to investigate a chain of small but significant reports of British investigators which bear on this question.

In 1958 Perry-Robinson (an independent journalist) carried out a six month investigation of the state of deaf persons in the U.K. He listed the salient features of the conditions of the deaf as follows:

Neglected Status of the Deaf.

1. A failure to followup the large and increasing expenditure of public money on deaf education by adequate provisions for the care of the adolescent deaf.
 2. Absence of authoritative information (statistics) about numbers, types, habits, and the social and economic conditions of the deaf.
 3. A widespread conviction that radical educational reform is needed, but a startling lack of agreement on what sort of educational reform is needed.
 4. Wide discrepancies in the deaf teaching profession in respect of training and performance.
 5. High hopes and expectations of a small group of scientists and doctors of recent advances in clinical treatment and residual hearing.
 6. A tendency for the medical professionals to take the law into their own hands and to lay down the law about the care of the deaf, including their education.
 7. Scantiness of adequate research on many fundamental aspects of deafness.
 8. Dissentions and jealousies among organizations working on behalf of the deaf.
 9. Zeal and devotion in evidence, but not enough protection for the deaf from exploitation by a self seeking majority
- (Robinson-Perry 1958)

Vestigial and less than vestigial remnants of all these features impinged on the Lewis Committee and on the progress of this survey and were responsible for certain constraints which made the study less than perfect. The Lewis committee itself articulated the constraints which apply where young children are the object of study; "that no child or his parents should be deprived of services for experimental purposes." Systematic survey, tape recordings and direct observation was the chosen method of study(Para 304 , The Lewis Report 1968). There was opposition from the oralist descendants of those oralists who opposed the 1948 experiment described by Sir Richard Paget (see Hodgson 1953. Gorman & Paget 1966). There was opposition from medical practitioners of the kind described by Perry-Robinson.

The Medical director of the Manchester Department of Education of the Deaf had objected to the terms of reference of the Lewis committee on principle (Taylor 1971) and also to data from this study. Taylor and Gaskill in a note of "Reservation on School Experimentation" expressed the traditional oralist view that "experimentation with manual media of communication in schools for the deaf should, in our view, be discouraged" (Lewis Report 1968). In 1980 Taylor expressed the view that when deafness is treated by early diagnosis, adequate hearing aids, and skilled parent guidance "all the arguments about methods of communication seem to be irrelevant when the children are listening and speaking without need for any augmented means of communication" (Taylor 1980). This is logical but all the evidence points to the fact that deaf children are failing to "listen and speak" (Hood 1949, Kendall 1952, Pickles 1957, Watson 1957, Johnson 1962, Hemmings 1972, Kershaw 1972, Goldin-Meadows & Feldman 1975, Greenberg 1980). An important sub-goal of this survey was to confirm or deny Professor Taylor's hypothesis.

Medical objections to data on deafness collected by members of non-medical disciplines appears

to rest on the assumption that parental statements of problems are valid only when recounted to a medical doctor but not when reported to a non-medical listener. Objections to this kind of chauvinism have been raised by Denmark, a psychiatrist for the deaf who pointed out that Fisch (an ear, nose, and throat specialist) objected to sign language because it is easier to learn (Denmark 1972,1973). In 1975 Denmark stated that the majority of deaf patients at the Whittingham Psychiatric Hospital did not suffer from formal mental disorder but were suffering from the effects of education by the oral method which left them with no communication skills. He was admitting young deaf persons for medical treatment which consisted in teaching them sign language. He felt the problems of these patients could have been prevented if sign language had been used in the preschool years (Denmark 1975). His conclusions are identical with those of a large scale mental health survey of deafness in the USA (Altshuler et al 1976).

Input from the deaf community into the educational system surfaced in the work of Dr Pierre Gorman, a congenitally deaf research worker who completed the Paget Systematic Signs in co-operation with Lady Paget (Gorman & Paget 1966). Gorman also raised the fundamental question of the emancipation of the deaf in the U.K. by questioning the assumption that hearing people can dictate the type of socio-linguistic environment in which deaf people live (Gorman 1966). Gorman's 1960's research demonstrated that all families irrespective of social class are unprepared for the birth of a deaf baby (Gorman 1960).

The most useful text on the construction and design of schedules proved to be "Sampling methods for Censuses and Surveys" (Yates 1960). The writer followed his recommendations: the design of the interview schedule involved much consultation with parents of deaf children themselves. The writer was able to draw on past experience with families and on the experiences of the staff of the National Deaf Children's Society. The Society loaned a copy of Gregory's study of families of deaf children which highlighted the continuing existence of established problems. A small study of 19 families by Worthington presented evidence of continuing problems in families (Gregory 1974, Worthington 1974).

Following other recommendations of Yates, the initial interview schedule was based on the concept of a narrative dealing first with questions of a factual non-threatening nature (name, birthdate, age) before probing controversial issues relating to communication. This allowed parents to tell their story from the beginning (first suspicions) through the process of diagnosis and management. Discussions with parents showed that the five most important stages in chronological order, from the parents point of view are:-

1. First Suspicions, diagnosis and guidance.

2. Hearing aids, other kinds of amplification and use of same.
3. Educational services, child's progress, communication difficulties.
4. Alternative sources of help and information for parents.
5. Impact of medical, educational and welfare services on the parents.

In the initial design these five areas were explored by means of 26 questions with subsections, in a format suitable for computer processing.

The Pilot Study

The pilot study showed the need for a wider range of responses in order to obtain a more sensitive fit for the parent's experience. The pilot group was involved in discussion of the original and revised format. For this reason the pilot study results have been tabulated and published separately and appear in this thesis as Chapter 2. The historical development of parent guidance is discussed in some detail. At this stage the hypothesis that a mixed form of communication would be typical of such families was formulated.

Developing the Interview Schedule.

The refinement of the schedule was greatly eased by the reading of an American thesis by the parent of a deaf child which demonstrated it was possible to lay out many of the open ended questions in the form of multiple choice responses, thus leaving no areas unexplored (Fellendorf 1974). The multiple choice format also made the schedule easier to complete for the interviewer. 90% of the questions can be answered in a factual manner. The final 10 questions are open ended questions which give parents the chance to amplify or modify earlier statements and to evaluate the study itself.

The writer is aware of scepticismⁱ about interview data gathered from mothers (Radke-Yarrow 1963). To combat the charge of subjectivity this study included independent interviews of both parents which permitted cross validation of completed schedules on the same child. Fellendorf cross validated parent responses with data from institutional records and found good correspondence. He concluded that parents are reliable reporters of facts relating to infantile deafness. British Medical Association ethics did not permit this author to access medical records on English samples. Fellendorf recommended personal interviewing on the grounds that the parent's willingness to co-operate may be enhanced by the person/s conducting the study (Fellendorf 1974). This supported the recommendations from Yates (Yates 1960). In the preliminary exercises the schedule was tried out as an oral interview and as a self

administered questionnaire. It appeared equally effective in both modes, always providing that it was completed by the target population, that is parents of preschool aged deaf children. This accords well with the results of a methodological study of interviews and questionnaires which showed that for adults the interview and self administered schedule are interchangeable (Bill 1973).

A final question tested to see if the interview had covered all the important areas. The interviewer felt that the schedule could be applied with confidence to the target population and replicated in future. In its final form it consisted of 100 questions distributed over five areas of service (Appendix III). Table 102 shows the distribution of questions in detail (Appendix II).

Contacting the Parents, practical difficulties.

Ideological obstructions in the way of objective studies concerning the management of infantile deafness in Britain can be avoided by using a variety of channels to access the target population. There are practical difficulties also. Deaf infants and toddlers are simply not visible. Typically they attend the same nursery schools and playgroups as the neighbour's children. The researcher who seeks a genuine sample of preschool aged children must be prepared to wear out cars and shoe leather. Previous workers have documented the labour intensive nature of genuine preschool studies (Hall 1973, Meadows 1978, Schaffer 1977, Yosey 1975). The preschool period passes quickly and potential subjects rapidly become school age children as the field work progresses. The present writer found it helpful to interview in one area as soon as possible after invitations were returned. Envelopes contained the description of the study the return slip and a stamped addressed envelope to the Department.

The invitations were delivered to parents via two agencies. The medical officers of area health authorities sent out invitations to families listed as having a deaf child and the Secretaries of the National Deaf Children's Society did the same. Each type of agency introduced its own bias which will be discussed in detail. Eighty invitations were sent out by the medical officers. This resulted in 42 interviews (a contact rate of one out of two). Followups on non-respondents was not possible as the medical officers did not reveal the names of families. Parents were interviewed in the area health authorities of Hertfordshire, Middlesex, Berkshire, Buckinghamshire, and Oxfordshire.

A second batch of 271 invitations was delivered by the 61 branch secretaries of the National Deaf Children's Society. These secretaries are parents working for the organization from their

own homes. Table 96(appendix 1) shows the response of the local branches. Approximately 50% of the secretaries forwarded the invitations in time.

The 18 deaf parents of deaf children were contacted by a special introductory letter from a social worker for the deaf. This special form of contact was needed because no truly deaf parents were uncovered by the other methods. By this contact parents were interviewed in Avon, Cheshire, Inner London, Greater London, South Coast areas, Lancashire, Manchester, Sheffield, the Midlands, Nottingham, and the home counties.

Possible sources of bias.

1. Medical opposition to this study. This is a direct result of the controversial nature of the subject. In consequence many parents did not receive invitations even though the otologist had lists of preschool aged patients. Dr. Fisch (a community based otologist) overruled the area health doctors who wished to co-operate in the West London Area. Parents in those areas were contacted by the National Deaf Childrens Society but it is possible that the full population of possible respondents was missed.

2. Overenthusiastic canvassing of all parents by N.D.C.S. officers. The National Deaf Childrens Society exists to promote the welfare of all deaf children. There is a central office in London, but the local branches depend on individual parents functioning out of their own homes to take on various organizational roles. Some branch secretaries simply canvassed every member of the branch. As a result some 56 parents of older deaf children were interviewed. All the additionally handicapped children came from this group.

3. Opposition from Peripatetic Teachers of the Deaf was not unexpected as some perceived the writer automatically as a manualist. One leader of a teaching team felt that the study could not be valid as it did not originate from Manchester's University Department of Education of the Deaf. Many hardworking teachers in the field were simply afraid the study would reveal their personal shortcomings.

4. Prior involvement of the target population in the Warnock committee study may have drained off some of the population. The Warnock interviewers had already started to interview parents in West Glamorgan, Hampshire, Suffolk, and Sheffield. Some of these families were families with deaf children. One mother wrote to explain this and also filled in the interview schedule and posted it back together with several pages of additional information. Many parents wrote lengthy letters before the interviews. It is possible that other parents were also involved on the

Warnock studies and that precluded them joining in this one.

5. The most obvious bias in the sample concerns the lack of deaf parents. Methods of contacting hearing parents simply do not yield deaf parents of deaf preschool children. An attempt to remedy this situation by contacting Mr. Hayhurst the General Secretary of the British Deaf Association. He referred the writer to Miss Clare Brook-Hughes at the Department of Health and Social Security. Miss Brook-Hughes had carried out the survey of deaf school leavers for the Lewis Committee and was familiar with the difficulties of getting an unbiased sample (D.E.S. Lewis Report 1968). The writer learned that there was no central register of deaf persons. Miss Brook-Hughes suggested Social Workers for the Deaf would be the best contacts. A senior social worker for the deaf from the Royal National Institute for the Deaf wrote an introductory letter which was sent out to 12 families. Nine couples replied. This resulted in 18 completed interviews. The ingredient which involved these parents in the study (personal contact) which also biases their data. It was treated separately to the rest of the data.

Pre-Interview Procedures

Parents had to fill in and send back an acceptance slip to the department. The Author usually phoned to confirm an appointment. Where no phones existed a letter offering a firm appointment was sent off and followed up by a visit. Care was taken before the interview to read all correspondence from the parents. Queries about the study - who was doing it and the purpose of the exercise - were dealt with before the actual visit if at all possible. Parents were assured of confidentiality in word and in writing. The writer also tried to make it clear that she had no influence over the fate of any individual child.

The Interviews

Most interviews took place in parents own homes, in the evening when both parents were present. The men were interviewed first on exactly the same schedules as the women. This is a departure from the studies discussed so far which mostly involved mothers. The author expected this order to maximise the information from the father, independently of the opinions of the mother. A quick analysis of the "don't know" categories confirm this opinion. There is evidence which suggests that where the husband plays an active role there are noticeable beneficial side effects on women and children (Kendall 1960). These would occur, if at all, after the data was collected.

Each spouse was given a blank interview sheet so that they could read along with the

interviewer who wrote and also taped the interviews. This gave the parent the advantage of being able to see the multiple choices at a glance. They could also see how successive questions were related to each other within the schedule. Tape recordings were permitted in 58 homes (90%). Generally the interview material, the tapes, and direct observations corroborated each other. The content of letters which came in before the interviews was similar to the data gathered by the questionnaire. Many parents checked their answers against their diaries, appointment cards, baby books, and other independent documentation including audiograms.

The author had intended to record samples of the children's speech as part of the data gathering process, but the majority of the children were without speech.

One advantage in meeting parents in their own homes is that they feel at ease, they have control over the situation and they feel free to talk. The interviews took much longer than expected. Very frequently the writer/interviewer spent the entire evening at the house. This was an unexpected aspect of these visits and should be noted for future replication. Proper names were removed on all interviews and tapes were coded to preserve anonymity. The arbitrary letters of the code refer to the sequence of blanks that came from the print shop, the numbers refer to the sequence in which parents in a given geographical area were interviewed. To further preserve anonymity all references to children by name were also removed. This resulted in 105 complete interviews.

The most outstanding characteristic of these parents was their almost total ignorance of deafness prior to the advent of their deaf baby. Frequently both mothers and fathers commented on the ignorance about deafness in the general public of which they themselves had been unthinking members a short time before. The families were striking in their commonsense approach to family life and in general outlook. It was only as the interviews progressed that the reality of coping with the deaf child emerged. Many parents stated that their reason for joining in the study was to benefit future generations of parents faced with the same problem.

Processing to Insure Lack of Bias in Sample

1. Direct interviewing of parents of children whose children had another handicap in addition to deafness showed schedules were suitable for dealing with information about deafness not other disabilities. Interviews with parents of deaf children with additional handicaps were incomplete and unuseable. In some cases the parent broke down and the formal interview was abandoned. In others the picture which came to the interviewer was that of a bewildering diagnostic roundabout. These were discarded from the sample.
2. Interviews of parents of older children showed that the schedules were more appropriate for younger children. These were discarded from the sample.

3. The possibility of bias and the small number of deaf parents precluded using the data from these interviews. The author noted such marked differences that they could not be grouped with the others.

The Sample

The bulk of the data comes from interviews with 105 hearing parents of preschool deaf children (see Table 98). The interviews with the deaf parents has been presented in its own right in the last chapter. Forty-one sets of interviews came out of families where both spouses were interviewed separately on the same schedule. Of the remaining single interviews 20 came from women and three from men. Two men and two women were divorced. One woman was separated. Twenty three single interviews took place because the husbands were away from home at work. Twelve men worked long hours in manual trades on a daily basis. Two husbands were reported as being away out of the country or in London on a weekly basis. In only three cases did the interviewer encounter a situation where the wife attempted to involve a husband who was physically present but psychologically absent. Where spouses had separated permanently the present spouse claimed that the deaf child had contributed to the separation.

A preliminary analysis of the single interviews reflected the pattern of interviews of couples. They were passed through the same analysis as the couples.

All but two of the children were the biological issue of the current marriage. Only three mothers were over 40, which is to be expected in a sample of parents of preschoolers.

Family Size.

In spite of the round-a-bout process of obtaining a sample - these families were amazingly typical. Table 101 (Appendix I) shows a typical family size of two children per family. Thirty families were nuclear type consisting of a father, mother and children living under one roof. The families had a total of 126 children. 50% of these(64) were preschool deaf children. Two families had two deaf children each. Two more families had three deaf children each. This yielded a grand total of 70 deaf children (of all ages) out of 126.

Two fathers claimed to have lost hearing by industrial noise. Three mothers claimed hearing loss. One claimed deafness ran in the family. All had normal speech and language and all had proceeded through the normal educational system. There was no deaf mutism in this group.

Social class was determined by the Registrar General's Classification of Occupations (1970) with the husband's occupation as the determining factor (see Table 102 in Appendix I). Four men only were not classified due to insufficient information on that point - one was unemployed. Social Classes I, IV and V were under-represented in comparison with that of the general population, but this is not without precedent. Gregory using the Classification of Occupations 1960 found a similar skew. An analysis of the mother's occupation before marriage showed 13 (21%) were in Intermediate class which shows good technical training.

Partial explanations exist for these skewed distributions:

1. Non-respondents may belong to families who cannot take the responsibility for returning the stamped addressed envelope back to the department. Gregory suggests these families may come from the lower classes. This may be at work in this sample also. However the general trend towards greater distribution of skills throughout the population is reflected in the revised classifications of 1970. This may indicate an overall reduction of the unskilled social classes (IV and V) within the population as a whole.

2. The underuse of infant welfare clinics comes from the Court Report which discovered a 15 year record of non-attenders in Social Classes I, IV and V (Court Report 1976). The children who do not attend these clinics may never appear on the area health authority registers and so never receive invitations to join in research, where those invitations are delivered in that way.

4. Families from I, IV and V may be underrepresented in the National Deaf Children's Society and miss invitations to join in research sent out that way. Evidence from interviews with manual workers suggested that one or two manual workers especially those without cars were hampered by this lack of transportation and experienced a subjective sensation of disadvantage when they went to branch meetings and so ceased to attend.

These are only partial explanations which attempt to explain the skewed pattern of takeup of invitations. The Court Report suggested that more research into consumer attitudes be undertaken in order to ensure a better takeup of services and greater co-operation between parents and professionals.

A Special Case

An attempt was made to include deaf parents of preschool deaf children in this survey. When it

became clear that methods of contacting hearing people do not uncover deaf parents, special means of contact were used. For this reason the results of the deaf parents interviews are included separately. There were only two preschool deaf children in this subsample so results cannot be compared statistically. In addition the interviews with deaf adults were conducted slightly differently to the main sample interviews, i.e. each deaf adult received a schedule before the date of the interview to read and understand. The writer intended to deal with any misunderstandings before recording answers. What actually happened in five families was that the husband filled in the schedule and insisted that the "wife" felt exactly the same as he did on every point. Interviewing these wives involved a struggle to explain the purpose of the research project and the need to know how each spouse felt. The results justified the effort. The data from these interviews indicate the presence of a rare concordance of attitudes between deaf spouses on those aspects of child rearing vital to the mental welfare of the child, such as communication, socialization and speech development. Direct observation of parent-child interactions in these families showed high levels of reciprocity between children and parents, independent of the hearing status of the child. Other workers have observed this mutuality in deaf families (Moore 1980, Meadows 1967) and suggested that further study is needed to benefit hearing parents faced with rearing deaf children. The data from this study suggests that hearing parents would be willing to learn from deaf parents if appropriate channels of communication could be established.

Statistical Techniques Used

The writers intention was to take the data and use simple tables, histograms, graphs, descriptive statistics, and tests to tease out patterns in the communication of families with deaf children.

Very little of the data was thrown away. The 56 interviews with parents of school age and children with additional handicaps were put to one side. All completed schedules with parents of preschool deaf children are included (N=105). Each interview was treated as a discrete event without *a priori* assumptions regarding the sex of the respondent. A preliminary analysis of the data from single parent interviews (N=23) showed them not significantly different from the others and they were included in the main sample. Data from 18 deaf parents was different and is presented without statistical analysis in the last chapter.

Each question was summarized into tables or histograms. Most of the variables are nominal. The majority of tables were sorted in order of decreasing frequency. Where the variable was a quantitative (time delays & ages) the usual measures of central tendency have been calculated

(mean, mode, median) plus the standard deviation. Simple tests of association were used to test hypotheses: chi-squared (without Yates correction) was sufficient in all cases except one (speech development). In that case there were so few observations in some cells that the exact probability of the table coming about by chance could be calculated by Fisher's Exact Test. Where p was less than 5%, Yule's coefficient of association (Q) was calculated and a 95% confidence interval established (Moroney p. 264). This is a simple correlation coefficient.

In the absence of comparative studies of the communicative behaviour of deaf children and their parents the results are no more than suggestive of tenable theories. The 10% level shows that observed figures were unusual but that a wait and see attitude is appropriate. At the 5% level it is unlikely that chance alone is at work. At the 1% level of significance it is assumed that this event could not occur by chance. Replication of the study is essential especially on the speech and communication items since these were the central issues of the survey. Where the raw data was subjected to the above tests this procedure confirmed observations obtained by straight forward comparisons with measures derived from Gesell as in the Watson, Pickles, and Kendall studies. They showed that profoundly deaf children do not acquire speech beyond the level of a few words. The negative association between speech and gestures also needs further testing.

Very few parents have any experience of sign language or of finger spelling. When asked about learning these means of communication parents showed a strong tendency to learn anything if it would help the child learn the English language. This strong desire stands in need of a specific training programme designed to bridge the communication gap. Services beamed at the deaf infant rely on the parent for implementation. These services stand to benefit most by incorporating feedback from parents into future services. This principle is based on the assumption that people matter in a society where personal medical-social and educational services are a public priority. It was confidence in the value of such feedback that motivated parents to participate in a long and detailed interview. Most of these parents are unaware of the history of the deaf, they joined in this study to share their experiences and thereby help future families, for the writer, their generosity more than dwarfed the academic aspects of the study.

Chapter 4

PARENT/S' EXPECTATIONS AND SUSPICIONS

Clearly a study of the parents of young deaf children would be incomplete without some basic information about the causes and degrees of deafness. It is important to know if children were born deaf or became deaf and at what age. The first set of questions were designed to elicit this kind of information.¹

In order to be included in this study every child had been diagnosed as having some degree of deafness at some point in his life. 82% of the children (53) were eventually found to be severely or profoundly deaf. The remaining 11 children eventually proved to be partially deaf. These children are usually described by the more popular term partially hearing. a term which places emphasis on the fact that they have useful hearing for speech.

It is those children with none or very little hearing for speech which present real communication problems for the parents and the education authorities. In the beginning the infant may appear to be very deaf, and for this reason the term deaf rather than "hearing impaired" is used throughout. following the precedent set by Gregory in 1974. The National Deaf Children's Society also uses the term "deaf" to describe all children for whom their deafness constitutes a handicap.

All the information in this study shows that for these children and their parents, the child's inability to hear formed a very real barrier to communication and prevented the natural learning

1. Appendix III Questions 8-14

of spoken language.

The first tests of the babies' hearing depend heavily on the infant turning his head to look for sounds made from behind. From the results of these first screening tests the parents knew that 62 out of 64 children did not hear normally in both ears. For both fathers and mothers this news constitutes a shock and questions No 8 and No 9 were designed to assess the degree of shock in the context of parental expectations of deafness and knowledge of the causes of deafness.

Table 5. Parental Expectations of Deafness

		Mothers	Fathers
NO Expectations	Total	51 (83.6%)	38 (86.4)
No family history of deafness		23	27
None		14	2
Normal Pregnancy		6	3
No Signs of deafness		2	1
Treated for Maternal Rubella		2	1
Assumed O.K.		2	2
Parents did not consider their deafness		1	1
Child born hearing		1	1
SOME Expectations of deafness	Total	10 (16.4)	6 (13.6)
Maternal Rubella		7	2
Rubella? Meningitis?		1	1
Older Deaf Child in family		0	1
Cytomeglia Virus		0	1

Table 5 cont'd

SOME Expectations of deafness	Mothers	Fathers
Hereditary	1	1
Diabetes/Caesarian delivery	1	0
GRAND TOTAL	61	44

Table 6. Reasons for deafness in Preschool children

No Explanations	total	11
Rubella		16
Cytomeglia		2
Maternal Influenza		2
Toxemia		1
Rhesus Incompatibility		1
Threatened miscarriage		1
Placental insufficiency		1
Non specific "troublesome" pregnancy		1
Total Maternal Diseases		= 25
Prematurity		4
Caesarian Delivery		3
Difficult Labour		3
Delivery Method		2
Forceps Delivery		1
Total Birth Traumas		= 13
Hereditary Deafness	total	12
Trauma (post natal)		4
Meningitis		2
Other		2
Total Post natal		= 8

N.B. Five children appeared in more than one category. These children all had traumatic births with associated anoxia, feeding difficulties, underweight, periods of incubation etc.

The results of question number eight show that 85% of hearing parents simply do not expect to have a deaf baby. This included two parents who had not been informed that their deafness was hereditary before marrying. The tape recordings show how this can happen.

D.14 Father of 3 year old profoundly deaf boy

"We never realised the true cause of my deafness. My mother thought it was an accident at birth". This man was the carrier of a visible deafness syndrome. which resulted in profound bilateral deafness in the child. At the other extreme the two parents who shared common grandparents and had a known hearing loss were the only people in the whole sample who actively explored the possibility of passing deafness along to their children. The difficulties of accurate predictions in this area are well illustrated by this comment from the father.

C32. Father of two deaf children

"When we decided we wanted to get married we did seek advice on it actually. We were told we'd got no more chances of having children that were deaf than people who were unrelated" Following the birth of the two children a geneticist gave them the same advice.

Absence of a family history of deafness is the most often quoted reason for not expecting deafness amongst the hearing

parents. This and the fact that deafness is an invisible handicap contributes to the parents perceiving and treating the baby as a normal infant in every way.

For 51 mothers and 38 of the fathers this was the sort of situation out of which suspicions formed and an eventual diagnosis of deafness emerged. These parents experienced the greatest shock and found it difficult to accept that the child could not hear. Three couples were in the position of learning about possible deafness through routine testing by Health Visitors.

A.17 Father of a profoundly deaf girl aged 4 years. 4 months

"It is very difficult with a deaf child to realize how much their loss is. If you want to see that they hear you see that they hear. Because they don't show any deafness in any way (its) invisible...Its subjective."

When his child was tested in a routine manner by the family health visitor his wife said that she "screamed and cried" when the Health Visitor told her the child was profoundly deaf. In her interview the wife described evicting the Health Visitor from the house and apologising later (When a definite diagnosis was obtained).

12 babies were expected to have something wrong with them by their parents. These parents were actively observing the new baby. This expectant attitude was associated with Maternal Rubella in 8 cases. The other four cases included deafness following meningitis, blood transfusions, Cytomeglia, and an older deaf sibling. For these parents each routine testing was anticipated and closely observed.

C.43 Mother of a profoundly deaf 4½ year old girl

"I knew that I had had Rubella and I looked for something as soon as the child was born."

Her husband had shared her anxieties and expectations.

C.42 Father

"Although our G.P. diagnosed food poisoning rash, my wife had been in contact with Rubella and we looked for something from the moment she was born"

Table 7. Delay between parent's suspicions and the first test of hearing. (64 deaf children).

Zero	20 (31%)
1 week -under one month	9 (14%)
1 month " three months	8 (12%)
3 months " six months	8 (12%)
6 months " twelve months	8 (12%)
12 months " 18 months	4 (6%)
18 months " 24 months	1 (2%)
Over 24 months	2 (3%)
Tests before suspicion	3 (5%)
Tests and suspicions	1 (2%)

Of those parents expecting a handicap none waited longer than 2 months before suspecting deafness and getting a test done. This does not mean that the expectant parent gets a diagnosis of deafness immediately. The same range of delay occurred for the 16 cases of post maternal rubella as for the others.

Table 6. . Delay between 1st suspicions and diagnosis

	Number
Queries	4 (1 = rubella)
0 - under 1 month	1
1 month - under 3 months	9
3 months - under 6 months	8 (2 = rubella)
6 months - under 12 months	21 (7 = rubella)
12 months - under 18 months	11 (3 = rubella)
18 months - under 24 months	5
24 months - under 36 months	5 (3 = rubella)

In spite of early suspicions and prompt referral for testing three cases of maternal rubella type deafness were not confirmed until 30 months after first suspicions. In a study of 80 deaf cases Borton and Stark indicate the difficulties of differential diagnosis. Out of 80 cases they found that "hearing loss was the last congenital defect to be diagnosed in the majority of cases" (Borton and Stark 1970). The authors suggest that deafness may be less readily recognized than "other congenital defects considered to be part of the rubella syndrome and therefore escapes early diagnosis". One couple who knew about the rubella set about looking for blindness from the moment the child was born.

In this sample 54 children (84.4%) were first suspected of being deaf within the first year of life. This left 10 cases who were first suspected of deafness between 12 month and 4½ years old. De Swainitz, Miller and Miller's study of delays in diagnosis of deafness in 48 preschool deaf children showed only 40% were

Certainly at the time of interview there were five fathers not able to recall first suspicions who also were unable to accept the child's deafness. This difference did not apparently prevent the suspecting spouse from following up suspicions one way or another. It is likely that real delay occurs where both parents will not deal with their suspicions by presenting the child for examination at the proper times. De Swainitz et al comment that fathers may find more difficulty in accepting handicap because they have less contact with young babies.

Following a definitive diagnosis of deafness which involves testing and giving a medical history and perhaps consulting a geneticist as well, parents are usually better informed about the nature of deafness.

Table 6 shows that only 11 (10.5%) of parents remained without some sort of explanation for the deafness.

The results of this sample are comparable with results of a survey of 260 families with deaf children in the U.S.A. by Fellendorf and Harrow.

That data shows that parents are the primary detectors of infantile deafness in 70% of cases. In 54% of cases suspicions were aroused in the first year of life. As in this study parent's suspicions were based on the baby's lack of responses to everyday household noises. These families were a random sample of thousands who had contacted the Alexander Graham Bell Association between 1961-1968. Fellendorf and Harrow looked for trends but found no evidence to indicate any appreciable changes in the way parents were advised over the years (Fellendorf and Harrow 1970).

suspected (19) in the first year, plus 23 by the second year, leaving just six in the third year. (De Swainitz et al 1959), They say that a review of the histories reveal no consistent reason for late suspicion of deafness in the children. They did find "long delays in establishing the diagnosis occurred after the first consultation with a physician." Time was lost between the general doctor's examination and meeting an ear nose and throat specialist or an audiologist. In 1959 De Swainitz et al were stating that deafness can be detected before the first birthday by simple distraction tests. In this sample the high proportion of diagnoses (50% by age of 18 months) seem to bear out their convictions.

Table 9. Delay between first suspicions for 41 couples

Delay	No %
Zero. Father and mother suspected	14 (34)
Mothers First. 1-6 months	13 (31)
7-12 months	1 (2)
13-18 months	2 (5)
14-24 months	1 (2)
24+ months	1 (2)
Fathers First	5 (12)
Unknown	4 (10)
Totals	41

Interviews revealed differences between fathers and mothers in the matter of accepting deafness. Generally the women suspected deafness first. Table 9. shows gaps ranged from 0 months up to 2 years.

The taped replies to the question about reasons for the deafness show a rise in amount and specificity of information on deafness. For example after the diagnosis one man was able to draw the arm of the chromosome responsible for his child's deafness. Another parent who had never heard of cytomeglia before his child was born described it as follows.

C.22 Father, of a profoundly deaf boy, 2.9 years old

"Cytomeglia Virus, lots of people have got it I understand. You have probably got it. It was explained to me that when people die they have a post mortem. They take a piece of tissue from the cheek and lots and lots of people have got this. A very high percentage of people have got it but it doesn't have any effect on them, its just one of those things that is around and sometimes it harms you sometimes it doesn't. It is a very new thing and a lot of research has been done on it. After genetic Counselling (tests) they found he had Cytomeglia Virus. He's got it. so have I."

Another parent made the distinction between having a medical explanation as opposed to ones own explanation for the deafness.

C.20 Mother, Severe/profoundly deaf girl 2.11 years old

"I can't(think of any reasons) but they say now it was placental insufficiency that caused it. It just packed up working a lack of oxygen to the brain."

Her husband was clearly worried about the explanation as well as the possibility of a second deaf child.

C.21 Father

"Well we've been told by the Dr's Placental Insufficiency. The fact that we have been told now...I suppose the only reason they have told us now, is because we've got another one on the way sort of thing."

One of the most important reasons for wanting to know the cause of the deafness is for parents to know if the deafness is hereditary or not before another baby is on the way. The value of a timely consultation with a geneticist is illustrated from the following interview.

D.16 Mother of one deaf boy, 4 years 5 months old

"After he was born after it was diagnosed we had genetic counselling and it is inherited in fact. There is a fair amount of deafness in the family. We could not be sure about that, but it was present possibly recessive inheritance. Yes we just didn't think about it because a number of people do go deaf later on. We didn't think there could be any problem in us having (deaf) children you know. But when we realized because of this we decided that it just wasn't on."

This couple adopted a second child rather than risk passing on hereditary deafness.

This is a marked contrast to the situation of another couple whose hereditary deafness was also recessive but undiagnosed as such.

C.8 Mother of three deaf children

"A. was two and a half. B was three years old but brought up in a noisy environment when I was pregnant

with D, by the time we found out about B. The chances are as we get older we will wear aids, but of course we didn't know in each case...if we had married other people. And now I mustn't have any more children. The next child could be perfect or profoundly deaf. So I was sterilized last year. to make sure I don't have any more. I couldn't risk it. And I couldn't deal with a profoundly deaf kid you know. I could with someone else's but not with my own.."

From the rest of her interview it became clear that this woman spent two or three hours a day working with the preschool boy and more time on homework with the older ones.

Three mothers who had had maternal rubella were offered the choice of therapeutic abortions. Only one was carried out however, there appears to have been untimely delay in the other cases. Two of the couples felt very bitter about the lack of urgency about these expected abortions. Except for five children who were deaf following meningitis or high temperatures or were adopted, all the children appear to have been deaf from birth. It is clear that where parents are informed about hereditary deafness they will complete or terminate the number of children in the family accordingly. The urge to avoid bringing a handicapped child into the world is strong.

Once the child is born it is usually the mother who is the first to notice lack of hearing. In answer to the question "Who was the first person to think that the child did not hear very well?" 51 mothers replied that they were the first to suspect deafness. Fathers came

second (12) then both spouses together (10).

Regardless of the prenatal history and the general health of the child the conditions which alert parents to the deafness are remarkably similar across all families. Table No 10 shows that straightforward lack of responses to general household noise is top of the list.

Table 10. Parents reasons for suspecting hearing loss

	N	%
1 Lack of Response to general domestic sounds	41	(39%)
2 Screening tests by health visitors	16	(15%)
3 Delayed/Cessation of speech	10	(9%)
4 Difficult to wake child up in the morning	9	(8%)
5 My wife thought he was deaf	8	(7%)
6 Screening tests by welfare clinic Drs.	5	(5%)
7 Comparisons with other children	5	(5%)
8 Don't know, general worries about deafness	2	(2%)
9 Poor Balance	1	(1%)
10 Put it down to imagination (my own deafness)	1	(1%)
11 Head banging	1	(1%)
12 My husband felt he was deaf	1	(1%)
13 Child was so responsive visually	1	(1%)
14 Maternal rubella	1	(1%)
15 Expecting it, one older deaf child	1	(1%)
16 Confusing responses	1	(1%)
17 No comment	1	(1%)

The mothers in this study did not go out to work in the first year of the child's life, this is the prime detection period for 85% of the sample. Question 13 and 14 relate to shared concern. The results show 33 men stating their wives were already concerned when the query about deafness was aired. 21 wives said their husbands were not yet concerned when the wife first talked about her fears.

SUMMARY

1 Types of deafness

The data shows that 53 cases were severely or profoundly deaf and 11 were partially deaf. The partially deaf often appeared more deaf when they were younger than when they were older. In all cases the deafness however mild interfered with normal speech and language development.

2 Expectations

85% of the parents simply did not expect a deaf baby. Absence of a family history of deafness is itself the most often quoted reason for not expecting deafness amongst hearing parents. It is rare for hearing parents to know anything of hereditary forms of deafness, even where the parent is a visible syndrome carrier. Where expectations did exist these were based on birth trauma.

3 Suspicions

Against a background of non-expectation of deafness, the parent's suspicions are aroused in the first year of life in the majority of cases. There is a slight tendency for fathers to suspect later than mothers. In most cases parent's suspicions are aroused before the first screening tests.

4 Causal explanations

The data suggests that the push for an early diagnosis and causal explanation for the deafness reflects the parent's need to avoid further deaf children. In this sample some 39% of cases were traced to maternal diseases by laboratory tests, with maternal rubella in first place. Just under one fifth were attributed to hereditary causes.

Chapter 5

ASCERTAINMENT OR DIAGNOSIS?

In Chapter 2 it was shown that it is important to parents to know as soon as possible whether the child's deafness is hereditary or not. Fear of producing another deaf child is not the only reason for pursuing a diagnosis. Of course parents want to know if there is a cure and if not what can be done to help the child in other ways.

Parents normally set off in pursuit of these goals with two kinds of ignorance; ignorance of deafness in general and ignorance of the detailed workings of the Health Education and Welfare services.

In contrast the professionals working in these services are familiar with statutory duties the referral system and the timing of various procedures. Different specialists know a great deal about the handicap in general but have to rely on parents for individual information about any one child.

This situation gives rise to parents who blame the system and key figures in it for delays mismanagement and misunderstandings.

The doctors teachers and nurses find themselves focussing on those parents who cannot accept the handicap. Although these may be few and far between, it is here that the stereotyped image of the parent "shopping around" is born. In short. there is a good deal of subjective evidence that both parties blame each other when things do not go according to plan.

This section of the interview was designed to probe for information

about the institutional and attitudinal delays in diagnosis and appropriate management. Notes were made of practices which appeared to enhance or retard the parent's ability to cope with the handicap. Every family in the study was registered with a general practitioner and every mother knew about the infant welfare clinics and the health visitors independently of how much they used these services.

Table 11. Data on Suspicion, tests and diagnosis, in 64 cases

No	Age (months)				Degree of deafness	
	Suspicion to 1st test	(delay)	diagnosis (delay)			
1.	12	36	(24)	36	(zero)	Severe
2.	9	16	(7)	16	(zero)	Profound
3.	18	30	(12)	30	(zero)	Severe
4.	1.5	3	(1.5)	3	(zero)	Profound (E)
5.	9	11	(2)	11	(zero)	Partial
6.	8	24	(16)	24	(zero)	Severe
7.	4	18	(14)	18	(zero)	Profound
8.	10	42	(32)	42	(zero)	Severe
9.	7	7	(0)	7.5	(.5)	Severe
10.	9	9.5	(.5)	10	(.5)	Profound
11.	8	8	(0)	9	(1)	Severe/profound
12.	9	9	(0)	10	(1)	Profound
13.	9	10	(1)	11	(1)	Severe
14.	0	5.5	(5.5)	7	(1.5)	Profound
15.	6	7	(1)	9	(2)	Partial (E)
16.	6	7	(1)	9	(2)	Severe/profound
17.	4	4	(0)	6	(2)	Profound
18.	10	12	(2)	14	(2)	Profound

E = Expectations that something might be wrong with the baby

H = Hereditary deafness

Table 11... cont'd

No	Age (months)				Degree of deafness	
	Suspicion to 1st test (delay)	diagnosis (delay)				
19.	6	18	(12)	20	(2)	Severe/profound
20.	8	18	(10)	20	(2)	Profound
21.	36	36	(0)	38	(2)	Partial (H)
22.	1.5	8	(6.5)	11	(3)	Profound
23.	9	9	(0)	12	(3)	Severe/profound
24.	6	9	(3)	12	(3)	Profound
25.	6	6	(0)	9	(3)	Profound
26.	7	11	(4)	14	(3)	Partial
27.	7	7	(0)	10	(3)	Profound
28.	5	7	(2)	10	(3)	Severe/profound
29.	6	6	(0)	9	(3)	Profound
30.	6	12	(6)	16	(4)	Severe/profound
31.	16	18	(2)	22.5	(4.5)	Profound (E)
32.	2.5	3	(.5)	8.5	(5.5)	Profound (E)
33.	10	11	(1)	16	(5)	Severe
34.	3	4	(1)	10	(6)	Profound (E)
35.	11	12	(1)	18	(6)	Severe (E)
36.	4	6	(2)	12	(6)	Partial
37.	6	6	(0)	12	(6)	Profound
38.	24	42	(18)	48	(6)	Partial
39.	3	5	(2)	11	(6)	Severe (E)
40.	4	4	(0)	11	(7)	Partial
41.	5	6	(1)	13	(7)	Severe
42.	3	6	(3)	13	(7)	Profound

Table 1. cont'd

No	Age (months)				Degree of deafness	
	Suspicion to 1st test (delay)	diagnosis (delay)				
43.	1.25	1.5	(0.5)	9	(7.5)	Severe/profound
44.	7	7	(0)	15	(8)	Partial
45.	12	6	(-6)	14	(8)	Profound *
46.	6	10	(4)	19	(9)	Profound
47.	1.5	1.5	(0)	10	(8.5)	Severe
48.	10	7	(-3)	18	(11)	Query *
49.	12	18	(6)	30	(12)	Partial
50.	6	6	(0)	18	(12)	Severe/profound
51.	6	6	(0)	18	(12)	Profound
52.	6	9	(3)	22	(13)	Severe
53.	6	12	(6)	27	(15)	Severe/profound
54.	1.5	9	(7.5)	24	(15)	Severe/profound
55.	12	2	(-10)	18	(16)	Profound (E) *
56.	6	6	(0)	23	(17)	Severe
57.	10	10	(0)	30	(20)	Profound
58.	6	4	(-2)	27	(23)	Profound *
59.	6	9	(3)	36	(27)	Profound
60.	6	6	(0)	36	(30)	Partial (E)
61.	2.5	6	(3.5)	.	.	Partial
62.	9	12	(3)	.	.	Profound
63.	18	18	(0)	.	.	Profound
64.	15	18	3	.	.	Partial

N.B. For four couples there is insufficient data on tests

Severe/Profound = A tentative diagnosis which rules out

Partial Hearing, and prepares parents for severe or

profound hearing loss in the child.

* = Tests before parents were suspicious

1st Suspicious	1st test	Delay	Diagnosis	Delay
mean 7.6	10.9	3.4	17.4	6.4 Months
S.D. 5.5	9.2	6.6	9.8	6.8 Months
Total Delay = 9.8 months				

Table 12. Summary of data on delays in diagnosis of deafness.

This usually came about in the course of routine developmental screening procedures by the Health Visitors. This confirms that parents are the primary detectors of infantile deafness. From figures supplied by Ewing and Ewing the relative proportions of children who fail the initial screening tests of hearing are distributed as follows.

Age 7 - 18 months	8.6 %
Age 19 - 33 months	6.5 %
Age 34 - 59 months	6.6 %

These figures were based on returns from 352 health visitors who screened 4,224 children in 1966, 1967, and 1968. It appears that children are marginally more likely to fail the initial screening test than the later ones (Ewing A.W.G. and Ewing E.C. 1971).

In this sample only four cases were actually confirmed by a welfare clinic doctor, at a second or third testing. Figure 1. shows that parents became suspicious that children were not hearing well at around seven months on average and this may coincide with initial testing.

Table E/13 of "Fit for the Future" (The Court Report 1976) shows the numbers of deaf children under 16 years for 1964-1975.

	<u>Deaf with speech</u>	<u>Deaf without speech</u>	<u>Hard of Hearing</u>
Totals	12.2	12.6	8.8
Males	12.7	13.5	9.0
Females	11.6	11.8	8.6

These figures are calculated per 100,000 population under sixteen years old. They are drawn from Department of Health sources; as registration is voluntary they may be an underestimate of deafness in the total population. Generally a rate of 1 per 1000 is quoted for significant hearing loss. In short filtering out deaf children by public health surveillance is rather like looking for the proverbial needle in the haystack.

The first screening test is a major event as the majority of parents are already suspicious about the child's hearing. 47 out of the 64 children in this sample were presented to health visitors or health clinic doctors for testing. Table 13 shows only one child went directly to an Ear, Nose and Throat Specialist for initial testing.

Table 13. The first persons to test the child's hearing

	Number of		
	Mothers	Fathers	Children
The family doctor	10	10	10
The Health Visitor	28	10	28
Welfare Clinic Doctor	19	13	20
Ear, Nose and Throat Doctor	1	6	1
Teacher	1	1	1
Audiologist	1	1	1
Pediatrician	1	1	1
Cannot recall/query	0	2	2
	61	44	64

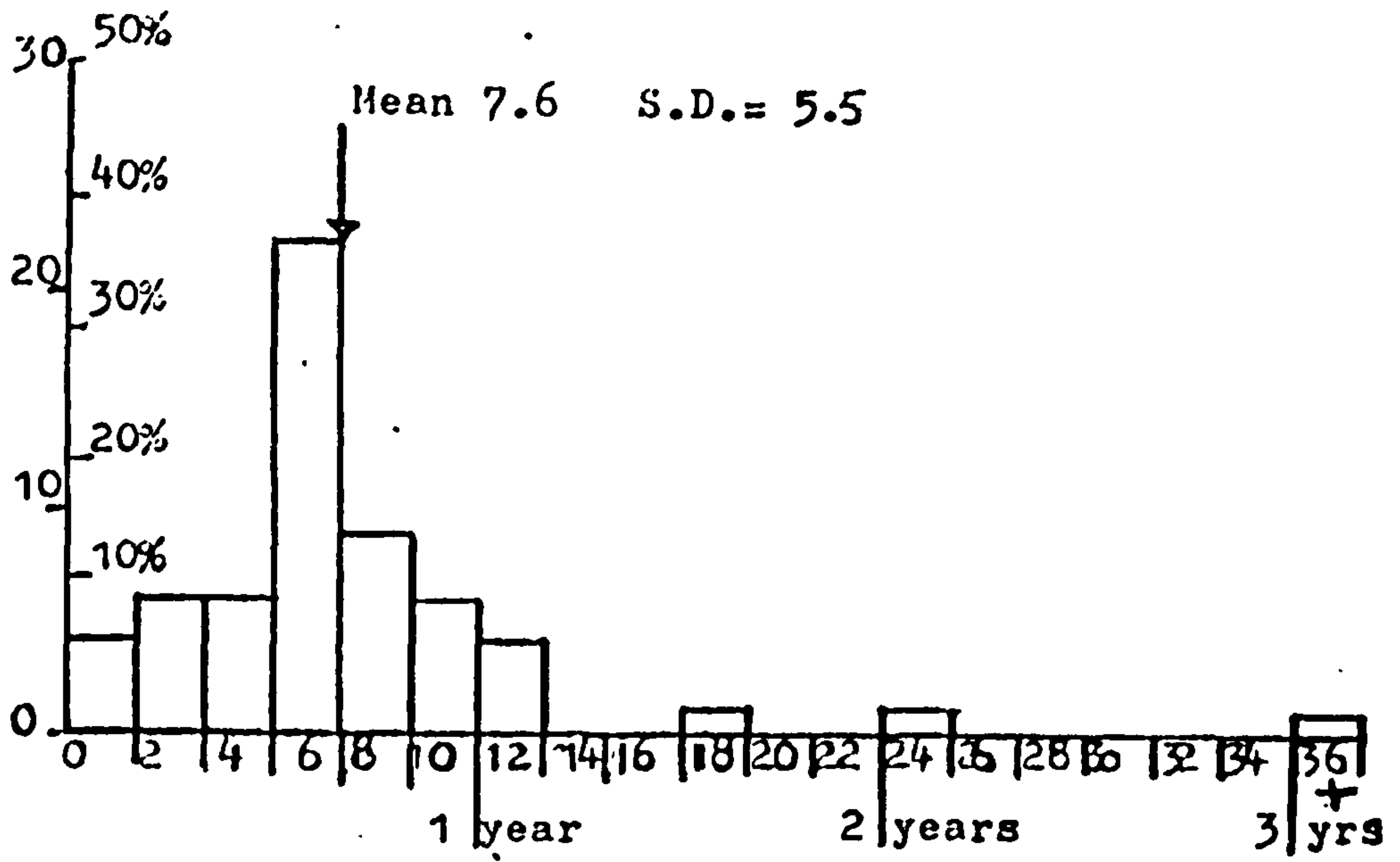


FIGURE 1. Age at 1st Suspicion.(months)

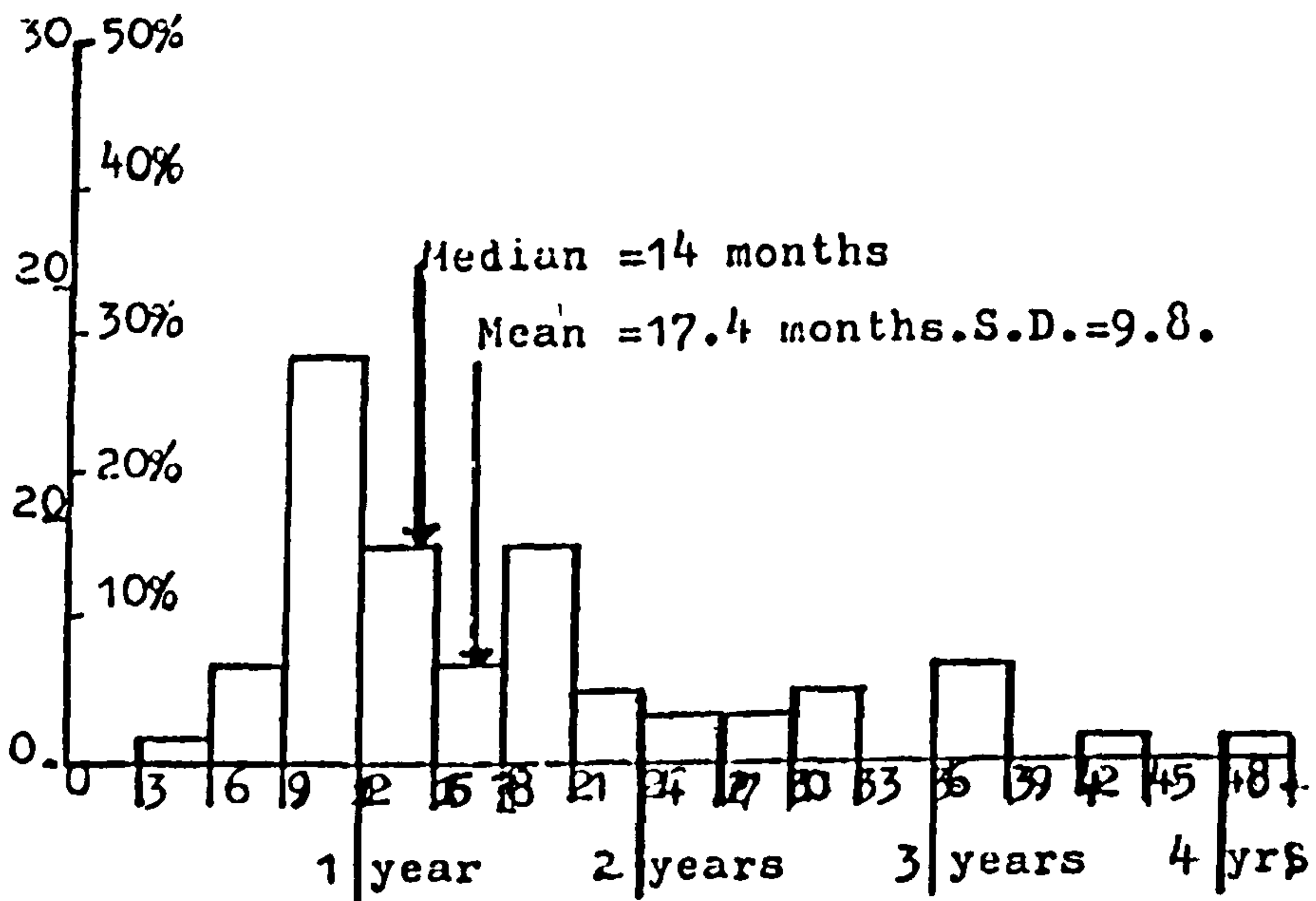


FIGURE 2. Age at Diagnosis. (months)

47 (73%) of all mothers had the initial hearing test done locally. The health visitors were involved as first tester in 28 (46%) of all cases. The women were all directly involved in the clinic testing as opposed to the fathers who relied on the mothers reports at this stage. Fathers tended to go to specialist appointments later on in the process.

Table 14. Age of child at first test of hearing

	Number of children
Under 6 months	11 (17%)
6 months - under 12 months	32 (50%)
12 months - under 18 months	5 (8%)
18 months - under 24 months	6 (9%)
24 months - under 36 months	1 (2%)
3 years and over	4 (6%)
Queries	5 (7%)

Table 14 shows that fully 75% of the group had their hearing tested under the age of 18 months. The average age being 10.9 months with a standard deviation of 9.2 months. Figure 5 shows that 20 children were presented for testing without delay. This usually followed a well defined suspicious incident for the parent. None of them obtained a diagnosis at the first presentation.

The average delay between parents' first suspicions and the first test is 3.4 months. It seems that many parents use this period to repeat their observations and check their perceptions with those of the spouse.

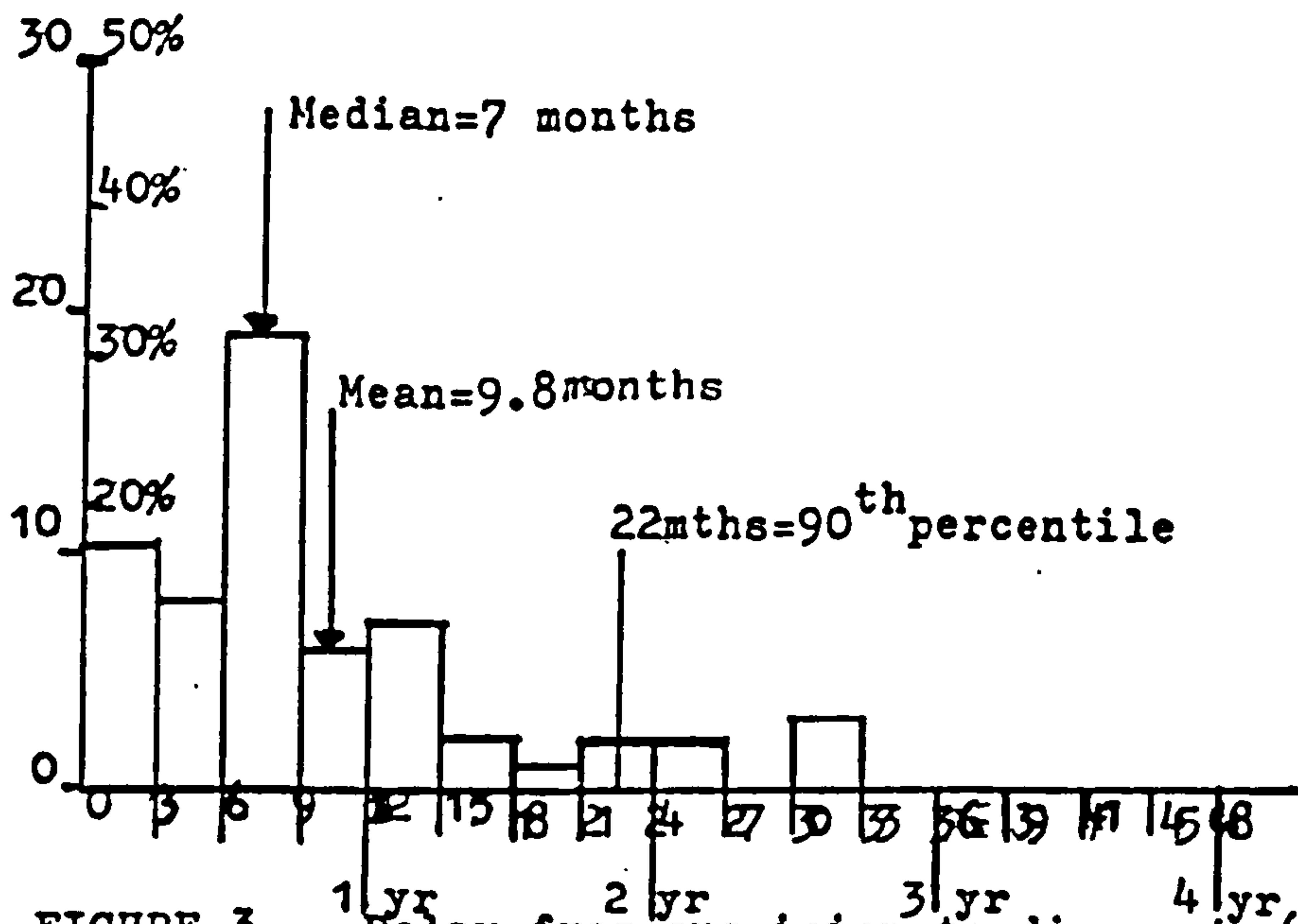


FIGURE 3. Delay from suspicion to diagnosis, (months).

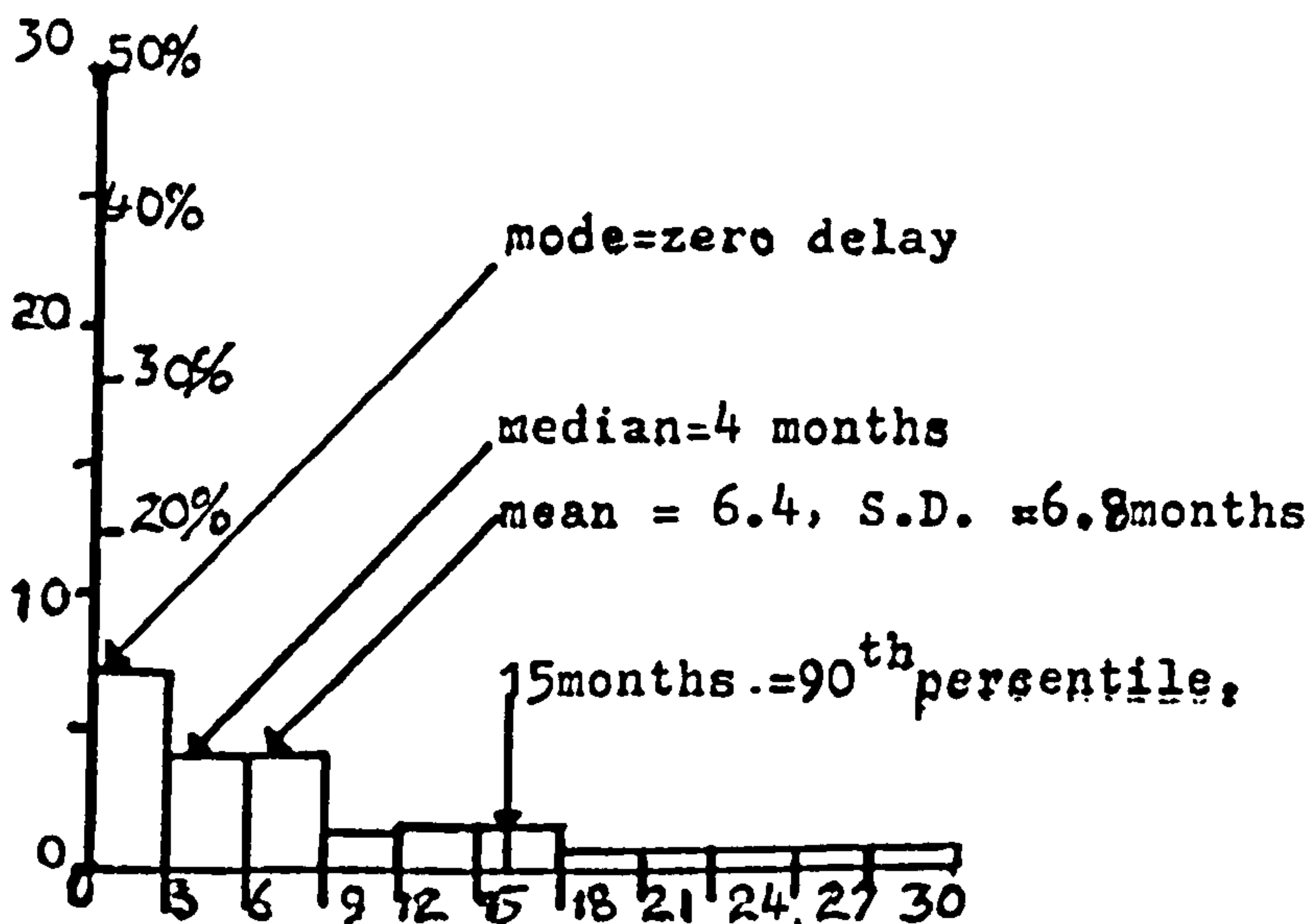


FIGURE 4. Delay from 1st test to Diagnosis. (months)

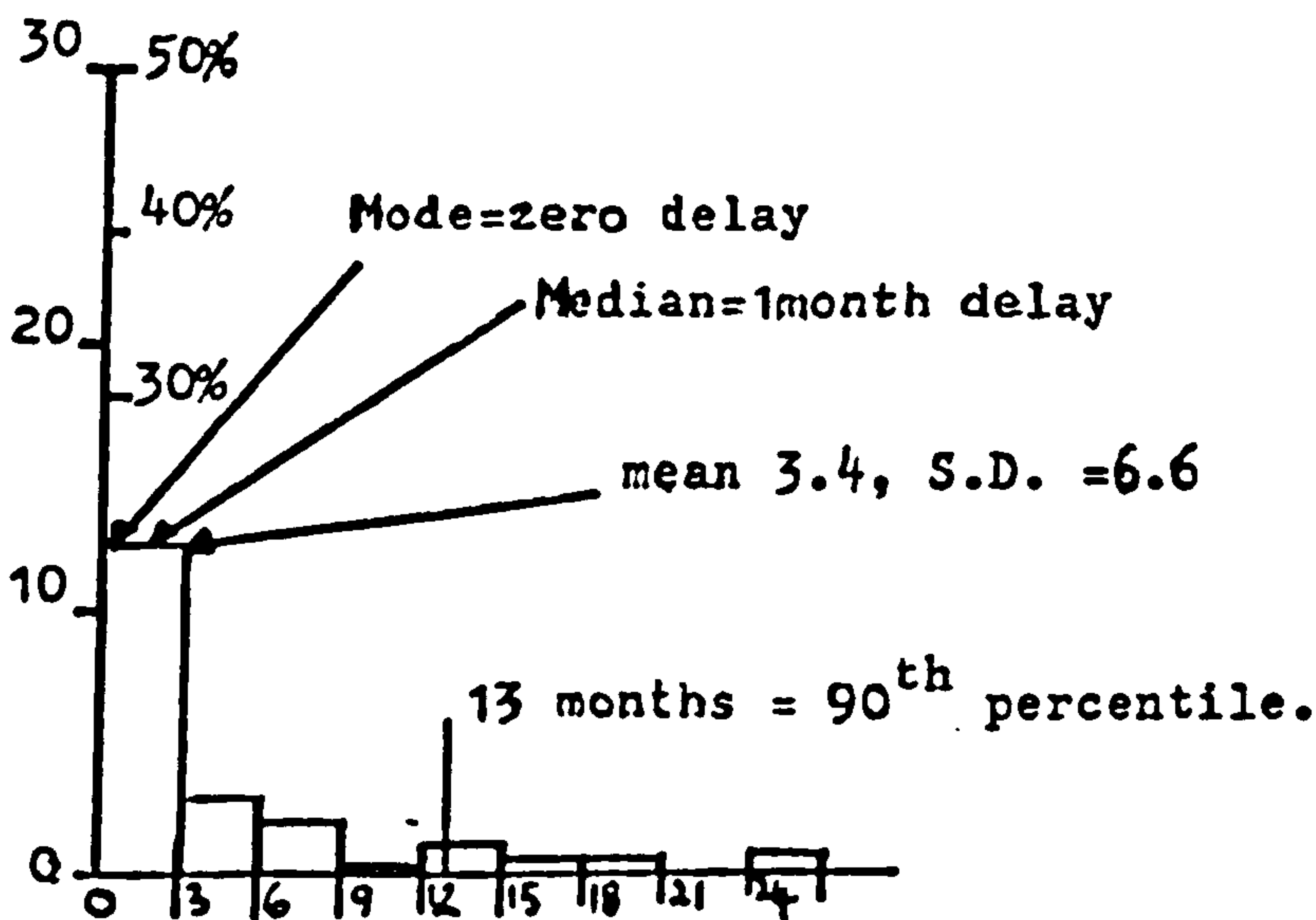


FIGURE 5. Delay from suspicions to 1st test (months).

Delay from 1st test to diagnosis

Figure 2 shows that the average age of diagnosis is 17.4 months with a standard deviation of 9.8 months. 50% were diagnosed by 14 months. The delay between the first test and diagnosis being 6.4 months. This is twice as long as the delay from suspicions to first test. It suggests that the parents may be right when they blame the "system" for unnecessary delays in getting diagnoses. It is clear that delay which is under the parents' control amounts to only one third of the total delay. There are a number of reasons for the sort of delays attributed to the "system". First deafness is difficult to detect because it is invisible. Second variation in testing. Third constraints affecting the child health services. Fourth. the degree of acceptance by parents and finally the role played by the medical specialists.

Tests of Hearing are not uniform. Usually the initial testing involves screening procedures. These were first developed by Professor and Mrs Ewing then taken up by the child health services first by Dr.B. Humphreys in Leicester and later in welfare clinics throughout the country. (Ewing A.W.G. and Ewing I.R. 1944, Humphreys 1954). Many public health doctors teachers and nurses are trained in this kind of testing at Manchester University Department of Audiology and Education of the Deaf which provides a variety of courses in this field. The critical ages for the Ewing screening tests are 7-18 months, 19-33 months and 34 months - 5 years (Ewing A.W.G. and Ewing E.C. 1971). At around seven months babies are expected to be able to sit up and turn to look at noises from behind and to the side. The effectiveness of this procedure lies in

successfully occupying the baby in such a manner that he is not continually looking round to check on the tester. This developmental test is sometimes called informal testing and is the one most frequently described by parents.

Diagnostic Tests are designed to produce accurate measurements of hearing. They involve training the child to make a standard response each time he hears a standard note. Pure tones, tuning forks and pre recorded sounds are used. Responses are usually represented in graphs of loudness versus frequency. These performance tests require a minimum of hand eye co-ordination. Where children cannot accomplish this co-operative sort of responding electrocochleography may be used. This involves minor surgery to place a probe against the cochlea while the patient is unconscious. Readings can be taken directly from the nerve and responses to sound can be stored in a computer. The results are presented as in conventional audiometry.

Ascertainment

The developmental screening tests are not designed to produce diagnoses. In their book "Hearing Impaired Children Under Five" Ewing and Ewing say "we have emphasized that screening is not diagnostic". They advise as a general rule "that a child who has failed to respond normally to a screening test should be given one further test. If a failure results referral for diagnostic examination is indicated at an audiology clinic where available" (Ewing A.W.G. and Ewing E.C. 1971).

There is no data in this study that indicates parents understand the distinction between screening tests and diagnostic tests. First no one appears to have the responsibility of explaining the distinction to

parents and secondly screening tests are applied in different situations by a variety of personnel. The results of Table 13 shows that children are tested by all kinds of professionals. There appears to be no way for parents to know how sophisticated the training is of people who are not medically qualified.

Table 15. Degree of Satisfaction with the hearing test by parents

	Mothers	Fathers
Satisfied with test	26 (43%)	11 (25%)
Dissatisfied with test	27 (42%)	15 (34%)
No Comment	8 (13%)	18 (41%)
	61	44

18 (41%) of the men were not present at the first test, so they were unable to comment directly. 61 of the women were present and they split fairly evenly along the lines of satisfaction/dissatisfaction. Eight women reserved comment because they were in no position to assess the first testing. The mothers do treat the results of the screening tests seriously however. Table 16. summarizes their answers to question 18 "What were you told at this first test of hearing?"

Table 16. Results of first test of hearing

	Number of Mothers
Positive Diagnosis	16 (26%)
Negative Diagnosis	14 (23%)
Retest Needed	25 (41%)
No Comment	6 (10%)
	61

The results of screening tests are couched in the language of

developmental levels. By positive diagnosis mothers are given to understand that the baby does not hear as well as he should for his age. 41% of all cases were asked to return for testing. This finding indicates that it is common to give the child a second test. Referral to an audiology clinic following a second failure is not automatic due to constraints governing the role of infant welfare clinic doctors.

Constraints of welfare clinic doctors

One could say that the staff of infant welfare clinics have a vested interest backed up by training in the early detection of deafness.

One hidden constraint which works against them is the separation of diagnostic and treatment functions of clinic doctors.

In this sample 19 children were presented to the clinic doctor and to the family doctor. This a ratio of 1 in 3 mothers consulting two different doctors about the same problem (deafness query). This is a markedly higher ratio than the one in eight mothers mentioned in another study of the use of infant welfare clinics by Radford and Pemberton. This was carried out for the Court Committee. They emphasized that the mothers took the child to both doctors (the welfare and the General Practitioner) for the same problem.

This is significant where the problem needs treatment. as the authors point out because welfare clinic doctors are not allowed to make out National Health Service prescriptions, or refer for specialist investigations without the consent of the child's own doctor. The mothers in this study took the child to the family doctor for these two services. The General Practitioner was mentioned most often as the person referring the child for specialist investigations. Radford

and Pemberton expressed the view that "It is clear that the broad distinction between services is not well understood and it is questionable how effective preventative services and developmental surveillance can be when it cannot be followed with treatment" (reported in the Court Report 1976). In this study 37% that is 24 mothers took the child back to the welfare clinic as requested.

Table 17⁷. Parent's Responses to results of 1st test of hearing

	Number of mothers
Took child back for further testing	24
Requested second opinion	19
Private consultations	3
Waited for help to arrive as indicated	3
Nothing wrong, child passed screening test	6
Changed address, started all over again	2
To Nuffield Hearing and Speech Centre	2
Supplied with hearing aids	2
To pediatric assessment	1
Peripatetic Teaching	2

The results in Table 17. correspond with the results of Table 16. i.e. Twenty-five requests for retests and 24 children taken back for retests. Only one man reported taking the child to a private consultation immediately following the first screening test. In the majority of cases the parents used the standard method of asking the family doctor for a referral to a specialist. There were only three instances where parents had to put pressure on the family doctor for early specialist consultations, and paid to do so. This does not support the notion that family doctors are reluctant to refer.

There is no evidence to support the notion that parents do anything other than what they are asked to do at the ascertainment stage. The mothers reported getting fed up with repeated testing which produced inconclusive results. Where this is combined with lack of effective advice on treatment or management they eventually seek help elsewhere.

Delay arises in cases where the mother suspects the baby does not hear normally, before he is old enough to be assessed by developmental tests. 34 mothers reported suspicions before or at six months old. This is a one in two ratio out of a group who all proved to be deaf. Only one was diagnosed as deaf at the first test. The delay to diagnosis ranges from 2 weeks to 36 months in 32 cases. There is no guarantee that early diagnosis will follow on early suspicions and this appears to hold regardless of type of hearing loss (Table 11.).

One mother who was told not to worry because the child was too young to test described her experience of welfare clinic procedures as follows.

C.22 Mother of a profoundly deaf boy aged 2yrs. 9months

"Of course I went to the clinic every week and I just asked about it and it just went on from there. I used to go every week anyway and they normally test them at 6-7 months old, and so they did~~nt~~ not really want to test him when he was so young (4 months). They said he was too young to have any of the tests. They only put me off for one week. The next week when I went back and they said the same thing. I asked them to do it anyway. I came back and said to my neighbour he had had a hearing test and they said he was alright. Then I went again next week. I kept on going down for his weight this that and the other, and I remember saying can we have

any tests just to make sure! And there was someone there more qualified to help her and there wasn't much noise around. so it was sort of there wasn't anything to distract him except for what was required. Then I think she thought yes, his hearing is not as it should be for a six month old child. She put us in touch with the senior peripatetic teacher of the deaf to come round and test him. (at home) and that was that.

Yes he was deaf he thought at the very beginning, he was very very deaf but (he said) he would come back in a couple of weeks to confirm it. He did the very same things with him and then said yes, in my opinion the child is very deaf and I'd like you to see a consultant, we saw him very quickly in about ten days"

This excerpt illustrates in some detail a tendency described by Wetnall (an ear nose and throat specialist) for "screening to be carried out at too late an age when it is safe to be definite" (Wetnall 1964).

Legal Constraints relating to welfare services

Section 24 of the 1944 Education Act outlines the basic duty of local education authorities to provide education from the age of two years for children who need it. This used to be accomplished by a school medical report and some form of training. In recent years ascertainment has developed in the direction of multi-disciplinary interaction about individual children, with hospital based specialists contributing detailed reports to the growing file of information on the child. The objective of this information gathering is to match special

educational needs to special educational provisions. The mothers are certainly unaware of this when they begin taking their infant along to the infant welfare clinic, many of them learned about the educational objectives of the assessment clinics as the child approached legal school age.

The objectives of the pre-school services are clearly stated in circular 2/75 from the Department of Education and Science. "The discovery of children requiring special education" (D.E.S. 1975). Ascertainment is described as a three stage process of discovery based on developmental screening, diagnosis based on reports from various specialists and assessment of educational needs based on diagnostic teaching. On page 7 there is a note that "parents more commonly bring any concern about their child to the attention of specialists" This is a tacit acknowledgement that the specialist has a very important contribution to make in relation to the parents of handicapped children. The data from this study suggests that consultants are very important in the matter of diagnosis and treatment of deafness. In an earlier report the hope was that the use of a descriptive list of educational needs would make it easier to find educational provision which matched special educational needs. The assessment teams were to include special education teachers with this aim in view (D.E.S. 1973). The evidence from this study suggests that where teachers of the deaf are involved in such teams their function veers towards the testing and assessing rather than teaching elements of their role. The advisory element also comes to the fore, a finding which was originally uncovered by the Department of Education

and Science survey of peripatetic teachers of the deaf in 1969 (Education Survey No 6, 1969). The roles become blurred and sometimes parents get confused especially those who are having difficulty accepting the handicap.

C.21 Father of a borderline deaf girl aged 2yrs. 11months.

"We went to our G.P. who was very good, he referred us to the city hospital. We saw a specialist pediatrician and then went to the peripatetic teacher of the deaf. We were getting nowhere there so we went back to the G.P. He referred us to the Pediatric Assessment Unit who went through everything really, sight, she started wearing glasses just after that and her hearing, her general co-ordination I.Q. everything (was checked) which was very good—they did everything there. The only problem there was the hearing specialist who was the bloke we had already seen: no, not the Ear Nose and Throat the peripatetic one. Then we were sent to the E.N.T. from there. Then we went back to the Pediatric Assessment Unit. When we first heard about the Nuffield (in London) initially we went to him (pediatrician) and got nowhere. He said because we had had a pediatric assessment, we had had a pediatric assessment. They were in charge of her now and he could not really write to London which on reflection I can really understand."

Perhaps because this man was in the education business himself he pursued a sharp diagnosis and educational treatment. None of the other parents indicated they were aware that the 1944 Education Act actively supports

parents who wish to make suitable arrangements for special educational treatment other than through their local education authority (D.E.S. 1944, paragraph 36). The description this father gave of the peripatetic teacher indicates how easily roles get blurred when teachers are part of assessment teams.

Parents' Attitudes

It has been shown in Table 17 that parent/s' reactions to the results of initial testing is to follow the advice of the professionals. At this stage the data does not support the view that parents start "shopping around" for cures, but rather that they stand in need of a sharp diagnosis from competent authority: The Court Report in 1976 expressed the view that requests for second opinion represent unfulfilled needs "that should not be suppressed but recognised and supported with the best advice and guidance. (Fit for the Future, 1976). The data from this study supports that view.

Clearly there will always be a number of parents who are slow to accept the initial diagnosis. Six out of seven queries and contradictions came from fathers. (See Table 14) Out of the whole sample, two mothers and six men admitted they had been very slow to accept the initial diagnosis. Where only one spouse is worried the Health Visitor or grandparents will help in pursuit of a diagnosis. Parents' attitudes do not appear to be a significant delaying factor in obtaining diagnoses. For some parents a clear diagnosis brought relief.

D.16 Mother of a profoundly deaf boy aged 4yrs. 5months.

"We were told at the Department of Audiology, when they had

tested him your child is irremediably deaf. Those were the exact words. I'd much rather have it straight than messing about, because we had had seven months of messing about and we were wondering what on earth was the matter with him by that time. In fact our first reaction was slight relief".

Some parents rated medical consultants as "blunt".

D.12 Mother of a profoundly deaf boy aged 3yrs. 5months.

"...saw the audiologist in April. Yes a bit blunt the way she told us, he's deaf, he'll have to wear an aid. We'll send a message about hearing aids. He will talk though.

Quick follow up. Perhaps I am neurotic (laughing) I should give up polishing furniture." Her son was diagnosed as deaf at 2 years 3 months old.

Obtaining a diagnosis

The ^role of the medical specialist is to provide a definitive diagnosis followed by treatment. Treatment includes aids, surgery, medicines, speech therapy and sometimes special educational treatment depending on resources. This sort of management is very much the province of the National Health Service Ear Nose and Throat consultant. There is no evidence in this study that any of these treatments came about prior to parents being seen by consultants. Table 18 shows that 46 (72%) of cases were diagnosed by a specialist.

Table 18. Diagnosis of deafness by professionals.

	Number of Children
Ear, Nose and Throat Doctors	46
Audiologists	10

Table 18. cont'd

	Number of Children
Welfare Clinic Doctors	4
Family Doctors	2
Technician	1
Pediatrician	1
School Doctor	0
<hr/>	
	64

When parents were asked "What did this doctor tell you?" 71 (67%) of parents associated diagnosis and prescription for hearing aids with the consultant, a further 27 (26%) associated confirmation of deafness with treatment. 7 only were referred for further investigations: these usually consisted of more sophisticated testing. This holds true even where the specialist sees the child away from hospital settings, as this mother explained.

C.40 Mother of a profoundly deaf boy aged 3yrs. 11months.

"She (the health visitor) said he's not taking any notice. perhaps it's the surroundings, you know he might be deaf. Then he went to the clinic, a normal welfare clinic with a visiting specialist. He said he was deaf, there and sent him to city childrens hospital. The ear specialist confirmed it (at 12 months). He said deaf in both ears. I can't remember how many decibels I was surprised. In a sound proof room with a great big gong, it nearly deafened me."

This child had failed the health visitors tests at 9 months, was diagnosed as deaf at 12 months and had an aid at 14 months.

The quickest way to diagnosis is by specialist consultation

This also applies to getting hearing aids which are issued on medical prescriptions. Every child was issued with one or more aids. The role of the consultant goes beyond the mere issue of aids. Where the specialist functions within a large teaching hospital, it is the specialist who initiates all the services of a hospital deemed to be of use to the child. Special teaching by teachers of the deaf usually came from the local education authorities. Variations on this theme are discussed later in this chapter: generally the parents felt that the consultant triggered off whatever services were available in the area. The "no man's land" lies between the first test of hearing and the actual consultation.

D.29 Mother of a severely deaf girl aged 4yrs. 2months.

"I would have liked more help between the time we took her to the clinic at 11 or 12 months and the time 16 months when he (the consultant) actually diagnosed her. That is a terrible time for parents to go through. When you don't know. She had not actually been diagnosed. I think something should be done about that. It's a shock that waiting time, waiting for a diagnosis. That's the only change (needed) during that time."

In this case the family got their special educational teaching from the peripatetic teacher who "started from the bottom from scratch with her" according to her mother.

Three children were diagnosed by electrocochleography. It was not possible to know how many national health service surgeons offer electrocochleography from these results. Parents were very satisfied

with the results of this particular test.

In eight other cases there was zero delay between test and diagnosis. Five involved one spouse taking the decision to get the child to a specialist. Age of diagnosis ranged from 3 months to three and a half years. Zero delay between suspicion and diagnosis is unrelated to degree of deafness. Generally couples attend the specialist consultation together and satisfaction is high for both men and women. 62% (65) parents reported satisfaction with conclusive testing at the specialist consultation. 17% (18) reported dissatisfaction. 21% (22) reserved comment. There were 82 descriptive statements from parents about consultant diagnoses. 50 said they were satisfied and 15 said they were not. Table 19 shows the reasons for these reactions.

Table 19.

Number of Satisfied Parents

It was thorough testing	17
A definite diagnosis	10
Non specific satisfaction	15
Amplification supplied	3
Parents' worries justified	3
Done privately	1
Yes a cure	1

Number of Dissatisfied Parents

Inconclusive/Contradictory Results	4
Dr did not test	2
Consultant validated previous results	2
Had to press for retest	1
Too young to tell	1
Dissatisfied with positive results	4
No comment by doctor	1

Of 50 satisfied parents only one man had hopes of a cure. The child had a minor operation to drain mucous from behind the ear: This left her profound nerve deafness unchanged. Previous studies by Gregory showed 65% (79) mothers were not satisfied with the manner in which she was told about her child's deafness (Gregory 1974). Meadow found that 97% of her sample felt that the general practitioner was not very knowledgeable about hearing problems in young children (Meadow and Meadow 1959). Of the 17 parents who did not express any reaction to the consultant 3 had positive diagnosis of deafness. Some parents commented about the difference between the specialist consultations and their experiences with the local services.

A.10. Mother of a profoundly deaf girl 2yrs. 11months.

"She said the middle ears are working well and then sent us up to Guys for a cross acoustic test. Why didn't they do all this before? She'd had her hearing aids since September, the consultant was satisfied with this test. It seems to me now, that if there is a child suspected hearing defect, then if there's an objective hearing test you can do then it should be done as soon as possible; instead of waiting a year, saying perhaps she is, perhaps she's not, and then do it: other people won't refer a child on because they don't want to be proved wrong."

D.30 Father of a severely deaf girl aged 4yrs. 2months.

"Obviously my wife went to the local clinic (the welfare clinic) and we just went from there on. He'd get on a very long waiting list if you ring them up today (immediately) I couldn't see it coming quick enough. Although we had been

in the National Health Service in the end I turned round and said, We'll pay you know, from there on we did have a bit of co-operation. We did get to see him pretty quick. I think they could see that we were not one of these families who would just accept it (the delay). You know it's as if someone came up to you and tried to explain about my job and if you didn't know anything about it, you would have to be satisfied with it. Well he (consultant) thought she had nerve damage. There was nothing else as far as he could see and then he referred us to the consultant at Cardiff, and also gave her a hearing aid. Just one of those from the National Health Service. No conflict about the diagnosis with the National Health Service Consultant. He said through his tests that she did not respond and he'd try out an aid a different aid and see how she came on and see later with a different test. Just the right ear. This is something we are going to see about the next time we see the consultant. He does need two aids."

According to parents there appears to be considerable variation in waiting lists; no pattern emerged from this data. The Department of Health and Social Security Statistical unit could provide no figures on average delay between G.P. referral and hospital consultation in National Health Service hospitals (Holingdale, 1980).

The specialist consultation was very important for those men whose suspicions were aroused only after their wives had drawn attention to the possibility of deafness. There were eight fathers in this position.

C.32 Father of a profoundly deaf girl aged 3yrs. 4months

"My wife brought it to my attention, and after that we tried a few simple tests with no reaction. She would be about eight weeks to ten weeks old then. Our local practitioner immediately put us in contact with a specialist and said it would be up to 4 to 6 months before we could see him. Actually when we found out about the time it would take we went privately--the same consultant. We asked to be put in contact with whoever our local practitioner considered to be the best in the field. He put us in contact with Mr-- at the clinic there his private clinics. It was a very basic test; rattling spoons in a cup, hand clapping, that kind of thing. But he said at such a young age he could not be sure of anything. It was up to us to see him at the children's hospital. When we saw him she would be about 3 months old. Actually, I have never been satisfied with any of the tests. They have all been too basic; if you know what I mean leaves too much to chance. We then went on the National Health Service. We then went to see him (at the hospital). To start with he put us in contact with the people (technicians) who do the hearing tests, we went and they thought they had a very slight response. Things never seemed to improve and this went on for, I think, every 3 months. These are the people at the children's hospital. But it was obvious from the start that she had got a hearing loss anyway. We asked the girls who were carrying out the tests what she'd heard and they thought that she had heard a loud bang of the drum and things like that.

After a number of tests we saw the consultant again and he told us that she had got a severe hearing loss (at 5 months old)"

In spite of some dissatisfaction with tests, this couple said they would recommend this specialist to other couples by N.H.S. or private consultation.

Other men alerted to the possibility of deafness when their wives reported failed screening tests.

D.43 Father of a profoundly deaf girl 3yrs. 8months

Q.11. "What made you think the child might not be hearing very well?"
 "Failure of tests by the Health Visitor at 8 months and an indefinite reaction from the specialist locally. I decided to go for a second opinion pay if necessary and went straight to London. (The Nuffield Speech and Hearing Centre). Had an audiogram by electrocochleography. None in the left ear, some (hearing) in the right ear. Later audiometry confirmed profound deafness in both ears. Had two aids, a Medresco and a Phillips. Her speech improves when both aids are on, deteriorates when not on."

This man agreed with the diagnosis completely. At the time of interview the child was viewed as profoundly deaf and had two Phillips aids on.

Not all parents find it that easy to accept the idea that the child could be deaf. Some mothers admitted that they avoided talking directly about deafness at the welfare clinic. They tried to drop hints about the real nature of their fears.

C.25 Mother of a profoundly deaf boy aged 3yrs. 7months

"Every month until he was a year old I took him to the clinic. I didn't actually say that I thought he was deaf because it's not the kind of thing you like to admit. I think. You know there's nothing wrong; you

have been given a perfectly normal. healthy baby at birth. I said time and time again that he was not making the sounds he should have been making. This was at the clinic and he was teething, he was suffering repeated ear infections and tonsillitis and I was just told that he is doing so much physically he's a boy. He's going to be a slow talker don't worry about it and that was the reason I was given until he was a year old. I then took him for his yearly medical and mentioned it again to the doctor. Again I didn't actually use the word deaf, but I would have thought that would have been picked up by a competent child practitioner and no hearing test was ever attempted at his yearly check-up, they didn't do them in this area. We went to see my mother when he was 13 months old and with my mother we did our own hearing tests. We then decided on the way back, we phoned the doctor and made an appointment for next morning and marched into the surgery and were told we were talking rubbish. We said no we are not. we are sitting here until you see us and blow the other patients. This is not the doctor we see now. You see the child's so alert, even when the doctor tried to do a hearing test he would see everything that was done and he responded his vision was so good. It was only when we told him that we had been trying to teach him to say Daddy and all he did was mouth that he said something might be wrong, his ears might be blocked. He wrote a letter to the pediatrician which we took to the hospital and got an appointment for a fortnight hence and saw the pediatrician. He said he had infections in both ears and was totally deaf. He then referred us to the ear nose and throat specialist."

At the time of interview this child was diagnosed as profoundly deaf at 16 months of age. He was wearing two powerful commercial aids. This

mother clearly expected the welfare doctor to take the responsibility for using the word "deaf" and following that up. She is one mother who would have benefitted from the use of a routine checklist covering deafness amongst other things at her early clinic sessions.

Some parents had children who were hard to assess in the awake condition and were successfully diagnosed by electrocochleography under anaesthesia.

C.27 Mother of a profoundly deaf boy aged 2yrs. 5months

"He said your little boy is stone deaf. He'll have to learn sign language and go to a deaf school and that was the biggest shock of our lives that was". His mother went on to say that she was "very satisfied because he had had that electrocochleography in October."

This definitive diagnosis ended a long period of doubting for this boy's parents as he had sailed through all the screening tests. Electrocochleography has good results confirmed by conventional audiometry later on.

Parents find this helpful.

D.44 Mother of a profoundly deaf girl aged 3yrs. 8months

"She was over 18 months and we still didn't have an answer, was she deaf or wasn't she? We then asked could we see any other specialist. We went to the Nuffield. She was given an anaesthetic and had electrocochleography. He said profoundly deaf in one ear the left ear, 110 decibels in the high frequencies, then fell off. She was pretty bad. He said a slight amount of hearing in her right ear. Nothing at all in her left."

Table 20 shows the results of consultant diagnosis, 51 (80%) of these children had serious hearing losses as far as speech perception is concerned.

Table 20. Classification of deafness in 64 preschool children

<u>Diagnosis</u>	<u>Number of Children</u>
Profoundly Deaf	28 (44%)
Severe Deafness	14 (22%)
Borderline Cases	10 (15%)
Partially Deaf	11 (17%)
Under Investigation	1 (2%)

The term "borderline" used by these medical consultants rules out the hard of hearing. They should not be underestimated (See John Tracy Course). These cases may resolve into severe deafness later on when the child is capable of giving accurate responses. In this study when parents disagreed about the diagnosis the more pessimistic diagnosis was recorded. In this study parents were asked about partial deafness rather than the popular term "partial hearing". Parents accepted that both terms mean a part-hearing, part-deaf situation. Whatever they are called this group had the most hearing for speech.

Answers to question 41 (Do you agree with the Doctor?) showed that 75% of all fathers and mothers agreed with the specialist opinion of the child's deafness at the time of interview.

Table 21. Parent's Response to specialist opinion

	<u>Number of Mothers</u>	<u>Number of Fathers</u>
Agreement	47 (77%)	33 (75%)
Undecided	11 (18%)	11 (25%)
Disagreement	3 (5%)	0 (0%)
	61	44

Table 22. Medical consultants and parents' Preference

	<u>Number of Mothers</u>	<u>Number of Fathers</u>
Would Recommend Specialist	36 (59%)	26 (59%)
Would not recommend	15 (24%)	14 (32%)
Doubtful	10 (16%)	4 (9%)
	61	44

Parents added a further 31 qualifying statements about medical consultants. Not everyone was satisfied with local consultants. 11 said "No" to recommending local consultants i.e. the National Health Services specialists. Five said that they would recommend local services. Of these three had obtained second opinion privately. Their views may reflect their ability to make the most of any service they are offered.

Hearing and Speech Centres

15 parents recommended taking the child to regional centres mainly hearing and speech centres. The majority (10) recommended the Nuffield Centre (London). Other centres in Sheffield and Berkshire were recommended as well as Great Ormond Street and Charing Cross hospital. This reflects the concentrated expertise of the metropolis. Generally specialists in these centres are recommended because they are familiar with all aspects of deafness and can call on a range of treatments to meet the problem. This includes educational type "treatments". The most highly concentrated is the one week crash course for parents at the Nuffield Centre's Hostel in Ealing. This consists of a one week residential small group experience in which the child is examined fitted with aids and training started. It has been in existence

since the 1950's (Gray. 1954). Currently it is the only residential course for parents of deaf children in the country. Fathers appear to get as much out of it as mothers.

B.19 Father of a severely deaf boy aged 3yrs. 7months

"I have found the service offered by the Nuffield Centre (which was recommended by the Teachers of the Deaf, not the E.N.T. surgeon) very reliable. All parents should be put in touch with such agencies as soon as deafness is diagnosed. I gather there are only a few hospitals offering such services and none others providing residential courses with teachers of the deaf for parents. These residential courses are most helpful and should be made widely available."

Other non-residential courses giving a service to parents are at Manchester University's Department of Audiology and Education of the Deaf. Parents described various aspects of the guidance there.

D.16 Mother of a profoundly deaf boy 4yrs. 5months

Q.57. (Do you ever try to teach your child in the same way as the teacher)? "Not as such because the person we see at the University does not teach him as such. He spends more time showing us the sorts of things we ought to do with him. And since parents are individuals we wouldn't do the same thing in exactly the same way. I mean, obviously I take hints and advice on how to approach quite different things but I would not necessarily do it in exactly the same way. What works for one does not work for another."

The Nuffield Centre and Manchester University appear to represent the two strongest concentrations of parent guidance in the country. Outside of these areas hospitals do not always have the staff to provide parent

guidance or preschool training for the deaf child. In most areas of this study hospitals have to rely on the local education authority to provide special educational treatment. This is by way of the peripatetic teaching service. Parents expressed a need for more help in these areas.

C.32 Father of a profoundly deaf girl aged 3yrs. 4months

"Direct teaching for you? If there was more to have Yes! I ran out of what we could do personally, need to learn what we could do personally. I know how far we could go personally if it was available, Yes!"

This was not the only father who felt he could use more detailed help: parents who were teachers themselves expressed a need for specific help with the deaf child.

C.2 Father of a severely deaf child aged 2yrs 11months

"I mean me being a teacher you'd think I can help her but you know I am lost really, how can I? I gather they used to run a weeks course up in Nottingham city up until two years ago for deaf children, as to what you can do with deaf children to keep them at home. I suppose it was finance, but it has all been scrapped and now what they do is a week, well its connected with the Nuffield Centre. near London in Ealing. I can't remember the name of the place in London. So they run a weeks course down there for parents where they can go and really learn how to teach the children, you know, what they can do with the children. Well we are hoping to go down there once we get things sorted out a little more."

SUMMARY

The data suggests that:

1. Early suspicions by parents do not indicate early diagnosis.
2. There are two identifiable phases in the delay between parental suspicions and final diagnosis.
3. Phase One Delay = from suspicions to first test. This phase is under parent's control and amounts to only one third of average total delay.
4. Phase Two Delay = from first test to diagnosis accounts for the remaining two thirds delay. This delay is related to the slower pace of ascertainment procedures in contrast to consultant diagnosis.
5. Overall delay is reducible if parents are directed to a medically qualified consultant, on first presentation.
6. There appears to be some substance to parent's complaints that existing organizational procedures in the welfare clinic service are responsible for the larger delay in obtaining a diagnosis.
7. A modification of welfare clinic interviews in the direction of verbal specific questions about deafness (and other sorts of handicap) at the first and subsequent visits would provide an immediate "verbal screening" of the mother's worries. On this basis referral to the child's own doctor or to a specialist could bring about an immediate medical examination and clear the air as regards early childhood deafness. The effect of such a procedure would be to reduce delay and the worries associated with "waiting".

Chapter 6

AMPLIFICATION

The idea of learning language by listening to powerfully amplified speech is an attractive concept which has been advocated by various workers including Wedenberg of Sweden (Wedenberg 1954) Beebe of the U.S.A. (Beebe 1975) Huizing and Pollack of the U.S.A. (Huizing and Pollack 1951) and Wetnall in England (Wetnall 1954, 1956, and Wetnall and Fry 1964). These auralists emphasized that the child should not be allowed to watch the face of the speaker, on the grounds that this would distract from the development of a listening attitude.

The oralist tradition is represented in England by A.W.G. Ewing and I.R. Ewing (Ewing and Ewing 1938) Watson, also from Manchester (Watson 1955) and E.C. Ewing (Ewing E.C. 1967). All of them worked from Manchester University developing the listen-and-look method of oralism, into which the hardware of amplification has been incorporated. The most recent developments at Manchester include a strong emphasis on good microphone techniques, in order to establish a voice-to-ear link as soon as possible. Ewing and Ewing in the 1970's published detailed directions for the correct use of hearing aids and speech trainers by parents and teachers working with under fives (Ewing A.W.G. and Ewing E.C. 1971).

In the main, deaf educationalists of the oralist tradition opt for amplification as part of a language learning programme which involves lipwatching and speech development. Many things have to be at their optimum for oralism to succeed according to Tucker lecturer in

parent guidance at Manchester (Tucker 1977). He emphasized that the optimum use of hearing aids depends on the following factors "The hearing aids must be of the correct type, correctly fitted, and operating at the correct settings for the hearing loss."

1974 was an eventful year as regards the issue of hearing aids to young deaf children. Lightweight behind-the-ear-aids and commercial pocket sized aids were made available to children by the National Health Service (on N.H.S. prescriptions). According to Sir Alfred Morris M.P. it was intended to replace Medresco aids with commercial ones for a time to allow the department to develop a more powerful range of Medresco aids (Morris 1977).

The move to supply children with commercial aids was prompted by the results of a survey of aids worn by children carried out by Manchester University. The results indicated that as many as 50% of children were wearing aids that were inadequate for their needs (Tucker I.G. 1977). These changes are reflected in the high numbers of children in this sample wearing high powered commercial aids, 50 (78%) had commercial aids, 15 (23%) had Medresco's and one child had one of each!

Hearing Aids : Power

In terms of sheer power it is difficult to penetrate profound deafness. 80% of the children in this sample were severely or profoundly deaf. The profoundly deaf were described in terms of 100-130 decibels below normal hearing by specialists. Frequently parents were told that the child did not hear across the speech range or had no hearing for the higher frequencies. Medical specialists are acutely aware of the physiological limitations of profound deafness especially in connection

with inability to hear speech. This may account for the fact that in some cases of profound deafness the consultant was reluctant to supply aids as all the indications were that aids could not pierce the deafness.

Of two pocket sized aids suitable for children the Willco Windsor can deliver 146 decibels sound pressure level to the ear drum. The Phillips can deliver 135 decibels (R.N.I.D. 1979). Of six radio type high fidelity systems available in this country, two offer output of 138 decibels. Forty five of the children had been issued with a second set of aids. The Willco and Phillips were the most popular choices. This finding reflects a shift towards the provision of powerful aids for very young deaf children. In 1974 Gregory found that 70% of her sample (pre-1974) had Medresco's only, 24% had commercial aids and 7% had none at all (Gregory 1974).

The main area of disagreement between medical specialists and teachers of the deaf concerns residual hearing, with educators insisting on hearing aids in every case and doctors hesitating to supply aids in cases of no residual hearing at all. In other cases where teachers regularly test the hearing of the children conflict arose about the degree of hearing present. Parents became confused in these circumstances.

D.38 Father of a profoundly deaf boy aged 4yrs.4months.

"Inconsistency with the schoolteacher's opinion. The doctor's opinion is that he is very deaf although teachers did not hold this view."

The father resolved the dilemma in favour of the doctor's view. The

mother still held the view that the child was partial hearing. "I have had different opinions and he appears to be partial hearing" She was undecided about recommending the consultant, and later on in her interview she admitted that she was still seeking more accurate information about her son's hearing loss.

When a child is repeatedly tested by teachers and doctors in different acoustic conditions results may vary and parents again become confused, or lose confidence in the very people there to help them.

C.21 Father of a severely deaf girl aged 2yrs. 11months.

"I don't know Mr— (another parent of a deaf child) says they (peripatetic teachers) are not qualified in any way to carry out the hearing tests. They are qualified as teachers and they have got certificates to prove it."

Where teachers carried out screening tests routinely, the role of the medical consultant appears to be merely prescriptive. Parents in these circumstances expressed disappointment.

C.22 Father of a profoundly deaf boy aged 2yrs. 9months.

"It was rather strange I thought. When you go to see a consultant you expect him to do something don't you? But he sort of said, "well I had better look down your ear anyway. And he just looked down his ears and said yes I agree with the teacher of the deaf. The child is profoundly deaf. See you at the deaf school when he's three or four." That's what he said. "Then he put out a requisition for a hearing aid. And after meeting this fellow since I can't understand why he acted like that want more understanding. He's very

charming and considerate."

There was only one instance of confusion arising out of medical procedures. A myringotomy was done in which mucous was drawn off from behind the ear drums. The surgeon commented that the condition (glue ear) was cured. The father interpreted this to mean the deafness was cured and could not understand why the child could not hear.

A.17 Father of a profoundly deaf girl aged 4yrs. 8months.

"Because of the cure did not know who to believe, more confused. The hearing therapist started after a six month check up. She suggested a mild aid after the myringotomy."

The mother said that the same child was thought to be partially hearing originally and eventually proved to be profoundly deaf at 18 months.

Table 23 shows that 53% of all the children were issued with a hearing aid before they were 18 months old.

Table 23. Age of issue of first hearing aids.

Age	Number of children
Less than 12 months old	15 (23%)
12 months to under 18 months	19 (30%)
18 months to under 24 months	12 (19%)
24 months to under 36 months	9 (14%)
36 months and over	9 (14%)

This is slightly earlier than the median age for issue of aids in Gregory's sample at 25 months (Gregory 1974). The average age of diagnosis in this sample was 17.4 months, with a median of fourteen

months.

Table 24 Delay from diagnosis to supply of aid.

<u>Delay</u>	<u>Number of children</u>
1 week or less	22 (34%)
2-4 weeks	11 (17%)
5-15 weeks	12 (19%)
4-6 months	13 (20%)
6 months or more	6 (9%)
	64

From Table 24 we see that over half the children were supplied with aids in less than a month. Gregory reports that two thirds of her sample were fitted with aids within a month of being diagnosed. (op cit).

The usual pattern is for the otologist to send the child along to laboratory facilities within the same building for impressions to be made of the child's ears. Individualized earmoulds are made from these casts and the aid is plugged into the moulds. As the majority of children were diagnosed by consultants sited in hospitals similarly equipped, it is surprising to see the variations in the length of time it took to accomplish this process. For 12 children it took 15 weeks and for 13 it took up to six months.

In six cases it took an astonishing six months and over to get earmoulds. Parents had no explanations for this.

Forty children had two aids each this is 63% of the sample:

Twenty two had one aid (34%) and one child had an aid with a Y cord and two earmoulds. One child described as having a combination was equipped with a behind-the-ear type and two body worn aids.

Table 25. Age at which children received second hearing aids.

Age	Number of children
Under 12 months	1 (2%)
12 months - under 18 months	2 (3%)
18 months - under 24 months	13 (20%)
24 months - under 36 months	10 (15%)
36 months and over	17 (26%)
still on original aid	21 (33%)

64

This Table (25) shows that 43 (67%) of the sample were on second aids at the time of interview. 50 (78%) of children wore two hearing aids: 9 (14%) wore one, usually in the better ear and one wore no aid at all. One child was using the aid in alternate ears in order to provide information about residual hearing.

Although only one child was refusing to wear an aid totally, parents reported difficulties in getting children with high frequency losses to wear aids. The problem appears to be that some of these children reject aids which amplify across the entire speech range.

Theoretically this should give most benefit but in practice it does not operate in that way.

C.1 Mother of a partially deaf boy aged 4yrs. 7months.

"He (consultant) said he had a high frequency loss and there was no suggestion of any treatment at all (just) speak to their face.

He said he would probably have to manage part lipreading and part hearing. No he didn't give him any aids the teacher of the deaf brought those to the house within a few weeks. He started crying. At two and a half he (teacher) started training arrangements. The Dr. said don't force him let him wear it naturally. It also stops all the sound he can hear (by airborne means). Its difficult to fit a child with a high frequency loss. really to encourage him but to let him come to wear it normally. He didn't like it and would only keep it in for about one minute at the most. He's got a second one now. A Medresco body aid-clip it on to the clothing. He wears it far more at school for the story time, even there he doesn't wear it when he comes back from play. He wears it when they are sitting down, but not at home. He'll wear it for a little while a quarter of an hour. but after that he's finished." This mother gave no indication that she had been helped to occupy this boy when the aid was put on him. He was trained by behaviour modification techniques separately i.e. away from his home. Stronger aids were supplied where children appeared to be more deaf than original tests showed. Some parents described their progress through successive aids.

C.15 Mother of a borderline deaf girl aged 4yrs. 3months

"She started off with one Medresco, a pink one. Then she had the little bit more powerful one the black one. Then she had a Phillips and now she's got two (at 2yrs. 9months). Yes she took to them all. Well I don't think she was getting anything from the original ones. In fact all the parents of the children I know have taken to them. I haven't come across anybody yet, whose child has rejected them of the people we know."

Other children appear to be improving as time passes.

28D. Mother of a severely deaf boy aged 2yrs. 11months

"He had tested him several times before making the decision, because his awkward posture made him difficult to assess. But finally he said Yes, we will fit him with an aid, you have a severely handicapped child. He wears a standard Medresco in the left but none in the right as there was no response. I must add. we feel very strongly that he needs a stronger aid."

In some borderline cases the increased amplification did make a noticeable difference.

C.25 Mother of a borderline deaf boy aged 3yrs. 7months

"He is inbetween, they call him very severely deaf. He is very severely deaf bordering on profoundly deaf. He can hear some sound without his aids, some low frequency sounds. The doctor said he is using the residual hearing he's got superbly over the whole range."

The boys father (C.24) described his son as "profoundly deaf without aids on. oh sure! He would be stood there and if he was looking at you and busy taking note you know, I could shout from here (4 feet away) and it would not make any difference. His hearing loss is in the decibel range of 80-85 starting in both ears and then it goes down. it tapers off. They have free field tested him when he has got his aids on and they have been able to confirm what we know, that he hears most of normal speech."

Descriptions of profoundly deaf children were very different.

A.44 Mother of a profoundly deaf boy aged 2yrs. 8months

"He doesn't react to sound at all, although from the audiogram it seems

he does hear, but generally he doesn't appear to react to any sounds. Last week the doctor said he is trying to communicate. What a pity they are not getting enough (sound) through to him."

It is obvious that this child was profoundly deaf even with two strong aids on. He was wearing one Willco and one Maico at the time of interview. This boy's father described him as "He is profound. You know he doesn't take any notice it is all visual at the moment".

Another mother said,

A.18 Mother of a profoundly deaf girl aged 4yrs. 8months

"Hears nothing." with hearing aids the same mother said "Vibration in the right ear".

Some children had several trials with different powerful commercial aids and still could not recognise speech.

C.23 Mother of a profoundly deaf boy aged 2yrs. 9months

"Seems to be profoundly deaf concentrate on his teaching" (advice)

About the aids she said "Very little if anything. I can't see much difference". This boy had had 4 aids in various combinations by the time he was 18 months old.

Some parents gave graphic descriptions of the child's operational deafness.

C.57 Father of a profoundly deaf boy aged 3yrs. 11months

"He does not appear to hear a thing without his hearing aids. A train he will hear if he is on the platform. Very very few sounds. He's profoundly deaf. We also went to Manchester they said profoundly deaf also."

These profoundly deaf children function in a virtually soundless world; they constitute the sub-totally deaf category described by Ewing and Ewing in "New Opportunities for deaf children". In that book the authors suggest that children whose detectability for voice begins beyond 80 decibels can only achieve crude auditory discrimination i.e. "They can only learn to discriminate marked rhythmic patterns in music and to some degree in speech also" (Ewing I.R. and Ewing A.W.G. 1958). In a later book "Teaching Deaf Children to Talk" Ethel C. Ewing and A.W.G. Ewing say that "When deafness is total or subtotal kinesthetic, without auditory, feedback can still make good speech possible" (Ewing A.W.G. and C.E. 1964). The authors suggest the use of mirrors to help the child perceive information about his own speech patterns.

A useful distinction to keep in mind when looking at pure tone audiograms is that hearing for speech and hearing for pure tones are not the same. Davis found the threshold for word discrimination was 11 decibels louder than hearing threshold for pure tones across the entire speech range (Davis, 1948). He suggested it is more meaningful to describe the percentage of words missed at different loudness levels, such as loud speech at the ear (85 decibels) and conversational speech (65 decibels). Profoundly deaf children who respond to pure tones at 80, 90 or 100 decibels will not hear other peoples' speech, but may detect their own voice through loud hearing aids (See John Tracy Correspondence course, 1968).

Hearing Aids : Reproduction

In this study commercial aids were usually issued following a trial with a Medresco aid, on evidence of increased deafness. The parents invariably mentioned increased power. The quality and range of the sound going into the child's ears became important only when the parents were questioned about that or because the child demonstrated an inability to discriminate speech through the aid.

The parents were asked "Do you notice that the child "hears" any particular sounds with the individual aids on, which he does not hear without it?" The results are shown in Tables 26 and 27.

Table 26. Awareness of sound through individual hearing aids.

	<u>Number of children</u>
1. No observable response to sound	21 (33%)
2. Aware of voices	20 (31%)
3. Awareness of speech	15 (23%)
4. Aware of household noises	20 (31%)
5. Aware of environmental noises	16 (25%)

The most frequently mentioned outdoor noises to which children responded were cars and aeroplanes. Indoor noises most frequently mentioned as getting responses were washing machines, door bells, telephones, radios, televisions and dogbarks.

For 21 children parents reported no observable response to any sounds. The three vibration cases came from this group. The parents of these children reported stamping on the floor to get their attention. This data suggests that the personal hearing aid was of no observable benefit to these children.

Of the 20 responding to voices the transcripts showed that these were often responses to loud, single calls. such as the child's own name called out by the mother or warnings shouted in a loud voice.

Of the 15 who responded to speech, three children were mentioned as being able to detect words through their aids. In total 49 (76%) children out of 64 could not discriminate amplified speech. These results suggest that the majority of these children could not recognise sufficient of human speech to learn to talk on amplification alone. When responses were matched against hearing losses (Table 27) the distribution of responses shows the kind of difference one would expect by chance.

Table 27: Hearing loss and Response to Amplified Sounds

Degree of deafness	Voice	Speech	House- hold	Environ- ment	Vibra- tion	None	Total Responses
Profound (27 cases)	12	4	11	7	3	6	43
Severe (14 cases)	5	3	5	5	0	2	20
Borderline (10 cases)	2	4	3	4	0	3	16
Partially Deaf (12 cases)	2	3	2	2	0	8	17
Totals = 63 cases	21	14	21	18	3	19	96

Undoubtedly this is a pessimistic picture which cannot be blamed on lack of amplification.

Wetnall and Hudgins are two auditory training enthusiasts who saw

the advent of electronic aids as taking the drudgery out of auditory training and simplifying the whole process of language learning (Wetnall 1956, Hudgins, 1954). This may have come about for teachers of the deaf but it cannot be assumed in the case of parents. Gregory has presented data which suggest that parents do not get the comprehensive advice they really need to help the child get the maximum benefit out of the hearing aid (Gregory 1974). In an earlier study Clark concluded that for the profoundly deaf child who has heard very few words, the aid is not valuable unless he receives auditory training to precede and parallel its use. "There is no evidence that parents are informed about the value of auditory training without aids " (Clark 1953).

Difficulties in maintaining aids for young children

Optimizing the conditions for successful use of hearing aids creates responsibilities for parents. In this sample the parents were made to feel responsible for aids in three ways.

- a. That the child wore the aid continuously
- b. That the parents keep the aid in good working order
- c. Parents expose the child to continuous spoken language

a. That the child wore the aid continuously. The majority of children did this as shown in Table 28.

Table 28. Daily Use of aids in preschool children

	<u>Numbers of Children</u>
All the time except in bed or bath	58 (90%)
Mornings only	1 (2%)
Afternoons	0
At home only	0

<u>Table 28 cont'd.</u>	<u>Numbers of Children</u>
In training sessions only	0
At the play group/nursery	3 (5%)
Never	2 (3%)

64

29 mothers reported having difficulty getting the child to wear the personal aid in the beginning. 31 reported no difficulty. Only 17 fathers reported having difficulties in getting the child to wear the aids in the beginning. 8 couples expressed differing views. The women felt that the men underestimated the amount of trouble the mother had encountered during the day getting the aid on and keeping it on the child. The men argued that they only saw the child when they came home from work often ready for bed and without the aid, so they missed all the fracas. A variety of reasons were brought forward to account for the struggle to get the child to wear the aid(s) (Table 29).

Table 29. Difficulties in connection with the child's first aid

	<u>Number of Mothers</u>	<u>Number of Fathers</u>
Earmoulds	13	9
Outright refusal	8	5
Too young	4	1
Aids too big	1	0
Child too frightened	1	0
Child too lively	1	0
Mother, gauche	1	0
No benefit	0	1

The raw data of Table 29 speaks for itself; earmoulds are the main cause of rejection of aids by young deaf children. Three parents said they solved this problem by getting earmoulds made privately. Ideally earmoulds are intended to follow the contours of the ears, directing amplified sound down the ear canal towards the eardrum. When the mould does not fit sound leaks out through the gap and escapes into the environment and back into the microphone. The resultant acoustic feedback is an irritating noisy squeal.

The solution is tight fitting earmoulds. Frequently the aid is turned down or off to put an end to the immediate squealing.

According to Kennedy writing in the Journal of the Royal Society of Medicine the problem of acoustic feedback is endemic, she says,

"Very few children are able to utilize the gain their hearing aids offer, because the current materials for the manufacture of earmoulds are inadequate and acoustic feedback occurs all too easily"

(Kennedy 1978).

Feedback also arises when the microphone is very close to the ears as is the case with small babies. Even if the moulds fit properly, short bursts of feedback can occur as the child moves about, or pulls the cords and moulds away from the ears. One mother described the effect of an aid on her small daughter.

A.31 Father of a partially deaf girl aged 2yrs. 4months.

"I just thought you know she couldn't hear so well and I just had to shout at her a bit. But they gave her this awful heavy thing. The peripatetic teacher herself, you know, was

extremely embarrassed you know by the thing. I didn't know she was coming and I didn't mean to be rude, I was just so upset you know. I think it was the wires really she is a fiddly child anyway. She was just forever fiddling. because the wires were there. She was just fiddling you know, very busy, would not keep the Medreco's on."

The "fiddling" was solved in this instance by fitting the child with two small behind-the-ear aids. Life improved greatly for mother and child. The whole business of acoustic feedback proved very irritating. Parents would finally turn the aid down or off altogether, to stop the squealing. Thus the whole point of wearing an aid was lost. Some parents reported that the child wore the aid in spite of the squealing.

A.44 Mother of a profoundly deaf boy aged 2yrs. 8months

"None at all (trouble) Right from the start he accepted them. We still have problems - feedback! 3 is the maximum (Volume control) Always needs moulds, not a good fit."

This extract illustrates the dilemma parents face; to turn up the volume needed by a profoundly deaf child and ruin the fidelity of input or to turn the volume down to get rid of the feedback.

With small babies there simply is not enough room on the baby's chest to fit everything on without feedback.

D.48 Mother of a profoundly deaf boy aged 4yrs. 3months

"Yes (had trouble). He was a good baby and I persevered. He was very young you get feedback on a small baby".

Other parents found the baby grew so rapidly that the earmoulds were

continually being out grown.

C.27 Mother of a profoundly deaf child aged 2yrs. 7months

"It were murder you know, absolutely. Well they fitted him badly those moulds at first. But you know, they were perfect fitting (originally) because they were done under anaesthetic. At first they fitted him lovely but he was growing so much they just didn't fit him for very long at all you know."

In other cases the child was only interested in taking the paraphernalia to bits. Parents could only wait and hope the novelty wore off.

D.16 Mother of a profoundly deaf boy aged 4yrs. 5months

"Yes (had trouble). Well I suppose that anybody, any child would baulk at having a harness strapped on and he, technically I am sure you will see he just wanted to take it all to pieces all the time. And he didn't get much benefit at first because he wouldn't from a Medresco you see. It was more a question of him getting used to wearing one, than of getting a great deal of benefit from it and after that he knew that it was the one thing that would bring me running straightaway; if he took his hearing aid out."

Other parents simply taped the earmoulds onto their baby.

A.7. Mother of a partially deaf boy aged 2yrs. 11months

"Yes (had trouble) He pulled the earmoulds out, hard to fit. We taped them on."

This boy was diagnosed as deaf at 11 months. At the time of

interview he was wearing a Phillips with a Y cord and the parents reported that he wore it all the time.

In 30 (49%) of cases the parents reported no trouble at all in getting the child to wear the aids. The most obvious reason for the children accepting the aids is that they hear better with it than without it.

C.25 Mother of a borderline deaf boy aged 3yrs. 7months

"No (no trouble). He wore them all the time even the Medresco's in London. He has a second set Yes a Phillips. Just under a year and eleven months old when he got the Phillips. The first time they were put on Miss X said Hello, that's his teacher in London, and his little face lit up. He had finally caught on that if somebody's mouth opened he could not hear what was coming out, but something was coming out. We had no troubles at all. only if he is ill, if he has got tonsillitis or ear infections."

D.29 Mother of a severely deaf girl aged 4yrs. 2months

"On the whole she was pretty good. At first she wore it for a short time then she took to it on the whole. You can call her name without shouting she'll turn to it. Without it she won't turn. without shouting. They gave her new aids last time in the hope that they'll be of more benefit to her. These new aids get rid of the background noises. Oh yes, she is getting more benefit from the aids and the specialist said that too. She's not hearing much louder but much clearer, which is more important."

b. The parents are responsible for keeping the aid in good working order

This involves having fully charged batteries in the aid itself, intact leads, plugs and earmoulds that actually fit. The main difficulty has been described already; badly fitting earmoulds. The chief difficulties are associated with lack of spares especially if the aid itself gets lost or broken. Parents reported waiting up to six weeks for another aid.

A.43 Father of a profoundly deaf boy aged 2yrs. 8months

"He wears the aid not all the time.. because we have been plagued with breakages, plagued with them going wrong quite a lot. More or less, as one came back we had to send the other one off, sort of thing. But they have settled down now. They don't break down quite so much now. She wears them just during the day, not in the evening because she goes to bed at half past five."

Some couples simply bought a spare aid on the commercial market to avoid being without an aid when the original broke down and had to be sent back to the hospital for repairs.

C.11 Mother of a partially deaf girl aged 4yrs. 5months

"We purchased a Maico Windsor, the family did. She uses an aid with a Y cord (to both ears). We bought her one you see because when the hospital one was in for repair the Medresco she didn't have any, so we bought one so she had one in use all the time. They are away such a long time for repair."

Some couples gave up on local facilities for earmoulds and travelled to London each time they needed new moulds, spares, etc. Often the father took a day off work to do this. This became a very time consuming affair just to get a set of decent earmoulds or exchange the aids.

Very few parents were advised to listen to the aids themselves to assess the quality of reproduction.

C.10 Mother of a profoundly deaf boy aged 4yrs. 6months

"I would have made sure we had a commercial aid earlier. Not knowing anything about hearing aids, we thought the Medresco was good, and at one of our first meetings (National Deaf Children's Society) we were played tape recordings of what the child would hear through different hearing aids. That was a great deal of help to hear what rubbish it was through some of them."

For all the parents in this study the idea of auditory training had been welded on to the issue of an aid. There is no data to show that any parent had been given any help in carrying out auditory training without aids, to bridge gaps when the aid was out of action for any reason. This situation is similar to the situation reported by Clark, earlier. There are accounts of auditory training without aids in the literature, however. Ling in 1963 provided a fascinating account of his attempts to utilize the lower frequencies for speech discrimination using an old fashioned speaking tube. He later used a stethoscope to feed speech into the child's ears. He pointed out "This apparatus certainly permits excellent speech reproduction

of low frequencies, costs only 25 shillings and is equally effective in many cases (though not so versatile) as an expensive speech training aid. It has some advantages. For example, there are no batteries or problems of feedback. It is essentially portable and because the full range of low frequencies is present, intonation and rhythmic patterns can be more clearly presented than through hearing aids" (Ling 1963). Fisch writing on the "Functions of Listening and its Disorders" describes the various processes involved in listening such as keeping still, positioning the head, inhibition of other bodily functions and so on (Fisch 1964). The Report of the study group on the child with Impaired Hearing, recommended auditory training as a discrete activity to be carried out separate from any hardware (World Health Organization 1955). The results of this study suggest that such recommendations were not implemented with these parents.

c. Parents must expose the child to continuous spoken language

All the parents had been instructed to talk to the child. Direct observation showed that the parents were talking to the children although some talked without establishing that the child was attending. Some had been advised to reserve part of the day to do some intensive talk and play sessions with the child plugged in to a speech trainer. These table models are larger, more powerful hearing aids with headphones which clamp over the ears. They can deliver very loud speech at good reproduction to the ear. One or two microphones are provided so that each person can have a microphone close to their lips when speaking. Speech trainers were

usually on loan to the families from the local education authority.

Table 30. Speech Trainers.

<u>Source</u>	<u>Number of Children</u>
On loan from L.E.A.	30 (47%)
By grant from the Rowntree Fund	2
Speech therapist loaned it to family	3
From The National Deaf Childrens Society	3
From the hospital	1
On loan from the University	2

Twenty three families had no speech trainer. (36%). When parents were asked if the child enjoyed wearing the headphones of these trainers (Question 36) 33 children (52%) were described as often enjoying the headphones. 20 children (31%) were said to rarely or never enjoy the headphones and rejected them. This means that slightly more than one in two children will enjoy (and therefore accept) the headphones of the speech trainer. Ewing and Ewing in their book "Hearing Impaired Children Under Five" attach great importance to the daily use of these speech trainers with young deaf children at home. "In practice we have not infrequently found that a training aid of this kind is the best means of giving a very young deaf child his first experience of amplification. It makes possible a very gradual introduction to use of a hearing aid. The child is watching in front of him what his mother is doing with an attractive noise making toy. She may be playing with an xylophone in a lively way, singing in time to the music that she makes with it. If the child needs much amplification, she uses one hand to

hold her microphone close to the noisemaking toy, in this case the xylophone. Her helper, the training aid having been switched on, holds one of the receivers near the child's ears - the better ear if a difference between them has been found. With the child's attention still focussed on the toy, the receiver is slowly moved nearer and nearer to his ear, finally to cover it. When this has been used several times we have found that a young child severely deaf, may come to press his ear against the receiver without waiting for it to be placed there by an adult. There could be no clearer proof of a deaf child's awareness and enjoyment of becoming able to hear as well as to see what is happening."

There is no evidence to suggest that the teachers worked in tandem with the parents as described by Ewing and Ewing, but the parent's own statements would support the idea of occupying the child in order to keep him wearing headphones and at the table.

C.26 Father of a profoundly deaf boy aged 2yrs. 7months

"He does enjoy wearing the headphones if you find something interesting for him to do, but he gets bored after about 10 minutes or a quarter of an hour. Sometimes he'll have them on a few minutes and then he'll take them off with me. But sometimes on a Saturday morning when my wife's out shopping he has had them on I should say half an hour. If you can get enough games together and things to interest him you know, possibly without the little girl around to distract him."

Some teachers provided the parent with ideas and materials to

make the most of these listen and talk sessions with the trainer.

A.30 Mother of a partially deaf girl aged 2yrs. 5months

"I think she does enjoy them because you know we make a game out of it and the peripatetic teacher brings new toys every week. So I am able to do a lesson every day."

In some cases the teachers did not use speech trainers for philosophical reasons although the family possessed a machine.

C.58 Mother of a profoundly deaf boy aged 3yrs. 11months

"The thing is both school and the peripatetic teacher are very antispeech training so we have never bothered with it. You know he will have it out of the box and play with it. I was only talking to the teacher last week about this. I was saying should I start getting him used to his speech trainer, before he goes to school. And she had had one little boy recommended to her and said they didn't want him teaching on a speech trainer because they think it doesn't teach them natural speech. They think it is no good putting headphones on them and sitting with them for ten minutes or whatever and pumping it in to them because they are not having that sort of sound all the time. And they just don't— they never used it formally. The teacher never used it at all. since she brought it to him. It's upstairs. I felt very guilty about having it at first. There are so many people who have different teachers to us, who swear by a speech trainer."

In other cases the speech trainer was used insensitively.

A.17 Father of a profoundly deaf girl aged 4yrs 8months

"Most of the teaching was done on the speech trainer for which she built up a colossal hatred. I was here very rarely for the teaching. Very, very occasionally she'd take it out but that was only two or three times a year."

In the case of young babies the headphones were simply too big.

D.22 Father of a profoundly deaf girl aged 3yrs. 2months.

"We used to use it three times a day (for television) she watched mainly cartoons. It took a while for her to accept. She wouldn't wear the headphones at first. They were a bit big I suppose. It took six months. But we had two teachers, one left, one tried to force them on her. The other changed. After a while she didn't mind. She doesn't use them now, she goes to school."

Other parents were disappointed with the speech trainer. One man who described his child as having no useful hearing described his experiences with the trainer.

C.9 Father of a profoundly deaf boy aged 4yrs. 6months

"The speech trainer you know we thought it was better than just hearing through a microphone, but he doesn't seem to notice any difference really. He didn't enjoy it. He used to tolerate it (we) had more difficulty with the speech trainer than the personal aids. He never uses it now, his favourite is his hearing aid."

Other sources of amplification

Eleven families had had induction loops installed in their homes. This consists of an induced electrical field within a loop usually

situated round the living room. Most hearing aids can be switched to magnetic coil pickup in order to use this type of amplification. One man who had installed this himself removed it as it proved to be of no use at all. Eight couples judged induction loops to be no use with their children. This left three families whose children regularly used the loop circuit to tune into television.

53 families had no induction loops at home. However, the lack of enthusiasm among the people who had used induction loops suggests that they have limited value for young deaf children.

Parents were asked about earphones in use with Television or Radio or Record players. In 11 families such general purpose earphones were available. The deaf children used them mostly for watching television. There is no evidence to suggest that young deaf children use domestic hi-fi equipment with any enjoyment.

SUMMARY

1. The data about amplification suggests a trend towards provision of commercial aids for preschool deaf children since 1974. This included high powered binaural amplification.
2. Acoustic feedback due to badly fitting earmoulds accounts for less than full use of personal aids.
3. Increased awareness of speech does not reach significant levels.
4. Parents experienced difficulty in keeping the aid in continuous working order due to frequent absences for repairs.
5. The data suggests that auditory training procedures are linked to hardware. Parents need guidance on how to carry out auditory training in the absence of aids.

Chapter 7

PRESCHOOL TRAINING AND PARENT GUIDANCE

Previous studies have indicated associations between deafness and a range of problems. Fellendorf showed high incidence of visual problems in his sample. (Fellendorf 1974). Caplan and Kendall have reported on the high incidence of temper tantrums in young deaf children. (Caplan 1955 and Kendall 1951). More recently Gregory reported higher incidence of temper tantrums in all ages of preschool deaf children than their hearing counterparts the root cause being "frustration" (Gregory 1974). Jensema of the U.S.A. Office of Demographic Studies reported that perceptual and motor problems were the most frequently reported problems for both sexes, with Rubella the highest reported cause of hearing loss and emotional/behavioural problems (Jensema 1975).

These findings back up the daily experience of teachers of the deaf who are in general agreement that there is a "straightforward" quality about "born deaf" deaf children. in contrast to the more complex makeup of children deaf from other sources. Workers such as Davis and Conrad have suggested that educational methods can help or exacerbate these problems; Davis suggests the use of signs and speech in parallel from an early age; Conrad suggests that speech and signs should be taught so the children have a choice of communication media suited to their personal needs (Davis 1975, Conrad 1979). In view of these developments the writer attempted to find out something of the range of additional problems in this sample. Questions were asked about special educational treatment

to combat the educational deficiencies arising out of these conditions.

Table 31 shows that the expected range of additional problems was present in this sample; 32 children were described as having no additional problems. This means that one in two children had something else besides deafness wrong with them.

Table 31. Additional problems in 64 Preschool Deaf Children

<u>Problem</u>	<u>No. of Children</u>	<u>Treatment by</u>
Poor eyesight	14	Glasses/Surgery
Slow learning	2	Due to the deafness
Poor balance	2	None. child maturing
Asthma	2	Cleared up by itself
Heart murmur	2	Cardiac X ray
Tantrums	2	Diagnostic Clinic
Cleft Palate	1	Surgery
Convulsions	1	Phenobarbitone
Hayfever	1	Anti-histamine
Hole-in-the-heart	1	Surgery
Insecurity	1	Parents gave support
Orthopaedic problems	1	Pediatric followup
Colds/Catarrh	1	Grommets to drain ears
Suspected autism	1	Spontaneous Remission
Total	32	

The listed treatments indicate that the majority of problems were perceived as "clinical" and treated by doctors. There was only one case of special educational treatment being applied to behavioural

problems resulting from the deafness (see C.1 quotation).

C.1 Mother of a partially deaf boy aged 4yrs. 6months.

"He did have a full test last time and he said he can hear about 50% of the scale you know the lower half about 50%. Mind you I do not think he hears 50% of speech. Because thats all on a higher scale. He hears a lot of the (environmental) noises aeroplanes going over. When he was younger he had dreadful behaviour problems resulting from this handicap. He was frustrated. He could not hear any corrections we called after him and he was bad with other children - terribly destructive and frustrated. It was dreadful. But the problems we have had, have been solved now. He has received help. yes, special help at the local diagnostic unit, the local education authority. They were very strict and disciplined him very thoroughly. They had a reward system with smarties and so on. There is a nursery attached near there, they had problems at first because there were no other deaf children there. They all had different problems but they had had a deaf child previously.

I don't know (in detail) how they did it, it was just a specialized approach. They did not give in. It was a small group. He went there really because he was not good with the other children. Other children were frightened of him. He did all the normal things an ordinary child would do, but he did them much worse, you know, kicking and biting and being such a big boy for his age they were all terrified of him. So it was the behaviour pattern; they wanted to change his behaviour

pattern. He was quite friendly but suddenly without warning he would change. I suppose he was so frustrated—he could not talk to the other children. If you called out to him he could not hear. Oh they were wonderful at the diagnostic unit. He is a different child."

This mother's account of the special educational treatment for her boy is the only example of educational treatment originating from an educational source; it is clear that what is being described here is behaviour modification treatment to counter the destructive behaviour of a deaf child placed in a hearing nursery setting. In theory the integration approach sounds ideal but in practice it is difficult to carry out without damage to the deaf child or danger to the other children, as this example shows.

The following quote illustrates the treatment of a restless active boy by drug treatment.

D.8 Mother of a profoundly deaf boy aged 4yrs. 5months

"Trouble with sleeping. terrible, he has to have medicine. We were terrible before someone (the E.N.T. specialist) - we had to have something. We have tried him without it once but we had a terrible night. He had a bed of his own and he used to be up everywhere playing about, waking them up (brothers). He used to bite them to wake them up. He wanted to play, to get up. That was one of the biggest problems with him. But he is under sedation at night. But it did not work with the medicine (only) it is only since he went to school that he has slept slightly better. The

problem is that we do not want him on this medicine really, but he has to have it for the rest of us. Just before Christmas we could not go on."

Problems such as poor sleeping, poor eating, restlessness and distractibility may never reach clinical status but still make heavy demands on parents and teachers. See Blatz and Griffen's Canadian study of problems in "non-problematic" children (Blatz and Griffen 1936). The data from the present study does not support the idea that teachers of the deaf made systematic attempts to help the parents deal with such problems. Ewing and Ewing discussing the management of temper tantrums in young deaf children simply suggest that the children become less frustrated as they gain control of spoken language (Ewing and Ewing, 1971). They emphasized that preschool training and parent guidance were essential aspects of the Oral Way of Life (Ewing and Ewing 1951). They give little advice on the problems mentioned above in their book "Hearing Impaired Children Under Five" in which they outlined their philosophy of home training in detail. The teacher's aims for home training as stated by them are:

1. The development of co-operative play
2. Adult child communication
3. To develop speech readiness and articulation readiness

and for parents the objectives of home training are:

1. To develop the child's tendency to watch faces
2. To help the baby associate what he can see with what he can hear

The practical applications of these objectives are that parents and teachers should allocate large amounts of individual attention to each child. The questions in this section of the interview were designed to measure the gap between theory and practice in the following areas

1. Amount of time spent in educational settings by deaf children
2. Amount of time spent with specialist teachers
3. Amount of home visiting from teachers of the deaf

Special Educational Settings

Special educational playgroups are an unusual facility. Of two children mentioned as attending "special" playgroups, one attended a group run by mothers of deaf children for deaf children. The other was an all-handicap group. The remaining 18 children attended local playgroups (non-specialized) 2 or 3 mornings a week as their mothers thought fit.

Table 32. Educational Settings of Preschool Deaf Children

	<u>Number of Children</u>
Playgroups (ordinary)	18 (28%)
Nurseries (ordinary)	11 (17%)
Partially Hearing Units (nurseries)	14 (22%)
Primary Departments of deaf schools	10 (16%)
Partially Hearing Units (daily)	3 (4%)
At home	4 (5%)
"Special" Playgroups	2 (3%)
Deaf Residential School Nursery	1 (2%)
Tutorials at a University	1 (2%)

In summary 29 (45%) of the children were attending non specialized local education facilities. 31 children (48%) were attending schools for the deaf or partially hearing units alongside ordinary schools. The single child attending for tutorials probably reflects a situation where only Manchester University offers a direct parent education service. Although many parents started off in this service they frequently switched to local education authority teachers as soon as the local service was offered. Many local education authorities offered services as soon as they were informed of the deaf child in their area regardless of age. In this group only one couple had insisted that their two year old should be sent away to a residential boarding school for the deaf, apparently very much against the wishes of their peripatetic teacher. Teachers and parents on the whole opted for local playgroups and for nursery groups, rather than send their children away to boarding school at this young age. Some parents were concerned that no special attempts were made to talk to the deaf children in such groups.

A.30 Mother of a Partially Hearing girl aged 2yrs. 5months

"I am trying to get her into an ordinary ^f playgroup because she gets no language. or very little language because they are so handicapped themselves at the playgroup for handicapped children. They thought she would be better with children who are speaking. she might try to copy them you know."

The taped interviews do not suggest that there is any special adaptation to talk to deaf children in these groups. There was no indication that sign language or finger spelling was used in such

groups either. In brief, there is no evidence to suggest that young deaf children attend groups which are specially adapted to their communication needs.

Table 33. Length of attendance in school settings

	<u>Number of Children</u>
Less than 3 months	12
3 months - under 6 months	5
6 months - under 9 months	11
9 months - under 12 months	4
12 months - under 15 months	8
15 months - under 18 months	3
18 months - under 21 months	5
21 months - under 24 months	1
2 years and over	7

A total of 56 (87%) children spent time regularly away from their homes every day. Five had not been assigned teachers at the time of interview. These were the youngest children. One child was involved in assessment procedures. 10 children travelled to schools for the deaf and had been doing that for 2 years or more. As all these children were under the age of five, this finding suggests that if young deaf children go to schools for the deaf they go between the age of two and a half and three years old. Regardless of whether they travel daily or weekly, it does mean that they spend a large part of every day away from their homes and families and the sort of individualized language stimulation they need to establish a basis for formal schooling. Tucker expressed

concern that 3 year olds formed 17% of all underfives in full time education in schools for the deaf in 1975, and wondered why they could not be supported at home until the statutory school age. (Tucker, 1977).

Contact with Specialist Teachers

Time spent with teachers of the deaf was difficult to assess as there was an overlap between home visiting and nursery school visiting by these teachers. The parent was not always informed about how many visits the teacher made to the deaf child in a hearing nursery, or a playgroup. In some cases the teacher continued visiting the home when the child went to the nursery, in other cases the teacher did not visit the parents when the child started attending a group. 29 (45%) of children were not in classes for deaf children. 28 of the children (43%) were in classes for deaf children. In total 35 (65%) individual children were taught by a teacher of the deaf. No particular pattern of contact appeared in any local authority. Fifty five families had had home visits from a teacher of the deaf, three had been involved with a speech therapist and two had attended specialist centres. In total 60 (94%) of children had had some form of individual contact with specialist educators before going out of their homes to a group experience. 52 children had had regular visits from a teacher of the deaf. The group mean length of time for this service was 19 months 22 days. These visits are confined to term times only. 14 (22%) of children were in regular contact with the peripatetic service at the time of interview.

In view of the emphasis on the contrived play situation in the listen-talk method of home training it is of some concern that 45% of children were away from the individual situation from an early age. A recent study of all handicapped children and controls by a research team from Strathclyde University showed that in groups handicapped children were (a) More likely to play alone and (b) Were marginally more likely to be alone with an adult. In spite of the extra time spent with adults, handicapped children did not get more "speech" time, especially the speech handicapped.

In their summary Clark, Riach and Cheyne noted that "there was little evidence of any special expertise for the handicapped in either nursery classes or preschool playgroups" (Clark, Riach and Cheyne, 1977). Some parents in this study were aware of this situation and attempted to remedy it by asking staff to talk to their deaf child.

D.16 Mother of a profoundly deaf boy aged 4yrs. 5months

"Even at the playgroup I had to do quite a lot of explaining to the supervisor who is a very intelligent woman about how to get her language across to him and obviously trained teachers are going to be much more aware of the sort of techniques to use."

Patterns of home visiting by Peripatetic Teachers of the Deaf

Table 34. Frequency of home visits

	<u>Number of families</u>
Once a week	44 (69%)
Twice a week	7 (11%)

Table 34. Frequency of home visits cont'd

	<u>Number of families</u>
Every two weeks	2 (3%)
Every three weeks	1 (2%)
Irregularly	3 (4%)
No peripatetic visits	6 (9%)
Mother took child to a clinic	1 (2%)

It is already known that visiting preschool deaf children is only one of the many duties of the peripatetic teachers. In 1967 a Department of Education and Science survey of the peripetatic service showed a total of 177 such teachers. 97 did no work with deaf children under the age of two years. 76 teachers had fewer than 10 on their books and 3 had between 10 and 20 such children (D.E.S. 1969). The report had this to say about visits to young deaf children "The very few (11) who were seen twice a week were very young children with special needs. A rather larger number (30) were seen once a week, or once a fortnight (57) but the majority were seen less often." The typical visiting pattern for this sample was once a week. It was not possible to detect trends as the proportion of preschool deaf children to all deaf children is not known.

It is clear that contact with a specialist teacher is vital to the success of the oralist approach. Gaskill felt that the solution to low educational achievement of deaf children was the training of young deaf children by their parents under expert guidance (Gaskill M.Ed. Thesis 1952). Tucker suggested that a realistic ratio of one

"parent guider" to 20 preschoolers would require 134 such staff nationwide. He quotes an establishment figure of 363 peripatetic teachers in the same paper. Theoretically at least in 1975 there was a sufficiency of teachers to meet his proposed ratio (Tucker 1977). Quantity of contact is no indicator of quality. Professor Taylor speaking about Manchester, which is still the largest teacher training department in the country stated that "the amount of experience that these students have of parent counselling totals one day of their course. Despite this there are authorities who are prepared to appoint teachers who have not undertaken further necessary training" (Taylor, 1977). In view of this statement it was expected that the teachers would be strong on direct teaching of the child and weak on parent counselling. A variety of questions were put to parents on these aspects of the peripatetic services.

An initial attempt to probe the parent's attitudes toward the question of specially trained teachers of the deaf showed that 97 out of 105 parents said "Yes" deaf children needed specially trained teachers of the deaf to work with them. This indicates a positive attitude toward teachers of the deaf. Attempts to assess the effects of home teaching on deaf children are shown in Table 35.

Table 35. Effects of Home Training on Preschool Children

	<u>Number of Parents</u>
No Change	7
Got worse	1
Some Learning	22
Slow Progress	19

Table 35. Effects of Home Training on Preschool Deaf Children cont'd.

	<u>Number of Parents</u>
Rapid Progress	22
Too Young to Teach	5
Child/Teacher conflict	2
Interrupted teaching	1
Never Saw any Teaching	3
No Teaching Provided	3

Out of 85 comments there were 63 which referred to some progress or some learning, of an unspecified nature. 5% of parents said that progress had been slow at first and speeded up later. Some parents reported no progress at all.

A.17 Father of a profoundly deaf girl aged 4yrs. 8months

"Before she started at a Partially Hearing Unit she made very little progress. The tutorial situation came to a stop formally. due to teacher calling at inopportune times and not having a regular teacher. After I saw the teacher at the Partially Hearing Unit I could see more ways of helping her, after seeing the teacher work."

Puzzles and matching games and picture completion seemed to form the basic content of the tutorials.

D.8 Mother of a profoundly deaf boy aged 4yrs. 5months

"I found a difference from when she (the teacher) came. He altered slightly, he used to look forward to her coming. and she had a few times he was awkward with her but she got through to him. I saw a difference. Not rapid I would not

say you know not for speech. But she brought puzzles and things, well you do not have to show him he can do them, he is very quick like that. Some learning. Oh Yes!"

Some parents were lavish in praise of the teaching although they could not describe anything specific that the child had learned.

D.19 Father of a profoundly deaf boy aged 3yrs. 1month

"Yes. The teacher has only just stopped coming the last couple of weeks and he came twice a week all the time, even through the holidays. He was very very keen very very good. He is in charge of all of them. we had the top bloke who used to come. He made a lot of progress and we also try to do the same as what they are doing in school in the week. He has made a lot of progress, socially. He is not as shy as what he used to be. and of course he is only three he is only a baby really, isn't he? He is quite good. To give you a comparison we had a teacher at — who was absolutely useless. There is no other word for it. She was absolutely useless. She used to sit there and he used to blow raspberries at her and she just used to laugh. But the second used to come and we used to — we were always in the room. And he used to just play and make him do things and make him work, which was very good."

Although a majority of parents felt their child had made progress it was difficult for them to pin down specific areas of improvement at the time.

D.33 Mother of a severely deaf girl aged 2yrs. 9months

"I think she made a lot of progress. I do not think it was rapid. I think over the last three or four months she has made rapid progress, but I think at the beginning it seemed slow, very slow, and I got very despondent. Because she (teacher) seemed to come each week. and we did not seem to be making any progress at all. Looking back I realize she has made a lot of progress and all this basic groundwork and slog was necessary."

An observer could be forgiven if they confessed to being as ignorant of progress after reading this as they were before they read it.

Some parents were hopelessly confused about oralism, speech and receptive language teaching.

D.29 Mother of a severely deaf girl aged 4yrs. 2months

"Oh Yes (need specially trained teachers). Because until they acquire speech and understand speech they just cannot learn anything. You have got to have your speech communication to understand anything. Only a specially trained teacher can do this. Otherwise your child would never be able to cope with normal life."

Specialist Teaching

The previous data suggests that very young deaf children are likely to attend local non-specialized playgroups and nursery classes before going to school proper, be that a partially hearing unit or a school for the deaf. It is very unlikely that they will have any contact with specialist teachers or teaching specially adapted to

their needs in those situations. The parents recognised the need for specialist teaching and looked to the peripatetic service for it. Table 40 shows that 32 (50%) of mothers and 23 (57%) of fathers wanted more direct teaching for the child independent of other areas of need. The obvious source of expertise for parents is the teacher of the deaf. Amongst members of the profession the issue is complicated by philosophical debate about the role of the parent and the amount of direct teaching of the child parents are expected to take on. Ewing and Ewing indicated in 1971 that they do not expect parents to become teachers and that tradition still persists in spite of individual parent's needs and capacities.

A.10 Mother of a profoundly deaf girl aged 2yrs. 11months

"In the early days she came and did things with the child, but she did not actually tell me what to do. I got the idea that I was meant to do what she had done but she actually did not tell me; I must do this. I felt as if I wanted to dash off and do a teacher of the deaf course. But as we discovered it later with her and she was saying she does not like her parents to become teachers she likes them to be parents not a teacher. I think she gears what she does with parents very much to parents. I suppose she is not the same with every family she goes to. Even if I felt I had wanted more she may have been right. I do not know but at the time, I did feel at the time I needed more."

In the 1970's however, the Warnock Committee of Enquiry into the Education of Handicapped Children came down firmly on the side of direct child teaching. "Where parents are unable to carry out

early education programmes effectively peripatetic teachers should assume responsibility and see that regular teaching is carried out " (D.E.S. Warnock Report, 1978).

Table 36 lists the sorts of educative activities which one might reasonably expect a teacher of the deaf to provide for parents of a young deaf child. The results represent an over-optimistic picture of the kind of educational help coming from the peripatetic service as the majority of parents said they had got help in all these areas from the Nuffield Centre's crash courses for parents. The John Tracy Clinic's correspondence course also played a part in supplying direct instruction on how to teach the child. The men particularly credited crash courses as their main source of help in all the following areas:-

Table 36. Educational help for parents from teachers of the deaf

<u>Area</u>	<u>Number of Parents</u>
1. How to talk to the child	74 (70%)
2. How to play educational games with the child	70 (66%)
3. To use books with the child	49 (47%)
4. To take care of the hearing aids	46 (43%)
5. How to develop the ideas behind words	33 (31%)
6. How to use a proper sign language	8 (7%)
7. How to use a finger spelling	2 (2%)

High priority areas of help all relate to oralism; it would have been surprising if "How to talk to the child" had not been top of the list as this is a major principle of the oral philosophy.

1. How to talk to the child. This was the highest priority for the teachers. The parents made the point that to really talk to a deaf

baby constantly, as directed by the teachers is a daunting task if done properly. To do it "properly" implies talking without signs, or finger spelling.

A.15 Mother of a partially deaf boy aged 4yrs. 5months

"It is a bit different having to do it like a peripatetic teacher over an hour here and an hour there, but having to do it day in and day out to keep saying it, go to bed, that is a nice bed, there is a bed, you are going to bed, always on that bedroom; the words sound foreign after a while. It comes but it takes an awful long time to do it as you should. I think every mother gets the feeling that they are not doing enough and this is what starts it off if you want to do more."

This mother said in another part of her interview that she had used all gestures with her baby in the beginning and replaced them with words later on. Other mothers admitted that applying the oral method in undiluted form was a terrific drain on time and energy without much satisfaction.

C.17 Mother of a profoundly deaf girl aged 4yrs. 8months

"For the first few weeks I had to watch them (peripatetic teachers) then thereafter I had to do it all and he watched me. So he in fact sat back and watched me. But he guided me and gave me advice and then he would come in and show me perhaps where I was going wrong and show me alternative ways of doing things. The teacher was very happy, happier than I was in fact; he wanted her to go to a Partially Hearing Unit not a school for the deaf. not the local deaf school. Which

would have meant she stayed at home for about a year longer than she actually stayed, so he was quite happy about it. But we were getting quite anxious about it, because we knew that something was not quite connecting. We were feeding her with all the information she could understand and lipreading but she could not give back (speech) and once she started school they made her give back and the language started coming out, so she does now she goes to school.

And this is where the peripatetic teacher fell down very badly and I wonder if it was just lack of knowledge because he only saw her once a week. But he did not make her give back and that was vital to me. I wanted that reward and he never once tried to. His policy was oh well you do not try to make normal children talk, you just wait and they start talking on their own. And he was quite happy to let her go on and me giving her the same language because you have got to repeat. You cannot widen their language, it was getting boring for her, it was getting boring for me. It got a bit hard towards the end. We were glad to send her to school because it was such a strain if you were doing it properly."

This extract illustrates in some detail the effort required to reproduce a natural language learning situation via an unnatural means (lipreading). Elsewhere in her interview this mother mentioned the significant amount of evening time she devoted to preparation for these intense talking sessions. It also demonstrates the keen

desire hearing parents experience that the child should talk back to them.

2. How to play educational games with the child

The operative element in this situation is "educational" as opposed to mere play. This was an area where direct teaching was needed and the lack of it left many parents floundering.

D.44 Mother of a profoundly deaf girl aged 3yrs. 8months

"But ideas that is basic. I mean I had never taught children let alone had one. After being a bank clerk deaf children do not quite come into the picture. Don't quite go together somehow."

Some mothers were bothered by the lack of educational help in the form of direct teaching.

C.23 Mother of a profoundly deaf boy aged 2yrs. 9months

"Originally I do not think they ever told us. It is what they used to do with him that I picked up. No. I do not think they ever turned round to me and said "Now watch this mother. do it like this". He (the teacher) would just come in and sit down with the child and I would not necessarily have to be there but I was all the time. I never left him and them together. I do not think I was ever told by the teacher who came to the home to do anything, but I picked it up while he was doing it with him. But then in the Nuffield Centre, Yes we were told How to use books with him, How to play with him, How to talk to him, How to use sign language if we wanted it, everything. It was very different because

that is what we went down there to learn. It was a residential group course where you just sat in on group sessions where you were just told these things and he never said now do something with him and I will put you right on it I'll tell you off. What you are doing is wrong. He was not like that. No he would come and play with him on the floor more often than not. He never really told me what to do. The teachers are very different as well, all the peripatetic teachers in our local service seem to be very different. They have all got their own ideas and nothing will budge them. You would think that one head would have some influence on his crew wouldn't you? They seem to do their own thing all the time they seem to go their own sweet way."

The critique from this mother captures the situation amongst teachers of the deaf in which an overall philosophy of education is just not obvious. Nora Wilkinson of Sussex University in her report on the practical aspects of the curricular needs of profoundly deaf children aged 4-8 years said that the "philosophy of education is not apparent" she found that "most of the suggestions for strategies which appear in the literature have rarely been followed up in consistent teaching practice." She commented on "anarchy of method" and "inadequately conceived principles " (Wilkinson 1979). The experience of many parents in this sample bears this out. Their needs are discussed in detail, later in the chapter.

3. To use books with the child

Some parents were encouraged to make books themselves which captured

the life experiences of their own child. This plus direct teaching in the other areas, did give a satisfactory service.

C.27 Mother of a profoundly deaf boy aged 2yrs. 7months

"He made rapid progress you know straightaway. The first day she called he was in a terrible tantrum and she thought she was going to have a real problem child you know. But he just took to her absolutely. He just gazes into her face. He cannot get enough. you know, she lives locally. She is more for playing games. not books, not jigsaw puzzles. Oh yes she told me to start an experience book with him, doing everything he was doing with him writing it down with pictures with him. And I bought a load of Ladybird books two of the one book then stuck all the pictures in. Then he picture matched.

She has given me you know, she told me to have a go at it if I want to (finger spelling) while I was trying Paget Gorman signs. Throw a bit of finger spelling in you know. But I did not. I tried to concentrate on the Paget Gorman System. I would have liked more teaching for him because he has needed it you know. I have seen other little deaf children. He just well, wanted to learn. He has known that there has been communication going on from a very young age and he has wanted to be in on this. Other deaf children I have seen they are, just, you know, not bothered."

4. To take care of the hearing aids

In the context of a philosophy which emphasizes the importance of

amplified speech, it is surprising that only 46 out of 105 parents said that they got help from the peripatetic teacher about taking care of hearing aids. Crash courses at the Nuffield were more often quoted as the source of information about aids and all the other aspects of educational practice. Fifteen couples said they got information in specific areas from this course. Two single men also got all their information there. The results of Table 36 are an over estimate of what was conveyed to parents by the peripatetic teachers about care of aids.

D.22 Father of a profoundly deaf girl aged 3yrs. 2months

"It was quite good, cos, I mean they showed us quite a lot at Ealing. I mean that's where we met the teachers there. It was a different teacher obviously (from the peripatetic one) but we had the same one there we went three times. These points (Table 36) were covered at Ealing because I was there full time. Not finger spelling not sign language. How to talk to the child: yes! Educational games, Use of Books, they covered that. Take care of the hearing aids well my wife usually sees to that. anyway. The first time you go you come away and it is just too much. The second time, I said to her it is too long, but the second time it went too quickly. We had both children with us the first time. The other time one stayed with my mother in law for the week so we only had to concentrate on one."

For the men the crash course was their only source of direct information about deafness education etc beyond merely getting secondhand information through their wives about the subject.

D.34 Father of a severely deaf girl aged 2yrs. 9months

"I would say I got quite a lot of help on teaching methods because of the teachers at Ealing, because I did go to three out of four sessions that my wife went to. And I learned a lot I think from the teachers up there and they majored in the techniques and preparing activities. So. I probably knew a lot about what out peripatetic teacher was doing from other sources and how to speak to them and how to attract their attention. So I did get a lot, but it was not from the peripatetic teacher. You know the Nuffield teachers, there are always three or four and usually one who stands out as an exceptional teacher and I can think of one teacher who I was not particularly impressed by her, but as a general comment the teachers up there I have found very helpful. But their job was much more teaching the adult than teaching the child."

5. How to develop the ideas behind words

Less than one third of parents said that teachers had shown them how to develop the ideas behind words. The absence of help on concept development was astonishing in view of the emphasis on oralism by the teachers.

C.15 Mother of a borderline deaf girl aged 4yrs. 3months

"He is the sort of man to put you at your ease, a very nice man, but not very helpful on the teaching side. What I have learned I have learned through experience through other mothers you know. Really, he really was not any help at all and other mothers have said the same thing about him. Very nice but not very helpful. To take

care of the hearing aids. I picked that up myself. To play educational games with her I suppose he did do that sort of vaguely. I suppose he did show me how to talk to her in a vague way you know. He would talk to her and I would copy him, but he was not much of a help. Nothing like how to develop the ideas behind words nothing like that."

In the discussions about the "ideas behind words" some mothers expressed their surprise that deaf children did not just learn about likenesses and differences between verbal concepts. For them the notion of engineering appropriate concept development was a novel idea.

D.33 Mother of a severely deaf girl aged 2yrs. 9months

"We went back to having our previous teacher and she and that teacher are absolute friends. As soon as she comes she would grab a chair over and sit down ready to work. But the teacher does not tell me things to do with her. I have had to push her. I have said "What would you like me to do during the school holidays what would you like me to do particularly." and she said. "Well you can label the furniture so she can start recognising words". But she has not really given me anything to work to. And because we did not feel we had got much of a learning programme with the child we sent away for the John Tracy Clinic Correspondence Course. And we worked through three or four lessons with those and I found them very good because I have

no teaching experience. And I have no idea how to develop the -- well, I have a friend who is a teacher and she told me how you get them to match pictures and then you get them to match similar things and you gradually work up to doing words and everything with them. But I did not know any of this and my teacher had never explained the buildup of getting them to read, or the buildup of getting them to notice the relationships and differences between them. I just thought almost that you showed them a word and they would pick it up. I think my teacher is rather shy, actually. I think she does not like to feel that she is too much the teacher and I will tell you what to do when I am here. She is very sort of reserved in saying anything. But I do like her for all these other things. I do not think she gives me that much advice but I do like her; and I am very happy with the way she works with my child. Yes and I watch her."

This last extract represents a situation which was only too common amongst this sample i.e. that of an energetic and willing-to-learn-parent faced with a competent but reluctant-to-teach teacher. It became clear during the interviews that parents who were capable of discussing cognitive development and language development in the context of this interview were in fact expanding their knowledge in ways which had applications for their child. One cannot help concluding that all this should be done by their own teachers. Even parents who were opposed to sign language were willing to discuss the notion of sign language in many cases. All of them

understood that a "proper sign language" meant the sign language that is used visibly by deaf adults on the streets. and in public places. i.e. where it can be seen by hearing people.

6. How to use a proper sign language

No parent was using that sort of sign language in this study at the time of interview. Eight parents were familiar with Paget Gorman Systematic Signs having learned this in adult groups separate from the peripatetic service. This sign system is designed to reproduce the structure of spoken English. According to Chittendon it is not intended to replace the sign language of the adult deaf population but to provide a visible pattern of spoken language for deaf children during their formative years (Chittendon,1974).

C.11 Mother of a partially deaf girl aged 4yrs. 5months

"I think that an ordinary teacher has not got any idea of the problems of deaf children. They need far more teaching and plus, if you want the signing which the deaf teacher can do. I mean she would not get that in an ordinary school. I had the auditory training from 18 months old and I used to do little games with her, just simple words like up and down and round and round or all the words you cannot see. He pointed out you can say it is a glass but things like ee's and oo's you cannot see. We use the Paget Gorman sign system one evening a week, she would go to different people's homes and go right through them in Paget Gorman systematic signs."

7. How to use finger spelling

The only evidence of finger spelling concerned one couple who had tried it. The father did not like using it but said that his child could communicate by it to a high level of accuracy (100%). A more detailed discussion about signing and finger spelling is presented in Chapter 7 on methods of communication.

In most areas of the country parents had no choice about communication methods. They were presented with oralism by the teachers and had to follow that and trust that results would follow. Where parents ran into problems these teachers tended to explain all the child's behaviour in developmental terms.

C.24 Father of a profoundly deaf boy aged 3yrs. 7months

"The main problem once we got him to wear the headphones on the auditory training unit was he wanted to be working the machine all the time. so for quite some time it was quite frustrating you know. He would be tinkering around turning the volume control up and down and you could feed two microphones in and if we were using one he would want to be putting the other one in you know. Because he is technically minded. I suppose. That was frustrating I suppose at the beginning, I was a little bit frustrated about not being able to hold his attention. until the teacher pointed out this is quite normal you know. He certainly has taught us how to play educational games with him, the sort of thing where you have three objects. like a drum, a whistle, maybe a rattle and you

make the child not look and you pick one and he has to tell you which one. This sort of game. He has taught us those. He has helped us to understand various stages that we have reached - various stages with him. you know, he has highlighted the fact that we have reached those stages. He has told us what you can expect and this sort of thing so he is very good."

Parents described the tutoring as play-and-talk sessions focussed on noisemakers, puzzles, toys and picture books. The writer observed several such tutorials in the course of the survey. The typical tutorial situation consisted of a table, some toys, the speech trainer and the child. The child usually was allowed to play freely with the toys, while the adult provided a commentary about the child and his activities. Direct observation of such sessions confirmed the parents difficulties in holding the child's attention, in communication breakdown, and lack of co-operation by children. (See Table 38).

It seemed to the writer that the teachers of the deaf had convinced the parents of the importance of co-operative play adult-child communication and speech "readiness" (teacher-goals) without demonstrating the detailed process of getting to these goals. In consequence the talk-play sessions are perceived differently by adults and children. For the adult the toys are merely an excuse to get some amplified speech or cued speech into the child. The child sees that he is in a "free-play" situation involving attractive toys, picture books and puzzles. Therefore he plays (see D.29).

At some point the adult decides that the child should attend to the commentary and takes action to get the child's attention by physically mauling him/her; grabbing the child's face and pulling it towards the adult tapping the child or twisting him around. Naturally the children resent these assaults and showed it in various ways; hitting back, leaving the table, throwing the headphones off. The writer saw no attempts to pace language input to the child's natural attention spans . i.e. when they looked at or listened to the adult spontaneously. In the sessions witnessed by the writer the children were not rewarded for taking up attentive postures towards sounds procedures or words. The most puzzling aspects of such sessions was the casual attitude toward language presentation. Current literature about language input suggests that a casual attitude toward perception is at work cloaked by the auditory global approach to language input. McCarthy a practising peripatetic teacher in a methodological paper opined it was not "wise" to pace talking to eye contact with the child! (McCarthy 1979). The detailed business of making sure the child has perceived what he was supposed to perceive by at least one of his senses has evaporated in the currently fashionable play-talk approach to educating young deaf children. One can appreciate why the parents had the sorts of difficulties they claimed to have in teaching the child. Methods of teaching which do not employ any sense organs to reach the child's brain in effect reduce him to the status of a blind deaf child.

Other workers have commented on the behaviour of mothers of deaf

children. Meadows in a detailed discussion of the observed difficulties 40 mothers had interacting with their deaf children, suggested that these mothers may appear more inflexible controlling and obtrusive to the observer than to the child itself. She further suggested that the training from "experts" adds to the very real problems of getting the child's attention and the frustrations of dealing with a non communicating child. She says "Many of the mothers whose behaviour could be characterized in these terms (didactic, intrusive) seemed to be carbon copies of the child's teacher as they interacted with him in the playroom. Thus every opportunity to "teach language" was seized upon with a vigour that often precluded pleasure and enjoyment...Rather than building a structure with the blocks or encouraging the child to find his own activity with the blocks many of the mothers of deaf children used the blocks as a way of eliciting the names of colours. Many of these mothers insisted that the child say the colour of a cup say "please" and "thankyou" or ask for a cookie before they allowed him to have refreshments. This reflects the kind of instructions that teachers frequently give mothers, or show them by example" (Schlesinger and Meadow 1972).

These intrusive methods do not have to continue as it is possible to obtain parent guidance materials of a non intrusive nature which also offer detailed oral training recipes. The John Tracy clinic offers a correspondence course for parents and an auditory training manual (Lowell and Stoner 1960). Of the 36 parents who

experienced some or part of this course 26 (70%) rated it as helpful. This was one of the highest rating about sources of information for parents (see Table 55). This course also provides explicit training in the use of all senses for input of verbal language plus detailed directions on how to deal with temper tantrums. A set of films for parents of young deaf children and a handbook written by this writer is also available from the same institution (Parent Education. Film Series. 1962).

In this study some mothers reported that their children spent a lot of time playing rather than practising language skills. This reflects the lack of design in the tutoring situation.

D.29 Mother of a severely deaf girl aged 4yrs. 2months

" I was told about talking to her face to face, having the room nice and bright sort of the general approach to getting her to lipread. Not sign language. We just wanted her to learn that there was such a thing as speech and there were toys mostly. It took a long time to get her to learn. She just wanted to play with the toys."

Somehow the individual teaching never seemed to hit the mark. The child was either too young or too old.

C.10 Mother of a severely deaf boy aged 4yrs. 6months

"No I do not think he was too young, when he saw the teacher of the deaf. I think he had passed the best stage of teaching what she wanted to teach him. I think he had got into a routine of his own. I think if she had come

earlier on she would have got more out of him. Because when we were visiting the speech therapist we used to go twice a week but it used to take him so long to settle down, being in a different environment that she could never really get much out of him."

The child's father held the view that "he learned practically nil really. I am not saying it was not useful, but he was so young and it was a long time - it was good preparation for what he is doing now. I think without it he would not be doing so well in school. The peripatetic teacher was also a very reassuring person just seeing how she goes about getting the child to co-operate. Well, just by being there and doing the things with him we could sort of get a hint on how we should do it. The teacher from the Nursery taught us the sign language, not the peripatetic teacher."

Some of the educationalists amongst the parents were able to put the specialist training for the deaf into the context of general educational philosophy. Some were acutely aware of how lucky they were to be trained teachers before becoming parents of deaf children.

A.30 Mother of a partially deaf girl aged 2yrs. 5months.

"I feel very fortunate that I have been trained to teach children anyway and I did not realize how different I was with her because of my training, until I met other parents of deaf children. I sort of found myself saying God, They have not got a clue and then I thought I am being unkind. I should know. They have not spent three years at college

teaching children to observe and you know they have just never had to and I feel perfectly sorry for people with deaf children who have not had any training. And specially sorry for children who have parents who are not terribly bright or are perhaps a bit shy. How do they sit down and give this child a lesson if they do not have someone to copy? For instance X's Mother copies the peripatetic teacher. She naturally takes on the same tone of voice and everything because that is what she has been shown. She finds it helpful and she says she would at a total loss without her."

Some professionally trained mothers suffered because of their training. They reported that they were perceived as "Super-Mums" by reason of their training and so they actually got less help (or felt they got less help) than mums who were not professionally trained.

D.20 Mother of a profoundly deaf boy aged 3yrs. 1month

"I know what my boys got. It was not a case of me accepting that he was deaf. It was not that at all. At the hospital the first thing they said was Mrs. X is a health visitor and I did try to say well what about the handicap itself? Because I wanted to be treated like any other mum. I did not know anything about deafness. I did not know how to handle him, what to do and really all I wanted anybody to do was to sit down with me and say look this week we will concentrate on such and such, do not think about anything else. Just to do that. And

that is something that nobody ever did and that is what I wanted. In fact, I felt the John Tracy Clinic course you know that was super. Everyone presumed I knew it. People only told me how to take care of the hearing aids because I went and asked. Lots and lots of people and even then half the time I was the one who found the faults because I was the one who was using the things practically. Really Ealing was the best. I would say this. they taught me how to use the hearing aids, how to use books, that was Ealing again to play educational games that was Ealing again and John Tracy Clinic."

In order to preserve herself inside the stereotype imposed on her by society, this mother employed a private tutor secretly in addition to official services throughout the child's entire preschool life. The remainder of her interview indicates that the service she had was indistinguishable from any other peripatetic service in the sample.

In spite of many unfulfilled needs parents rarely complained about the peripatetic teaching to the teachers or by formal complaint to the director of education. A very typical view was expressed by one father of three.

D.7 Father of a profoundly deaf boy aged 4yrs. 5months

"I do not think she is achieving anything with him. Very little you know. I would not like to run her down. He has not got worse, but his advancement is not fast enough. I can only gauge him against my own first two. Now and again I will allow

him 50% because he has a hearing loss. But still I am not satisfied. I am not satisfied with the end product of the school, because the wife goes down there helping with that and she knows what they are turning out. They are like vegetables. The peripatetic teacher. only bumped into her a couple of times. Well we, I mean we accept that she is doing a job. I mean I would not interfere with her job for all the money in the world. But I can only gauge from the end product whether she is doing her job proper. But then if you are profoundly deaf. I do not expect miracles. And I cannot put myself in a position where I can tell her her job kind of thing. This is what I could not do..."

It is not surprising that with these attitudes towards the teaching that 35 (57%) of the women said "yes" to more home visits from the teacher of the Deaf. 34 (77%) of the men opted for more home teaching as well. Throughout this section of the interviews the writer got a powerful impression that these parents had resigned themselves to the sort of services they were getting and had pinned their hopes on full time schooling. When parents were asked if they would recommend the teachers they had had to other parents in a similar position. 40 (65%) of the mothers said "Yes". 32 (73%) of fathers said "Yes".

Table 37 represents an attempt to assess the impact of direct child teaching on the parents. Obviously some of the teaching was intended to function as demonstration teaching, in other cases it was carried out for the child's sake only. However as many parents observed child teaching it was assumed that this had some effects.

Parents were asked if they ever taught the child in the same way as the teacher.

<u>Table 37. Teach the same way as the teacher.</u>	<u>Mothers</u>	<u>Fathers</u>
Frequently	46 (75%)	25 (57%)
Never	5 (8%)	16 (36%)
Rarely	4 (7%)	3 (7%)
No Comment	6 (10%)	0 (0)
Totals	61	44

N.B. 16 men said that the reason they did not teach the child as the teacher did was they had never had the opportunity to observe the teaching. A second reason for fathers not teaching was that they came home from work too late to do anything but see the child off to bed.

These results indicate a real determination to do something with the child by parents.

The question "What sort of difficulties did you have when you tried to work with the child yourself" brought very full answers. The advantage of the parent who is also a professionally trained educator came to the fore again. One such felt that a number of the multiple choice items "are not so much difficulties as conditions that face all people who try to work with the child to a greater or lesser extent - one cannot complain about them; one assumes that they must be overcome: that is what the task of "working" with the child involves". Certainly parents without the advantage of teacher training felt that they had to overcome the difficulties. In these instances the main problem was in not knowing how.

Table 38. Difficulties encountered by parents working with children

<u>Specific Difficulty</u>	<u>Number of Parents</u>
Holding the child's attention	70 (67%)
Communication Problems	55 (52%)
Child will not co-operate	47 (45%)
Lack of time	38 (36%)
Lack of ideas	31 (30%)
Demands of other children	30 (28%)
Other problems	27 (25%)
Not enough teaching materials	21 (20%)
Lack of space	9 (8%)

The teachers' comments about the child's learning as perceived by the parents were of a very generalized nature; comments such as doing well, very bright, an intelligent child were quoted. There was not one reported comment based on anything the teacher had attempted to teach.

47 (77%) of mothers and 31 (70%) of fathers reported positive comments by the teacher about their child's learning. Not all parents were happy about this situation.

Table 39. Teachers' Comments about the Childrens' learning

<u>Number of teachers' comments</u>	<u>Mothers' reactions</u>	
Positive (47)	30 (agreed)	7 (disagreed)
Negative (14)	3 (agreed)	3 (disagreed)
	<u>Fathers' reactions</u>	
Positive (31)	22 (agreed)	3 (disagreed)
Negative (13)	3 (agreed)	2 (disagreed)

Ten mothers made no comment about the positive comments from the teacher. These mothers could not judge the teaching situation. Of seven who disagreed with positive comment the most often quoted basis of disagreement was that the mothers felt the child could do better. Three fathers also felt the child needed more and better teaching. The teachers positive comments took the form of "being pleased". The dilemma for the naive parent is that they do not know how to evaluate the teaching on technical grounds. Secondly they feel quite naturally that they have to put their trust in the teacher. Thirdly their own experience of the child teaches them that patience is required and so the parent is prepared to wait for results and to give the teacher and his methods a chance. This is true for parents of other handicapped children (see Brock 1975).

D.16 Mother of a profoundly deaf boy aged 4yrs. 5months

"We are fairly positive about this and I think we agree with the University that we have been very anxious not to make his childhood too formal. So a lot of what we have done has not been teaching at all in fact but just talking to get language in, in all sorts of different situations. They are quite impressed with his understanding and his ability to cope. I am constantly bombarding them with my worry about his not talking and they say it is not significant, the significant thing is his comprehension. I cannot do anything else. Because if I do not trust that they are right it leaves me nowhere!"

The taped interviews indicate an enormous dependency on the parents' side for the teacher to direct them in sensible ways. Parents are

willing to take up an apprenticeship role, if it were offered by the teacher. Throughout these interviews, the writer had the sensation that teachers regardless of rank and training uniformly underestimated the parents' willingness to learn. This supports the findings in Chazan's book "Some of our Children". This is a report of provisions for parents of all-handicapped preschool children. Chazan says "For many parents, the opportunity to co-operate in a programme specifically devised to help their child would be welcome. There are very few parents who do not want to do all they can for their child especially in the early preschool. Vague generalities for example, urging the mother to stimulate the baby, may simply be confusing." (Chazan, Laing, Shackleton-Bailey and Jones, 1980). Several parents took part in Chazan's study and in this one. The taped interviews show satisfaction rises in response to specific provision for specific educational needs of specific handicaps. In this sample on-site crash courses and correspondence courses were much appreciated. The interviews indicate a stated need for direct teaching of children for their own sake or as a form of demonstration teaching. These needs are consonant with statements by peripatetic teachers that they as a group were unable to meet the needs of 740 deaf children in 1969 (Department of Education and Science 1969).

Parent Guidance: Models

There are as many models of parent guidance as there are teachers of the deaf. The parents themselves distinguished between the "Welfare worker" model and the "Educationalist" model.

C.15 Mother of a severely deaf girl 3yrs. 4months

"Well, I had this peripatetic teacher who was not very good. He is very - the sort of man that comes round - very good to the mother. The sort of man that is very good to chat to. He was not very good at putting things over to the child and sometimes he would come and spend the whole hour and it was not until he had gone I'd realize he had spent the whole time talking about something quite irrelevant to the child."

Some teachers followed the Tucker model which allowed for a period of parent adjustment before moving on to the educational aspects of parent guidance based on oralism. (Tucker 1977).

A.33 Mother of a profoundly deaf girl aged 4yrs. 5months

(About more information) "No I don't think so, because we were adjusting and trying to cope with the situation. As long as we had the basic facts and the knowhow on how to teach her to talk. And then gradually gain the background knowledge as you go along. I do not think you know, that you want it all thrown at you. I do not think I wanted more information I could get it as I went along. I do not think I wanted to be held down by a lot of information at one time."

Some followed the Broomfield Model and concentrated heavily on the psychology of handicap only (Broomfield 1967). There has been resistance amongst parents to the indiscriminate use of this model. Tumin, a parent herself and Chairman of the National Deaf Children's Society admits that "the phrase handicapped family is a helpful one, insofar as it focusses on the needs of the whole family, but

was an attempt to probe for more precise information over four identifiable aspects of the peripatetic service.

Table 40. Four areas of need by parents (Summary)

Stated need for	Mothers (N=56)				Fathers (N=33)			
	Frequency		Probability		Frequency		Probability	
	Yes	No	Yes	No	Yes	No	Yes	No
SUPPORT	24	32	.43	.57	12	21	.36	.63
INFORMATION	25	31	.45	.57	16	17	.48	.52
CHILD TEACHING	32	24	.57	.43	23	10	.70	.30
DIRECT TEACHING OF PARENTS	21	35	.38	.62	16	17	.48	.52

Table 40 summarizes the frequencies and probabilities of four areas of parental need in relation to the services offered by the teachers of the deaf. The most frequently stated need by both sexes was for direct teaching of the child. 57% of mothers and 70% of fathers are likely to ask for child teaching rather than information or support. These results suggest that parents view education for the child as a top priority; one which takes precedence over parent-oriented needs such as ventilation of their feelings or information gathering.

Table 41. The four most common patterns of responses.

Mothers (N=37)	Fathers (N=23)	Pattern of responses
14	8	<u>NO</u> to all FOUR aspects of service
9	9	<u>YES</u> to all FOUR aspects of service
7	4	<u>YES</u> to child teaching only
7	2	<u>NO</u> parent teaching <u>YES</u> to all the others

Table 41 shows the response patterns of 60 parents. These make up the most common responses. There were eighty-nine completed response patterns however and when all sets of responses were analyzed it was found that extremes

unfortunately it may give the peripatetic teacher a rather distorted perception of our needs by overemphasizing family pathology, as though we suddenly became emotionally sick when we discover we have a deaf child, a mongol, or a spastic" (see Tumin 1977).

This view summarizes the increasing emphasis on the therapeutic aspects of their work by the teachers of the deaf. The complexity of job roles and duties of these teachers was revealed by the D.E.S. survey of peripatetic teachers. The survey showed that the work of the teachers of the deaf now includes an audiological aspect as well as teaching and guidance functions. Where parents of deaf infants are concerned these teachers are expected to provide advice and support over a wide range of parental needs. (see D.E.S. 1969).

For purposes of this survey the therapeutic aspects of the service were conceptualized as the ability to support the parents, the ability to listen to parents plus the ability to convey information to the parents in digestible form.

First parents were asked "Did the teacher spend any time just listening to your worries each time he came to the house?" 68(65%) said "Yes" (often) and 37(35%) said the teacher rarely/never listened to their worries. These results are biased in favour of the women as they had had most contact with the teachers. Only 6 women had not talked to the teacher. 14 men had not talked to the teacher as they had never met. However when they were asked if they needed more time to talk to the teacher 38(59%) of mothers said No! 33(80%) of fathers also said No!

Parents were then asked "Would you have liked more (1) Support (2) More information (3) More child teaching (4) More direct teaching for yourself from the teacher of the deaf? (Q 58)". This question

(all "No"/all "Yes") accounted for 40 response sets out of 89. This means 35% of response sets were polarised either at the reject-all-elements-of-the-service, or want-all-elements-of-the-service ends of the continuum. These results posit the existence of a polarising factor, which could be teacher-related or parent-related.

Where the parent guidance model assumes that the teacher delivers all four elements of the service, then it is possible that where parents do not like the teacher, they reject all four elements of the service. The alternative interpretation is that where the teacher is weak on one aspect of service, he or she is poor on all other aspects of the service. A parent-related polarising factor could be that those parents who need most help need it across all four elements. Conversely parents who can cope may be those who can cope across all four elements; simply because some individuals are better at extracting and applying relevant information than others.

The Four Commonest Patterns showed:-

1. That 22 (21%) of parents wanted no more of all four
2. That 18 (17%) of parents wanted more of all four
3. That 11 (10%) of parents wanted teaching for the child only
4. That 9 (8%) of parents wanted everything but direct teaching for themselves

The 21% of parents who want no more of all aspects of the service is an underestimate as there were 23 spouses who were not sufficiently involved with the child to participate in the study. Of three

interviews with men two wives had divorced out of marriage and one man was widowed. It is safe to assume a further pattern exists one in which the husband simply leaves the entire child rearing process to the wife. There were 20 interviews with mothers only in which the writer got the impression that the mother was the sole parent as far as the deaf child was concerned.

1. Support for Mothers

There were 20 mothers who said "Yes" to support and teaching for the child. A further 20 said "No" to both.

		Mothers			
		Child teaching			
		Obs	Yes	No	Totals
Support	Yes	20	4		24
	No	12	20		32
	Totals	32	24		56

$$\chi^2 = 11.63 \text{ with one degree of freedom } p = \text{less than } 0.1\%$$

We can conclude that for mothers a stated need for support for self is positively associated with a stated need for child tutoring.

The reverse is equally true. This finding runs contrary to those models of guidance which perceive the mother as an advice absorbing object only.

2. Support for Fathers

		Fathers			
		Child teaching			
		Obs	Yes	No	Totals
Support	Yes	12	0		12
	No	11	10		21
	Totals	23	10		33

$\chi^2 = 33$ with one degree of freedom $p =$ less than 0.1%.

The raw data speaks for itself no father said No to support and Yes to direct teaching.

SUMMARY

1. Parent Guidance was evaluated in terms of four elements - support, information and teaching for parents and direct teaching for the child. The results showed that these concepts are meaningful for parents.
2. Analysis of 89 complete sets of preferences showed a greater than expected number of parents rejected or demanded more of all four. This suggests a polarising factor at work across all four aspects of the peripatetic service. Some tentative explanations for this were explored but the reasons for this polarisation remain unclear. Further investigation is needed.
3. The results showed that the biggest demand was for direct teaching of the child. This was equally true for fathers and for mothers. The reasons for this are clear. For parents there is an obvious case for teaching the child the language he cannot hear. This implies that language teaching should take place for the sake of the child. Parents also value child teaching given in the form of demonstration of method. Where this is provided the parent can observe, adapt and incorporate techniques into his own efforts to help the child.
4. Attempts to assess the impact of the peripatetic service over seven areas of educational help were foiled due to parents attendance on residential crash courses or enrolment in a correspondence course. Fathers particularly attributed educational help to these sources. Therefore results concerning educational help from peripatetic teachers is an overestimate.

Chapter 8

SPEECH DEVELOPMENT

In the previous chapter speech readiness and speech articulation readiness was mentioned as a teacher objective in parent guidance. For many parents speech readiness was an amorphous concept. They worried about the fact that their three or four year old did not speak yet. Some parents felt that far from being "ready" to speak, their child was unwilling to do so.

A.20 Father of a severely deaf boy aged 2yrs. 11months

"Two words. Occasionally he gives the impression of being unwilling. I feel certain, sometimes, that he knows and is being unsocial."

In spite of the emphasis by teachers on the need to establish a large reserve of understood language. from which the child will speak spontaneously, parents were tempted to put pressure on the child to articulate the few words they understand. Frequently this led to a situation in which the child withheld speech deliberately.

A.31 Father of a partially deaf girl aged 2yrs. 5months

"If she knows you are pushing then she won't use them".

Fry, Professor of experimental phonetics at London University has summarized a wide range of studies of the "active" vocabulary of preschool children from two to six years. He gives as a safe figure 270 words of active vocabulary for average two year olds (Wetnall and Fry, 1964). No child of any age or hearing loss in this sample reached that level of "active" vocabulary. This

allows for the fact that parents were anxiously watching and listening for any speech at all from the child. It is unlikely that parents word counts were anything but accurate. "Silent" words were counted as words, as it is well known that deaf children produce articulated speech without voice. Parts of words produced regularly and appropriately were also counted as words in order to give full credit to the children's speech development.

A.43 Father of a profoundly deaf boy aged 2yrs. 8months

"More"; "It could be for anything but it is usually when he wants more food. He will come up to me and he'll say M..M..M.. 'cos I have showed him that it is more. If he feels he is not getting through to me he will touch his throat to make sure (?) and he will sound very odd. That is one word. Bye,Bye, he will say but it is a definite B..B..B..two syllables and he waves. So that is another word, and No! He will shake his head and make a noise, N.. N..N.. He will say it to anybody."

The child's mother felt that he was "ready" to talk, "He is vocalizing all the time. It is irritating. Quite often his lips are copying conversation, he mouths words and nothing comes out. His lips are going in all sorts of directions."

The raw data shows speech performance and hearing loss against ratings from the speech scale. This speech scale is not intended to be a diagnostic tool, but a measure of speech performance of deaf children in the broadest sense, i.e. silent speech is included.

Table 42. Speech Development and Hearing Loss for 62 Children

	<u>Partial</u>	<u>Severe</u>	<u>Borderline</u>	<u>Prof</u>	<u>?</u>	<u>Totals</u>
a. No speech	0	1	0	0	0	1
b. A few words	1	1	1	3	1	7
c. Puts words together	6	4	1	5	0	16
d. Muddled speech	0	0	0	0	0	0
e. Uses voice only	0	1	2	4	0	7
f. Silent words	1	3	2	11	0	17
g. Speaks words clearly	0	2	3	5	0	10
h. Has natural speech with a few mistakes	2	2	0	0	0	4
	10	14	9	28	1	62

N.B. No data for two children.? = query (under investigation).

Table 42 includes pessimistic hearing losses plus optimistic speech performance. This procedure was adopted to give the deafest children the chance to score somewhere on the speech scale. The raw data showed 7 children had "no speech", voice only. All of them were severe or profoundly deaf. Absence of articulated speech does not exclude use of voice or "silent" speech. Chi squared tests show no association between voice and articulated speech.

	(A) No speech	Some speech	Totals
(E) Voice only	4	19	23
No voice	3	38	41
Totals	7	57	64

$\chi^2 = 1.55$ with one degree of freedom $p =$ not significant.

Table 42. shows only 4 children at the upper end of the scale producing "natural speech with few mistakes" 2 were partially deaf and 2 were severely deaf. For the rest of the children the discussion about speech development is, essentially, about the production of words.

	(E) Voice only	Voice plus	Totals
(F) Silent words	15	6	21
Voiced words	8	35	43
<hr/>			
Totals	23	41	64

$$\chi^2 = 17 \text{ with one degree of freedom } p < .1\%$$

There is a positive association between use of voice and silent words. Voice tends to occur with or without silent words. This "silent" articulation is characteristic of deaf children, but not of hearing children's speech development. Hearing children either talk with voice or whisper.

	(B) Few words	More words	Totals
(F) Silent words	16	5	21
Voiced words	21	22	43
<hr/>			
Totals	37	27	64

$$\chi^2 = 4.2 \text{ with one degree of freedom } p < .5\%$$

Silent words and a few words are positively associated. If the preschool deaf child has a few words one can expect that some will be silent. If not one then not the other.

Puts words together. For parents of deaf children, after the

excitement of the child's first spoken word, the reward of hearing the child combine two words is very significant; this represents an important linguistic advance as well as increased control of speech.

	(C) Puts words together	Isolated words	Totals
(B) Few words	14	23	37
More words	17	10	27
<hr/>			
Totals	31	33	64

$$\chi^2 = 3.9 \text{ with one degree of freedom } p < 5\%.$$

B and C is significant at the 5% level. A chi squared test shows a negative association between having more words and using isolated words. One can expect words in combinations only where the child has a large reserve of known (understood) words.

Sixteen couples were able to attach numbers to the category "few words". The raw data is shown in Table 43..

Table 43. Spoken words by deaf preschool children

	minus 10	-20	-30	-40	-50	-100	-200	Total words
Partial Hearing	0	0	0	0	0	1	1	2
Severely Deaf	0	0	1	0	0	1	0	2
Borderline Deaf	2	1	0	0	0	0	0	3
Profoundly Deaf	6	3	0	0	0	0	0	9
<hr/>								
Totals	8	4	1	0	0	2	1	16

The numbers in Table 43 are too small to do chi squared tests but it should be noted that 200 words is the best performance out of the group.

If the classes of hearing loss are grouped as mild and profound against number of words as follows:-

	<u>Number of Words</u>		Totals
	10-40	50-200	
Mild Hearing Loss	1	3	4
Profound Hearing Loss	12	0	12
Totals	13	3	16

It is possible to apply an "Exact Treatment of 2X2 tables" by R.A.Fisher*. His formula gives

$p = 1\%$ approximately. This indicates a significant association between degree of loss and fewer words.

*R.A. Fisher; Statistical Methods for Research Workers. pp 96-97

by Oliver and Boyd 14 Ed.

SUMMARY

The data was gathered by use of a broad band speech scale designed to include peculiarities of speech associated with deaf children i.e. silent speech. The results indicate that the majority of these children do not speak. Of 16 children having speech none reached beginning levels associated with hearing children. There are indications that of the non-talkers some are in an extended "readiness-to-talk" state.

Chapter 9

COMMUNICATION PATTERNS OF PARENTS AND PRESCHOOL DEAF CHILDREN*

In previous chapters it has been shown that parent guidance is the product of a number of trends including a downgrading of sign language in favour of verbal methods: less demonstration of skills by accomplished oralist teachers: an increased reliance on hearing aids: the development of the "natural" (unstructured) approach to language teaching.

The responsibility for developing efficient educational methods lies with the teachers. The controversy is about communication modes. The manualists argue that education cannot proceed without the use of some sign language and/or finger spelling: (See Denmark 1972, Mindel and Vernon 1971, Montgomery, 1977). The oralists argue that every child should be given the chance to learn speech, that amplified speech brings that possibility within the range of the born-deaf; signs and finger spelling should be reserved for those children who do not make progress by speech methods. (Johns and Howarth, 1973, Van Uden, 1977).

Within schools for the deaf in the late 60's, the Lewis Committee found sign language and finger spelling was alive and in use amongst the children: it was not possible to determine how many teachers had command of sign language (D.E.S. 1968). Nothing was known about the communication processes of deaf infants born into hearing families. Most studies of preschool deaf children were carried out at Manchester, in the context of the prevailing oralist approach.

*Paper presented at The International Congress on Education of the Deaf. Hamburg, August 1980.

In 1974 when this work began, the published literature about the effects of introducing sign language and finger spelling to preschool deaf children came from the Institute of Defectology in Moscow (Morkovin 1960, Mulholland 1965, Moores 1971). Experience in the U.S.A. indicated that use of signs and finger spelling with preschool deaf children could open up communication channels in a satisfying manner for teachers and children, (Brill and Fahey 1971, Brill 1976, Collens-Allgren, 1975). Other long term studies of pure oralism showed good results, (see Balow and Brill, 1975). Studies carried out by linguists however, involving young deaf children and experimental work with chimpanzees indicate that a combination of verbal and manual communication modes early in life, may yield better communication skills in total later on (see Meadow 1968, Bellugi and Klima 1972, Bellugi Klima and Siple 1974, Brennan 1975, Brown 1970, Schlesinger and Meadow 1972, Meadow 1976).

The aim of this section of the interview was to provide information about communication methods in use between parents and very young deaf children. A fifteen point nominal scale was used. The distinction between mime, natural gestures, sign language and finger spelling was retained as in the Lewis survey of methods of communication used in schools.

Characteristics of Parent-Child Communication: Mode Use

The results are comparable with those of the Lewis Survey, which showed that 91% of nursery and infant teachers in schools for the

Deaf did not use finger spelling with the younger children. 85% never used sign language with young deaf children, but mime, drama and natural gestures were used extensively (Lewis Report 1968).

Table 44. Parent to child communication.

Use versus ease in descending order

	Parents (105)		
	Use	Easiest	Used (not easy)
	N	N %	N %
Showing things to the child	82	25 (30.5)	57 (69.5)
Pointing	76	23 (30.3)	53 (69.7)
Natural Gestures	74	29 (39.0)	45 (61.0)
Using simple sentences	74	17 (23.0)	57 (77.0)
By speaking slowly	63	31 (49.2)	32 (50.8)
By repetition	57	12 (21.0)	45 (79.0)
Using situational Clues	57	10 (17.5)	47 (82.4)
By looking at things	52	3 (5.7)	49 (94.3)
Miming	34	7 (20.5)	27 (79.5)
Drawings	33	4 (12.2)	29 (87.8)
Moving the whole child about	33	2 (6.0)	31 (94.0)
By sign language	18	10 (55.5)	8 (44.5)
By shouting	14	0	14 (100)
By writing	9	0	9 (100)
By finger spelling	0	0	0

Eighty two per cent of parents did not use sign language with the children. None of them used finger spelling. Natural Gestures

were used by 70% of parents and miming by 32%. The two main characteristics of parents-to-children communication are parents showing things to the child, and parents pointing out objects to the child. Shouting, writing and sign language were not prominent features of parents' communication patterns.

Both sets of results indicate that hearing adults (parents and teachers) are likely to adapt in similar ways in order to communicate with young deaf children; the main characteristics will be increased use of pointing- showing objects, natural gestures and shorter, simplified sentences.

Ease

Parents were also asked to estimate which modes of communication were easiest to use. (Ease being defined as the easiest way to get the message across to the child). Results were tabulated separately for parents and children. Ease is expressed as a % of use. The hypothesis underlying this procedure was that the most used methods would also be the easiest ways of getting ideas across. For these parents this was not the case, as Table 44 shows. Sign language was used by a mere 18 parents, yet it was rated as easiest by 55.5% of the users. This was the highest rating for parents-child modes. It means slightly more than one in two parents using it rated it as "easiest". These parents were using the Paget Gorman signs which aims to have a sign for every word normally spoken (Chittenden, 1974). This particular result does not support the idea that sheer use of a communication mode makes transmission of ideas easy.

Figure 6 Parent-child communication. Use v. Ease of communication modes.

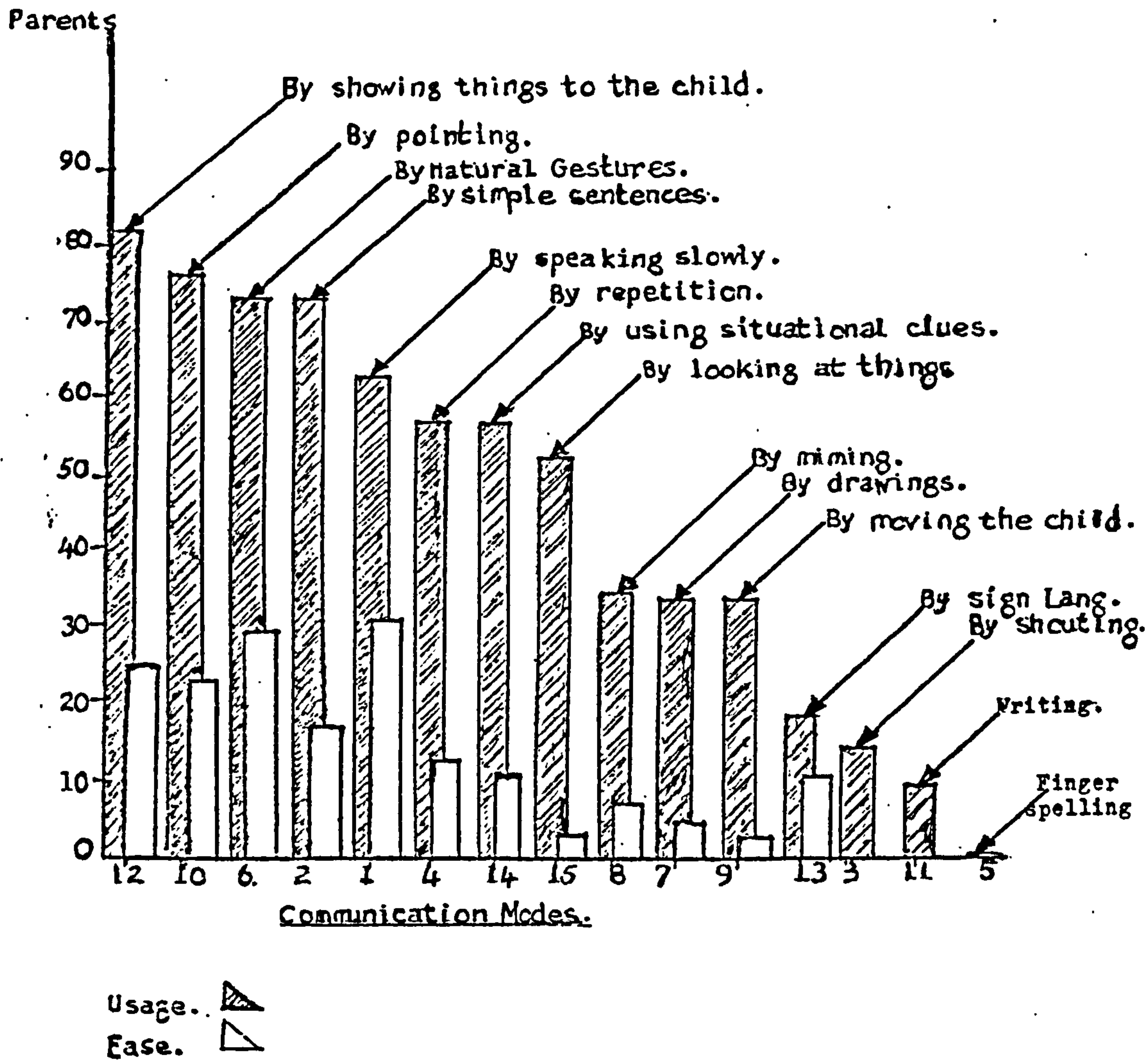


Table 45. Child parent communication

Parent's Estimates of use versus ease. (N=105)

	Use	Easiest	Used (not easy)
	N	N %	N %
Moving,pulling,tapping parents	86	33 (38.3)	53 (61.6)
By pointing	77	19 (24.6)	58 (75.4)
By showing you things	65	22 (33.8)	43 (66.1)
By natural Gestures	64	24 (37.5)	40 (62.5)
By shouting	40	5 (12.5)	35 (87.5)
By repetition	31	7 (22.5)	24 (77.4)
By situational clues	30	5 (16.6)	25 (83.3)
By looking at things	27	0 (0)	27 (100)
By miming	23	12 (52.1)	11 (47.8)
By speaking slowly	21	18 (85.7)	3 (14.2)
By sign Language	18	13 (72.2)	5 (27.7)
By simple sentences	14	11 (78.5)	3 (21.4)
Drawings	8	1 (12.5)	7 (87.5)
Writing	4	2 (50.0)	2 (50.0)
Finger Spelling	0	1 (100.0)	0 (0)

Ease of idea-transmission is associated with symbol manipulation. For example, parents frequently found themselves pointing out or showing objects to the child, but only one in three rated these as the easiest ways of getting the message across to the child. These results indicate the inadequacy of methods which rely on the manipulation of phenomena. High "easiest" ratings are associated with symbol manipulation as in

connected speech and connected signs.

Characteristics of child-parents communication: Mode Use

Communication from child to parents is dominated by physical methods, with the child pulling and tugging at the parents in top place for frequency (Table 45). Repetition, use of situational clues, looking at things, and miming are ranked in the same places on both scales 45 and 44. The children do more shouting than the parents, but verbal modes are used far less by children than parents.

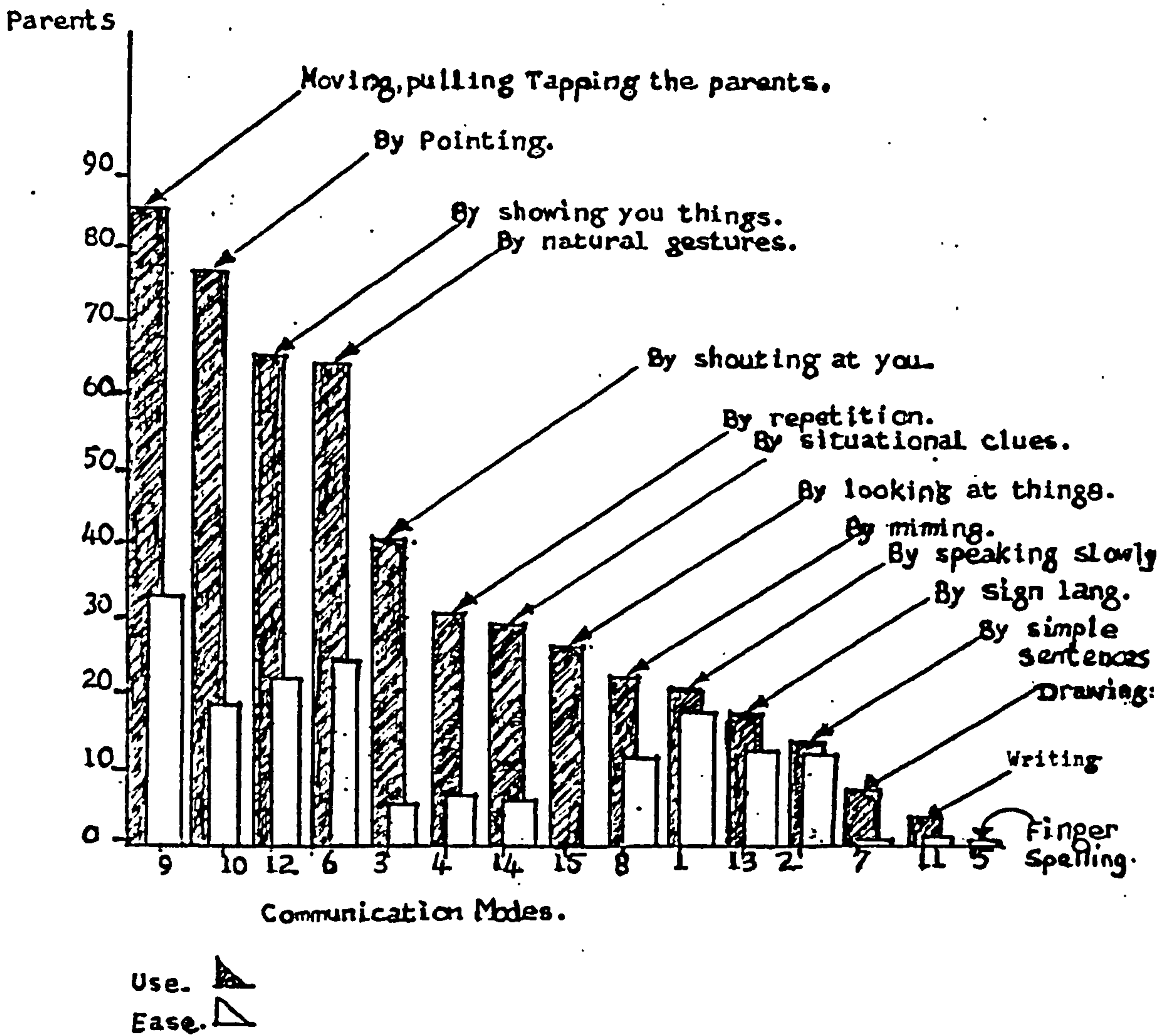
Ease

As far as the children are concerned the least used modes associate with greater ease (Table 45). The extreme example is Finger spelling, practised by only one child and rated as 100% easiest. Sign language which was used in nine families, was rated as "easiest" for the children by 72.2% of the parents. This is a larger rating than the parents self rating on signs; this means that some parents are not as competent in the use of signs as their own child. Speaking slowly and writing were also rated highly in terms of ease in getting the message across. All those methods rated as "easiest" for the children, by more than half the parents, have a common characteristic; connected symbols and it does not seem to make any difference if they are connected speech, connected signs, moving fingers or graphic symbols. In my view it is the systemic aspects of these modes which advance them over purely physical or repetitive methods.

Easiest Modes of Communication

Table 46 shows that the children have greater ease over a wider range

Figure 7. Child-Parent Communication ease and use, as judged by parents.



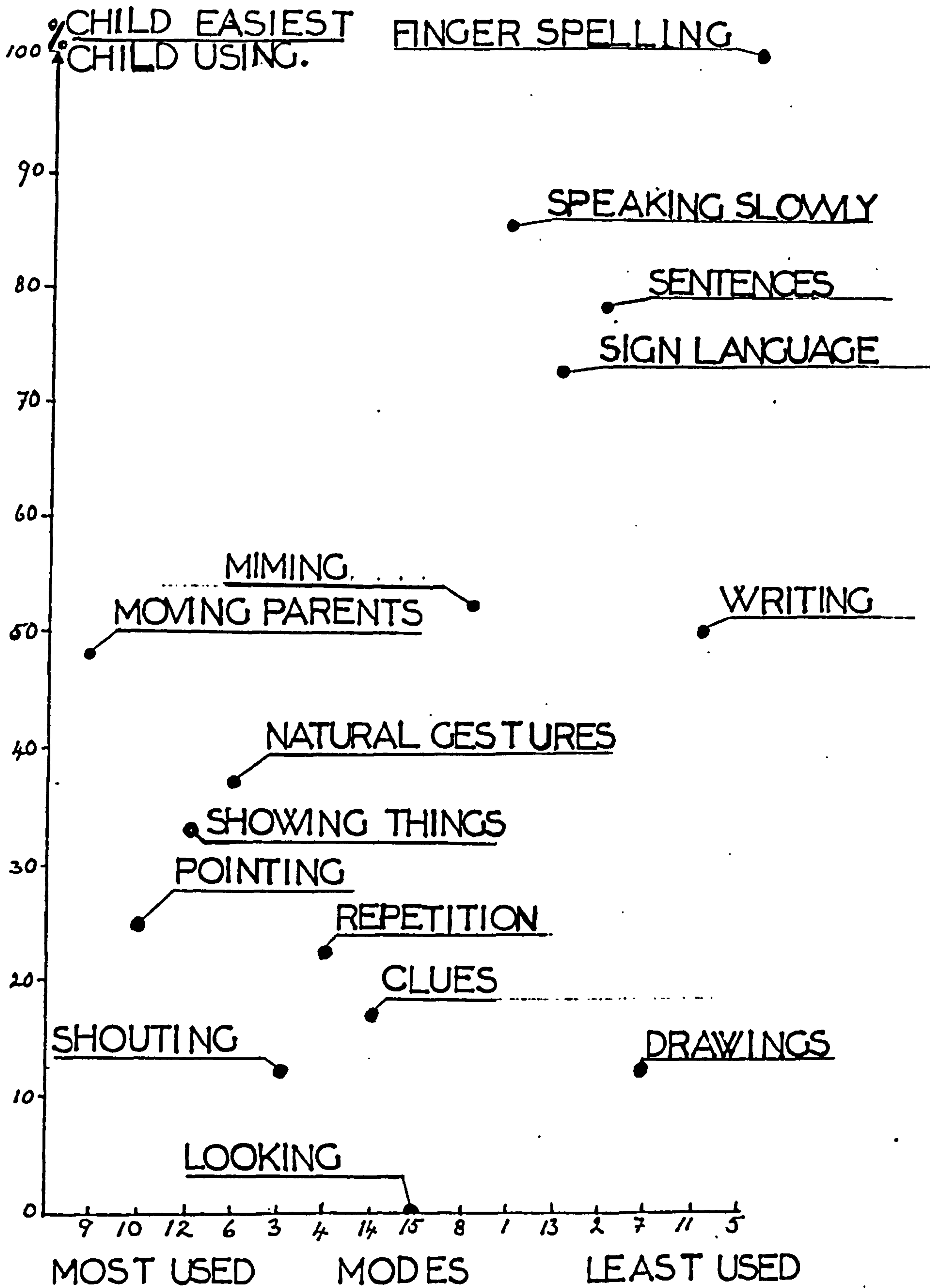


Figure 8 .

of methods than the parents. The six modes rated as easiest for children were all based on symbol manipulation, with the exception of miming (Figure 8).

In contrast all the methods used by parents with the exception of sign language, fall below 50% easiest ratings. This means that less than one in two parents found any mode easiest (See Table 46). Writing and finger spelling were not rated as easiest by any parents at all. This implies that parents will be less competent at communicating ideas using these modes than the children.

Table 46. Easiest modes of communication expressed in % s.

% of parents who found it easiest					
0-19%	%	20-49%	%	50-100%	%
Shouting	0	Miming	20.5	Sign Language	55.5
Writing	0	Repetition	21.0		
Finger Spelling	0	Simple sentences	23.0		
By looking at things	5.7	Natural Gestures	39.0		
By moving the child	6.0	Pointing	30.3		
Drawings	12.2	Showing things to			
Situational Clues	17.5	the child	30.5		
		Speaking slowly	49.2		
% of children who found it easiest					
By looking at things	0	Repetition	22.5	Writing	50.0
By shouting	12.5	Pointing	24.6	Miming	52.1

Table 46. Easiest modes of communication expressed in % s. cont'd.

% of children who found it easiest

0-19%		20-49%		50-100%	
	%		%		%
By drawings	12.5	Showing you things	33.8	Sign Language	72.2
Situational Clues	16.6	Natural Gestures	37.5	Simple Sentences	78.5
		Moving, pulling the parent	38.3	Finger Spelling	100 [†]

[†] Finger spelling was used by only one child so results must be treated with caution.

As all the children will go to school at some point, it could be argued that the parents should have some training in these modes, to avoid breakdown of communication as the children progress through school.

Parent guidance includes advice on how to talk effectively to deaf children. In view of this it is surprising that verbal modes of communication were not rated higher in ease; only one in two parents rated speaking slowly as the easiest way to get the message across. Approximately one in four rated simple sentences.

There is no evidence that any child or parent had direct instruction in signs or finger spelling at home. Parents learned Paget Gorman Systematic Signs in adult classes separately from children's services. Attitudes towards the use of signs and natural gestures varied. Some parents believed signs and natural gestures inhibited speech, others just the

opposite. An attempt was made to show the overall proportions of parents and children using connected speech and/or sign language and natural gestures. The following variables were used.

Speaking slowly (1) : Using simple sentences (2) : Sign language (13) :
Natural Gestures (6).

Table 47. Parents verbal and manual communication

1	2	6	13	Observed	Expected
-	-	-	-	6	2.92
-	-	-	13	0	0.60
-	-	6	-	5	7.30
-	-	6	13	1	1.51
-	2	-	-	6	5.84
-	2	-	13	0	1.21
-	2	6	-	17	14.59
-	2	6	13	2	3.02
1	-	-	-	7	5.37
1	-	-	13	1	1.11
1	-	6	-	14	13.41
1	-	6	13	1	2.78
1	2	-	-	8	10.73
1	2	-	13	2	2.22
1	2	6	-	24	26.83
1	2	6	13	11	5.55
Total				105	104.99

Table 48, Distribution of communication patterns by parents.

	Parents (N=105)	%
Parents using mixed patterns	72	(68.5)
Parents using speech only	21	(20)
Parents using manual modes	6	(5.7)
Parents not using verbal or manual modes	6	(5.7)

Tables 47 and 48 show that a majority (68.5%) of parents actually used a mixture of verbal and physical procedures when trying to communicate with their own child.

When the children's data was analysed in the same way results showed a majority (65%) of children did not use connected speech with their parents.

47.6% of children used manual modes with parents.

22.8% used mixed communication modes with parents.

18.4% used no connected speech or connected manual language.

11.4% used speech modes with parents.

Further analysis showed that associations between these four variables differed for parents and for children. Chi squared test and a coefficient of association due to Yule was used. +

Results: association of verbal and physical elements in parent's communication patterns.

1. Association of speech modes (1 and 2). None.
2. Association of manual modes (6 and 13). None.

+ A coefficient of association due to Yule page 264 'Facts from Figures' by M.J. Moroney. Pelican Originals (A236). London and Beccles 1963.

3. Association of speech modes and natural gestures. None.
4. Association of sign language and using simple sentences - weak, positive association.

$$\chi^2 = 2.71 \text{ with one degree of freedom } p = 10\%$$

5. Association of sign language and slow speech, $p = 10\%$ indicates a weak positive association.

6. When sign language was tested against speech modes (1) and (2) parent's data showed a strong positive association.

$$\chi^2 = 7.65 \text{ with one degree of freedom } p = 1\%$$

Conclusion: there is a strong positive association between sign language and speech modes (1) and (2)

These results indicate that sign language and the use of simple sentences spoken slowly, are significantly associated when hearing parents are communicating with young deaf children. It should be understood that speaking slowly meant pacing connected speech to eye contact with the child. The parents were able to demonstrate this deliberate type of speech delivery. In most cases parents emphasized the pause between phrases rather than exaggerated speech elements.

Chi squared tests showed no significant association between Paget Gorman Systematic Sign and natural gestures. These results can be interpreted to mean that Paget Gorman Systematic Signs do not arise out of natural gestures.

Association of verbal and physical elements in children's communication patterns.

1. Association of speech modes (1) and (2). Positive.

$$\chi^2 = 8.78 \text{ with one degree of freedom } p = 0.5\%$$

2. Association of manual modes (6) and (13). None.

This result confirms the non-associative relationship of Paget Gorman and natural gestures.

3. Association of speaking slowly and natural gestures.

Results of chi squared test showed a significant negative association. $\chi^2 = 5.28$ with one degree of freedom, $p = 2.5\%$

	6	$\bar{6}$	total
1	12	15	27
$\bar{1}$	54	24	78
total	66	39	105

Conclusion: there is a tendency for either speaking slowly or natural gestures to appear but not both.

This result does not support the view of those oralists who permit natural gestures in preference to signs, on the assumption that use of sign inhibits speech development and gesture does not.

4. Association of simple sentences and natural gestures. None.
5. Association of sign language and slow speech. A weak positive association ($p = < 10\%$).
6. Association of sign language and simple sentences. None.
7. When sign language was tested against both speech modes the children's data showed no significant associations.

This implies that sign language is independent of speech modes in this sample.

The next analyses were designed to test the association of parents'

modes and childrens' modes. The same four variables were used.

1. Speaking slowly (1) in parents and children

		children		
		1	$\bar{1}$	total
parents	1	23	45	68
	$\bar{1}$	4	33	37
totals		27	78	105

$$\chi^2 = 6.67, \text{ with one degree of freedom, } p = .1\%.$$

Conclusion: speaking slowly in parents is positively associated with speaking slowly in children.

The co-efficient of association, $Q = .85$ with a 95% confidence interval of $.81 \leq Q \leq .89$

Natural Gestures (6) in parents and children

$$\chi^2 = 16.44 \text{ with one degree of freedom, } p = \text{very significant.}$$

Conclusion: strong evidence for a positive association between natural gestures in parents and children

The co-efficient of association, $Q = .71$, with a 95% confidence interval of $.49 \leq Q \leq .93$.

Sign Language (13) in parents and children

		children		
		13	$\bar{13}$	total
parents	13	11	7	18
	$\bar{13}$	11	76	87
totals		22	83	105

$\chi^2 = 21.15$ with one degree of freedom, p is highly significant (less than 0.1%)

Conclusion: that there is evidence for a positive association between Paget Gorman Systematic Signs in parents and children. The coefficient of association $Q = .83$ with a 95% confidence interval $.65 \leq Q \leq 1$.

Simple sentences in parents and children.

$\chi^2 = 11.13$ with one degree of freedom $p < 0.1\%$.

Conclusion: that simple sentences are positively associated in parents and children.

The coefficient of association $Q = .85$ with a confidence interval of $.81 \leq Q \leq .89$.

These results are contrary to the null hypothesis of no association between the communication patterns of parents and children.

Parents modes	Children		Totals
	1 or 2	<u>1. or 2</u>	
0-1	4	21	25
2	8	27	35
3-4	24	21	45
Totals	36	69	105

$\chi^2 = 12.96$ with two degrees of freedom $p = 0.5\%$.

We find a higher proportion of children using one or other of the speech modes where parents use more communication modes.

1. The Role of Natural Gestures

The evidence supports the notion that natural gestures inhibit speech production in preschool deaf children (see Trevoort, 1963). All the evidence points towards the widespread use of gestures by hearing parents and young deaf children (Barsch, 1968, Trevoort, op cit). In view of this situation those oralists who hold a neutral view of natural gestures may need to review their position. If the aim of parent guidance is speech production in the child, elimination of natural gestures must be considered. It is known that one of the most successful and exclusively oral preschool programmes, does not permit the use of natural gestures or movement of any kind, when talking to preschool deaf children (Tidwell, 1976). Clearly, such a rigorous modification of the speaker's behaviour involves the development of alternative modes of perception. Tidwell describes the tactile, visual, auditory methods in detail. Traditionally the oralists would suggest the use of better hearing aids and more concentrated talking. The manualists would suggest the use of sign language, plus hearing aids, plus speech in varying proportions (see Collected papers, Methods of Communication currently used in the Education of Deaf Children, from the Royal National Institute for the Deaf, 1976).

2. The Role of Sign Language

Significance tests showed a positive association of signs and use of simple sentences in parents. In the case of children association of signs and slow speech production was positive, but weak ($p = < 10\%$). The manualist case for use of sign and spoken language together, usually rests on results of tests with school children. They usually show

that more information passes across with increased use of modes (see Stuckless R. 1976). In this sample sign language appears to take on an information production function for parents by reminding them to keep on talking in the face of no response. In itself this may remedy a tendency for hearing mothers to use fewer and less complex utterances to deaf toddlers as they grow older (see Gregory Mogford and Bishop 1978). Use of signed English may function as a speech priming mechanism in hearing parents, thus ensuring that the deaf infant is exposed to more information channels than the speech-only or sign-only situation. Paget Gorman Systematic Signs is designed to be used in parallel with speech and may fulfill such a role. This was the only sort of sign system used in this particular sample.

Greenberg has suggested that the manner in which sign is used may be the important factor in the child's oral abilities. He found that mothers of high competent communicators were more likely than the mothers of low competent communicators, to embed their signs in bimodal communication. These same mothers were less likely to use signs alone. Children used bimodal communication for more complex messages and in situations where the referent was present (see Greenberg 1980).

3. Increased Communication Modes and Expressive Speech

Increased communication modes by parents was tabulated against use of speech (modes 1 or 2) in children. The results showed an increased proportion of children used speech where the parents used 3 or 4 modes of communication. This may account for parent/s

claims that Paget Gorman Signs increased expressive speech in children. At this point it should be noted that fully 65% of the children were reported as not using connected speech at all with their parents. Secondly the raw data showed that the only parents making claims for causal effects between signs and use of speech were those parents who added a form of signed English input.

This writer takes the view that where language input is increased by use of signed English a situation is established in which internal language develops ahead of articulate speech. This is more akin to the language and speech development of hearing children.

An alternative explanation is that speech progress is valued and reported by these parents whereas increased signing may simply go unreported. Meadows has advanced an alternative explanation. She feels that bimodal communication (speech and signs) eased parent-child communication and spoken language was the result of these early satisfying communication experiences (see Meadows, 1976).

Data from both the deaf and hearing parents using signs in this sample would support this argument.

SUMMARY

These results suggest that a communication system which is both "easy" and "satisfying" by definition, has the following characteristics:- It is discriminable by the child: it exhibits adequate symbolic representation; and preferably, has reversibility with spoken language. Bimodal communication of the kind described here seems to meet all three criteria. Craig has indicated that Paget Gorman has reversibility with spoken language, such a system overcomes the criticism that sign is ungrammatical (Craig, 1976).

The findings showed that for the majority of parents oralism is not easy or effective. On the contrary, a large percentage of hearing parents are high risk candidates for communication failure, one aspect of which is oral failure (speechlessness) in the children. The last result showed that parents who began using a form of systematic signed English in parallel with spoken language were able to avert such failure. There is as yet, no evidence to suggest that the same results could not obtain in other families. There is no hard and fast evidence that sign language should not be part of pre-school education, on a trial basis in much the same way as hearing aids are put on trial. Teachers of the deaf and parents are already familiar with this kind of experimental design. It is part of optimizing the auditory environment. All the evidence to hand suggests that controlled trials of sign language would optimise the language learning environment in a similar manner.

Chapter 10

COMMUNICATION PROBLEMS

Receptive Difficulties

There is wide agreement that lack of communication and the resultant frustrations for parents and temper tantrums in children is associated with deafness; rather than any particular form of child rearing.

Neuhas, using the University of Southern California Attitudes Survey, has shown that parents are most tolerant when the child is young (Neuhas, 1971).

Even if the parents were endowed with limitless patience, endless resources and the best of intentions, the fundamental problem of communication remains; as expressed by Shannon this is "that of reproducing at one point either exactly or approximately a message selected at another point". He distinguishes three categories of communication system; the discrete (dots, dashes, spaces) the continuous (television, radio) and the mixed (telephoned speech). In the case of communication by speech a number of all embracing problems have to be overcome simultaneously. These have been conceptualized at three levels by Shannon and Weaver, and apply to any communication system (Shannon and Weaver, 1949). They apply particularly to parents trying to communicate by speech with the naive deaf child.

Level A. The technical problem

How accurately can the symbols of communication be transmitted?

Level B. The Semantic Problem

How precisely do the transmitted symbols convey the desired meaning?

Level C. The Effectiveness problem

How effectively does the received meaning affect conduct in the desired way?

1. The Technical Problem. Data on the use of hearing aids indicated that the majority of children could not accurately perceive enough of amplified speech to learn to talk on that input alone.

In an early study of 10 cases of suspect deafness Ewing showed that high frequency deafness above 256 cycles was sufficient to abolish the difference between speech and noise (Ewing A.W.G., 1930). In 1931 he showed that "dumbness and lack of response to sound" in young children was traceable to lack of hearing above 256 cycles (Ewing A.W.G., 1931).

In a more recent study by Conrad involving 300 school age deaf children, he showed that partially hearing children without internal speech encounter serious difficulty in discrimination of speech. He took care to present material that the children could read silently before presenting it in speech. He described such children as "audiologically partially hearing, but profoundly deaf for comprehension of speech" (Conrad, 1979). This is more true of the naive untrained preschool child, as the writer showed in 1976. This paper detailed the successful training of a two year old girl who behaved as if she was deaf to speech, in the absence of a clear

diagnosis of deafness (Botting, 1976).

In this study it was found that parents are just as likely to be misunderstood and get irritated with a partially deaf as a profoundly deaf child at this age. The discrepancy between hearing for pure tones and hearing for speech can be conceptualised as a communication loss. Parents become aware of communication loss by trial and error and gradually develop alternative modes of communication to bridge that gap.

Fathers' and Mothers' modes of communication were plotted against the children's ages at 6 month intervals, then the data was collapsed to show yearly changes (See figures 9 and 10). There was insufficient data for under two's to show any patterns. The mothers' patterns showed a high frequency group of modes and low frequency group. Only "repetition" changes from low to high rising to a peak at around three years old. 75% of mothers plus or minus 15% were exposing their children to repetitious utterances at this age. Other studies show wide variations in parents' repetitions of their own utterances (See Snow and Ferguson, 1977). Rendal of Laval showed a sharp drop in repetitions to three year old hearing infants out of a group of five (Rendal, 1980). The results here offer a 95% confidence interval of 30%. The data does suggest that the communication needs of deaf 3 year olds demand more repetition from their mothers than do hearing three year olds. The Laval study showed increased lexical diversity in the utterances of parents alongside the developing semantic and syntactic capabilities of the

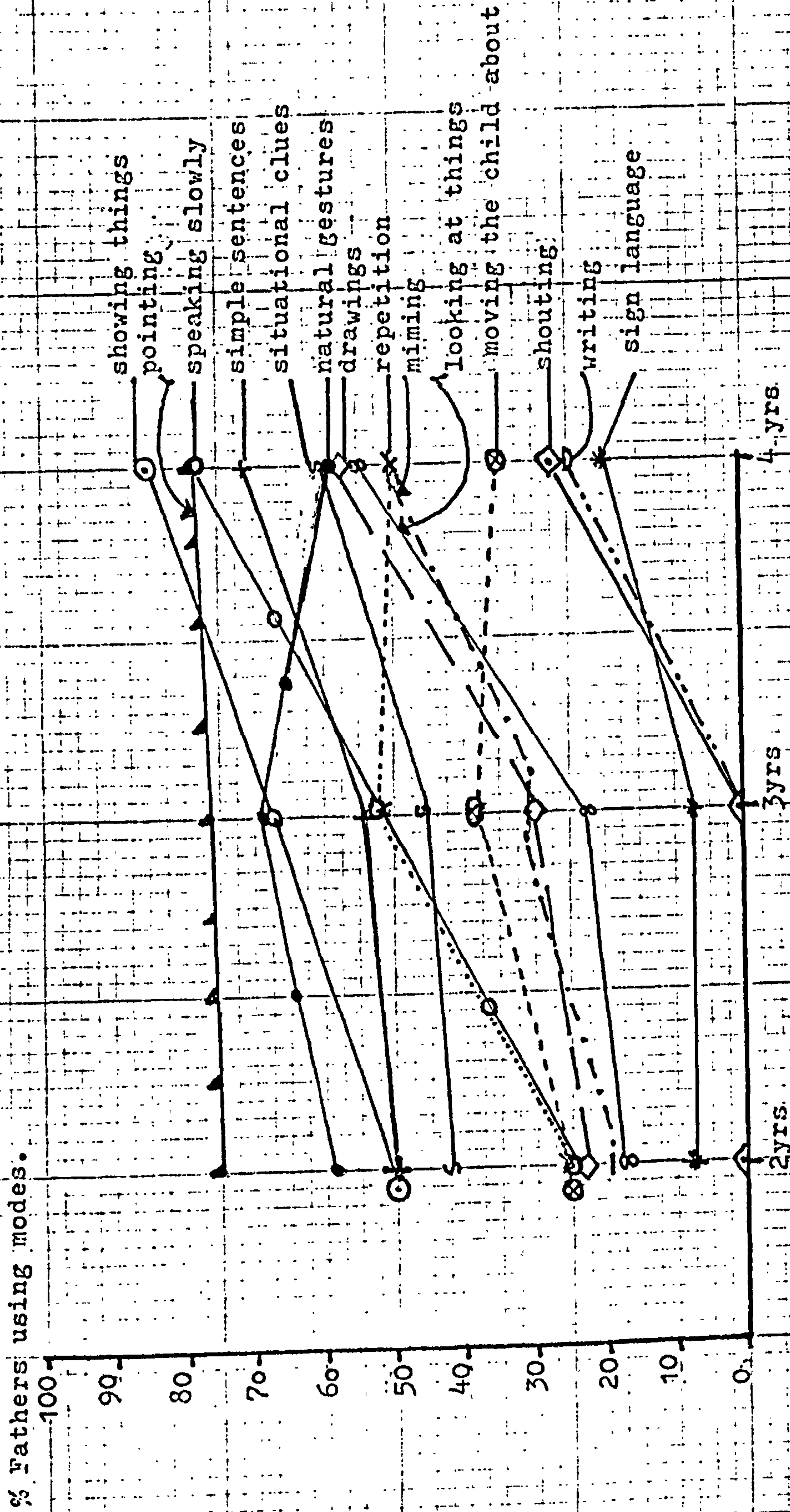


Figure 9. Fathers' communication modes by age of children.

% of mothers using communication modes

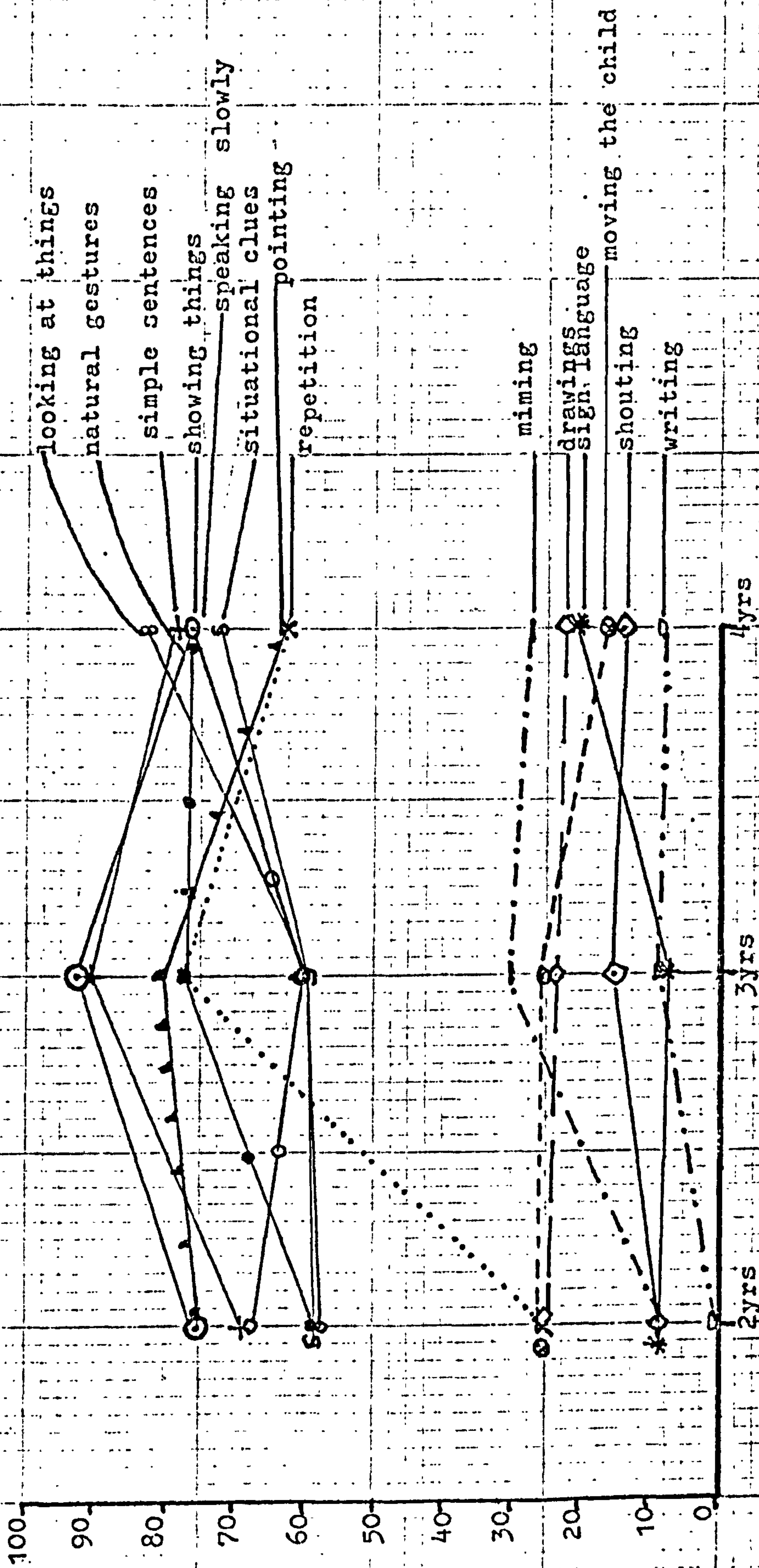


Figure 10. Mothers' communication modes by age of children.

children. In contrast the utterances of both parents to deaf children remain at the level of simple sentences throughout. The men show a steady increase in simple sentences as the child grows older, the women peak at age three. The overall pattern of mode use by fathers shows a higher use of miming, drawing and "daddy-games" interaction than for mothers. By the time the child is rising five the men are using 14 modes of communication to get the message across to the child. This is an acquisition rate of one mode every three months.

2. The Semantic Problem

Many parents of hearing children find it necessary to get the youngster to stand still, stop what they are doing and pay attention in order to get the desired message across to the child. In this sample parents judged that lack of understanding came from lack of hearing, not inattention. When attention was plotted against inability to hear speech, chi squared test showed no significant evidence that deafness and attention interact. If a child has an irreversible loss of hearing across the speech range, this will hold regardless of attention.

	<u>Cannot hear speech</u>	<u>Can hear speech</u>	<u>Totals</u>
Lack of attention	10	2	12
Attending	41	11	52
Totals	51	13	64

$\chi^2 = 0.12$ with one degree of freedom $p =$ non-significant.

Mindel and Vernon have drawn attention to the value of overheard conversations in the development of semantic dexterity. They point out "that the blind child develops language on the same time schedule as the normally seeing and hearing child" (Mindel and Vernon, 1971). The deaf child misses the structural variety of words in sentences and the intonational nuances as well. Some mothers felt the child should understand more than he/she did after being talked at for three years or more. The parents found this irritating.

D.16 Mother of a profoundly deaf boy aged 4yrs. 5months

"More frequently now, than I used to, probably now because after three years, I expect him to understand. Now I do expect him to understand, and sometimes he does like me to repeat things for the sake of repetition. I have to say the same thing six times and I could scream."

Some mothers solved the semantic limitations imposed by deafness by limiting conversations to words the child already knew.

C.15 Mother of a borderline deaf girl aged 4yrs. 3months

"How can you tell the child has really understood you? Because a lot of words she already knows. I know she will understand me, like if I said off to bed! then she will know what I meant and off she'll go. But if she did not know what I meant it is a sort of blank look" and another mother,

D.20 Mother of a profoundly deaf boy aged 3yrs 1month

"My language is carefully structured. I'll only say the things he will understand".

It is unclear what steps, if any, the teachers were taking to help

parents teach new concepts to the children.

Some parents who had followed a complete course of sign language expressed the view that the use of signs had solved the technical and semantic aspects of communication.

C.7 Mother of a borderline deaf girl aged 4yrs. 5months

"I am sure it is the sign language. It helps to communicate with the sign and it is surprising how easy it is to pick up. She knew it before she was two, the words, to drink, aeroplane, mostly nouns, normal for a child of that age. And she seems to have kept up her sign language; so that you can get things across, words, little phrases that you use, very quickly."

This same mother reported that her child spoke as well as signed. She placed the child at the linguistic level of "putting two words together". Studies of signing hearing children from deaf families, by Mayberry showed no noteworthy defects or delays in development of spoken language in 3-7 year olds (Mayberry, 1976). She noted that more children performed better on combined modes than either oral or manual modes alone. This applies to deaf children whose hearing parents use sign and speech language together (see Schlesinger and Meadow, 1972).

Answers to question 66 showed that the children were unable to hear or overhear the nuances of normal conversational speech. This means that parents had to persist in their efforts to communicate to the child what they had not heard. 86 (81%) of parents said that they never or rarely gave up trying to communicate. The

children were also very persistent at communicating with 90 (86%) of parents reporting that their child rarely or never gave up trying to communicate with parents.

C.10 Mother of a severely deaf boy aged 4yrs. 6months

"He stamps his feet and screams and takes me to what it is he wants, if we are not anywhere near it. He will sign, well sometimes he will sign and he will keep on doing it, you know but often it is something I do not want him to do. He gets a bit frustrated and I think that is when he is stubborn, because I am sure that he understands I do not want him to, but he won't just give in."

Parents' of partially deaf children were able to distinguish very clearly between lack of hearing and lack of understanding.

C.11 Mother of a partially deaf girl aged 4yrs. 5months

"Yes, she is stubborn, but I think that some of it is that she just does not understand what I am saying to her."

In discussions about the easiest ways to communicate with children parents were explicit that the reason they did not gesture to young deaf children was that they had been advised not to: applying a "talk only" rule, involved them in elaborate strategies to get the message across to the child.

C.17 Mother of a profoundly deaf girl aged 4yrs. 8months

"Which was the easiest way? (to communicate). Well the way I was taught was not to gesture at all under any circumstances, which is tremendously hard to do. I was taught this way, and I had to do it with her all the time she was at home. If I

wanted to talk about something, I had to go and find a picture in a book and talk about it. But once she started school and I got more knowledge, I have been able to appreciate that there are some natural gestures you can use to get something across you know rather than looking for pictures which is very time consuming. I suppose they have to teach parents this way because they are afraid that once they start gesturing the deaf child will hang on to a gesture. We have noticed this with her. Her grandfather he does "thumbs up" to her and she was tickled by this, so she did it and we did it to her and we said yes! that means good, that is good. But she still does it and because she did not have a negative gesture to go with the positive she invented one. She does this with the little finger and she points it at you, if she wants to tell you, you are bad".

The mother was able to demonstrate this sign and it proved to be identical with the adult deaf sign.

Most parents worked out ways of establishing associations between referents and words from extended experience with their own children.

C.24 Father of a profoundly deaf boy aged 3yrs. 7months

"If he was very tired, he will deliberately not understand you, this is not because he is deaf, but because he is a child, you know. Sometimes not because he cannot hear the speech, he is obviously not hearing the whole word. So, if it a new word, he may not understand it, and there is not a situational clue with it, you know, then he won't understand. Whereas if it is

more everyday things, i.e. you say it is time to go out and you say go and get your shoes, I would not sort of go into the kitchen and point at his shoes. If after two or three times of saying go and get your shoes, he does not understand, then I would say lets go and find your shoes. Because there is no point in going on and on with him not understanding."

Table 49. Parents' estimates of easiest ways to make deaf children

<u>understand them.</u>	<u>Number of parents</u>
By speaking slowly	31
By natural gestures	29
By showing things	25
By pointing	23
By using simple sentences	17
By repetition	12
By sign language	10
By using situational clues	10
Miming	7
Drawings	4
By looking at things	3
By moving the whole child about	2
"No easy way"	1

Finger spelling, shouting and writing had no ratings at all.

When modes were combined to get estimates of "easiest" ways of communicating 12 parents reported that there were no "easy" ways of communicating with their child.

Table 50. Combined modes of communication. Number of parents

No easy way to communicate	12 (12%)
One single mode	36 (34%)
Two modes	38 (36%)
Three modes	16 (15%)
Four modes	2 (2%)
Five modes	1 (1%)
Total	105

Forty four parents were using speech modes (1) and (2) in combination with non-verbal modes to produce the "easiest" way of getting the idea across to the child. When speech modes were subtracted, fourteen people had "no easy way" to communicate with the child. Natural gestures was the most frequent accompaniment to speech.

C.26 Father of a profoundly deaf boy aged 2yrs. 7months

"If I am going out and I want him to get dressed, I just put my coat on and show him my car keys, he cannot get dressed fast enough. I should say he understands signing, pointing, a mixture of all three."

Frequently parents try speech first then add other modes.

C.27 Mother of a profoundly deaf boy aged 2yrs. 7months

"Well, I do a bit of allsorts, I speak to him first, then if he doesn't understand, I try and do Paget (signs), then if he cannot quite understand I sort of point, you know."

Parents used 8/9 combinations of modes, this is twice as many as the combinations used by children (see figures 11 and 12).

Parents

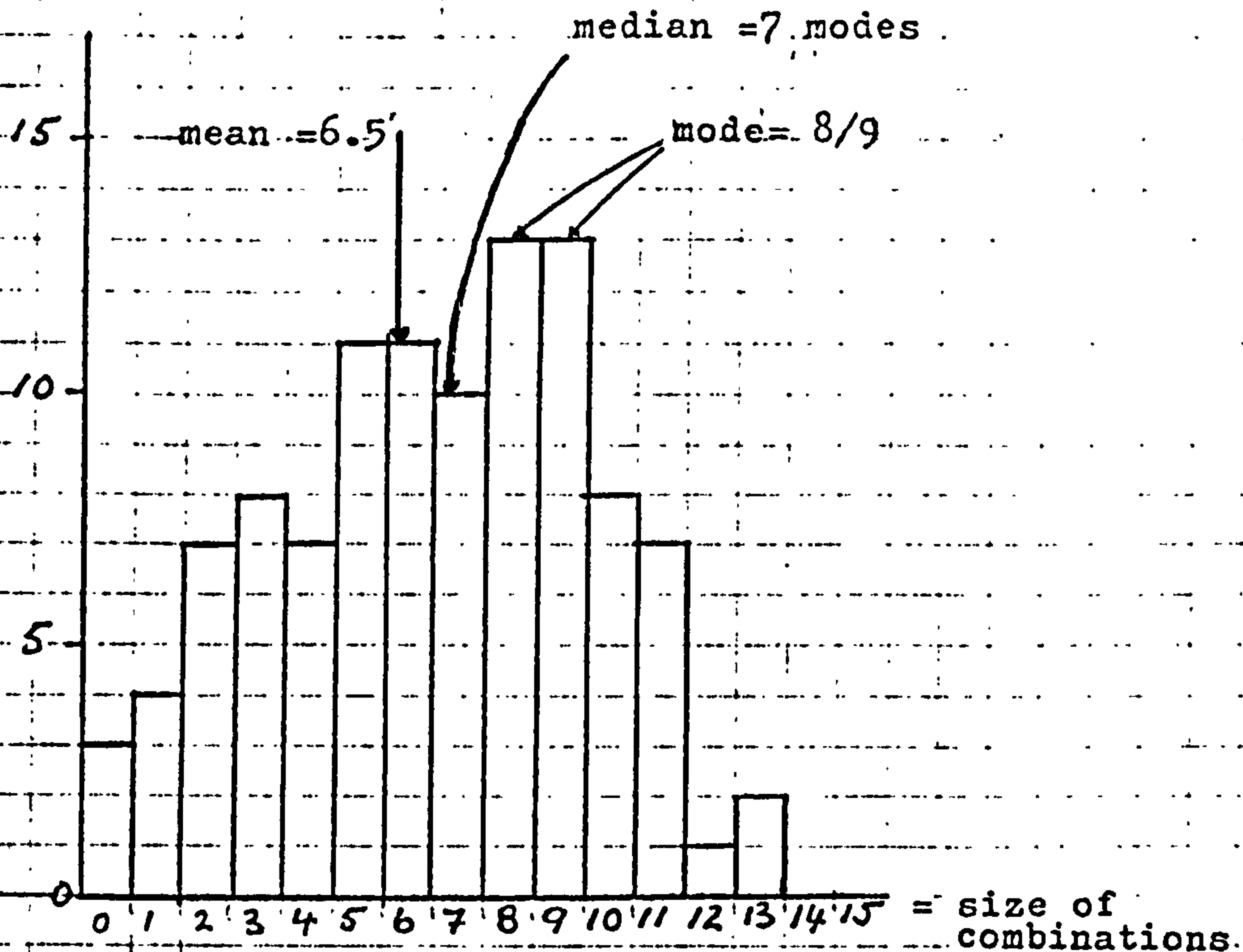


Figure 11. Combination of modes used by parents.

Children

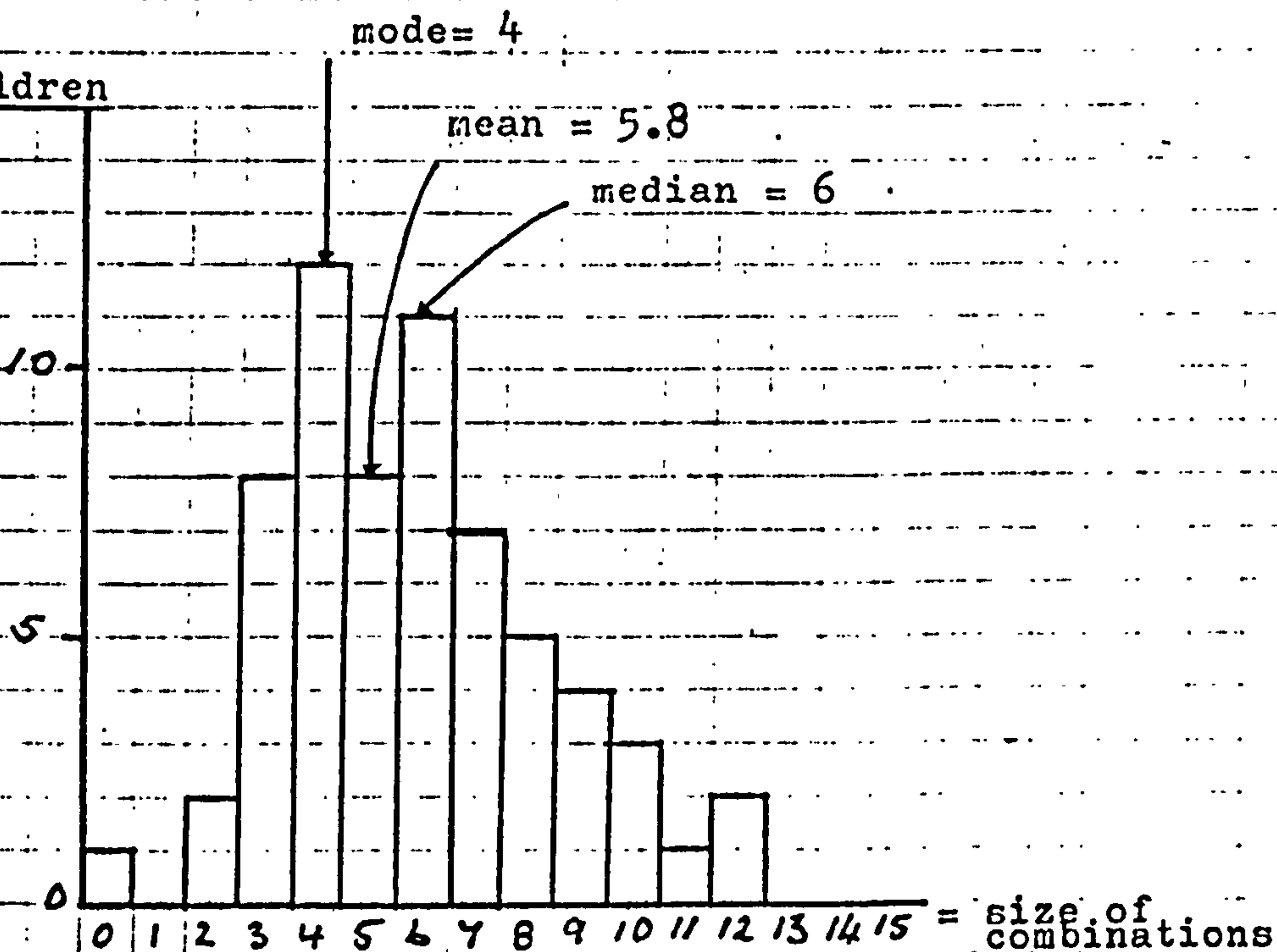


Figure 12. Combination of modes used by children.

3. The Effectiveness Problem

Norbet Weiner emphasized the principle of effective communication as follows "It is not the quantity of information sent that is important for action, but rather the quantity of information which can penetrate into a communication and storage apparatus, sufficiently to serve as a trigger for action" (Weiner, 1954).

Regardless of the type of parent guidance to which they had been exposed, parents acted on this principle, and judged the child's understanding by his/her behavioural responses. When they were asked "How can you tell the child has really understood you?" estimates of understanding were obtained for 58 children.

	Behaviour	No behaviour	Totals
Replies	3	4	7
No replies	43	8	51
Totals	46	12	58

$$\chi^2 = 6.053 \text{ with one degree of freedom } p < 2.5\%.$$

If there are no replies, behaviour can be expected as a measure of understanding. Replies and behaviour are not to be expected although lack of speech in itself is no indication of lack of understanding. Parents accepted nods, smiles and changes of expression as indices of understanding, as well as the detailed execution of requests.

D.34 Father of a severely deaf girl aged 2yrs. 9months

"I think most of the things we ask her to do demand a response like, shut the door, go to the toilet, eat your Weetabix, so you can always

tell if you have got understanding because she does something. There are very few things — you don't ask things that demand an opinion, or an answer, you know, you do not discuss anything! Everything is on a very basic level, you know. Even if it is shut up! If she does shut up you know she has understood it, look at it that way."

Many parents were keen to make the distinction between imitative speech and understanding.

C.58 Mother of a profoundly deaf boy aged 3yrs. 11months

"He will see a tractor and he will say tractor and we will say, Have you been to the farm today? and he will say Yes! and we will say did you see some pigs? and he will say "pigs". He will copy us but he does not remember them all the time."

30 parents reported that the child often understood strangers speech to them, but 50 parents said the child did not understand strangers. Some mothers reported that the child was highly dependent on the parent in the presence of strangers.

C.58 Mother of a profoundly deaf boy aged 3yrs. 11months

"Complete strangers, somebody out of the blue, No. Because he does not try to understand them. He will cling to me and it seems as if he does not want to bother."

D.29 Mother of a severely deaf girl aged 4yrs.2months

"I do not think she lipreads other people (strangers) very well. Not just anybody."

Some mothers had found that the child cast them in the role of interpreter when strangers were present.

C.10 Mother of a severely deaf boy aged 4yrs. 6months

"With a complete stranger he is quite shy. But with friends that we know now he will start to talk. If I am not there he will talk to them. But, if I am there he will talk to me, to talk to them. I am trying to make him ask for what he wants (directly)."

Expressive Language difficulties

Parents were asked to estimate the degree of frustration experienced by the child when trying to make himself understood.

Table 51. Frustration and expressive language

<u>Child Frustrated</u>	<u>Number of mothers</u>	<u>Number of fathers</u>
Often	34 (56%)	23 (52%)
Rarely/never	18 (30%)	15 (34%)
No comment	9 (14%)	6 (14%)
	61	44

The raw data shows that over 50% of parents claimed the child became frustrated in his/her efforts to communicate with their own parents. The word "tantrum" came to the fore in this section. Sheer lack of articulated speech brought on frustration, especially if the child fell sick.

A.30 Mother of a partially deaf girl aged 2yrs. 4months

"She is turning from a sunny child to a sort of niggly naggly child and there are things that she cannot make me understand and I just do not know what she is saying. She got over a bout of flu' and then she began to be the most miserable child, the most awful niggle naggly, screamed, you know she was lying on her bed and screamed, this poor child could not tell me you know. I do not know why she did not point to it, but she did not. She would hold her head you know. The last few weeks you know she has let go. She is having terrible tantrums. She shows me,

she tries to show me and tries to make noises and if that fails, she just sits down on the floor and kicks and screams, but it is happening more and more often now."

Ewing and Ewing suggest that children who are profoundly deaf will not hear enough of speech to learn to speak distinctly. They advise the parents not to be anxious as long as such children are understanding and at least trying to talk, up to age three. From then on they advise specialist speech teaching (Ewing A.W.G. and I. R. Ewing, 1958). No parent in this sample mentioned any technical help to clear up the child's speech. A situation might develop in which the child's understanding by lipreading expanded without a corresponding development of articulatory control. So the parents found themselves in the unenviable position of not understanding more and more of the child's spoken language.

C.24 Father of a borderline deaf boy aged 3yrs. 7months

"Quite frequently, yes! (gets frustrated) mainly because he is experimenting more and more, and he is wanting to learn more and more. So as a result it is the law of averages, he is coming out with more and more words which mean something to him, but do not mean anything to us. So that the more he wants to learn the more he is confronting us with this. The worse thing is when we have got the blackboard out and he wants you to draw something for him. He says the word and you have not got a clue and you draw the wrong thing and he goes berserk. You know he rubs it out and shouts at you."

Many parents were preoccupied at the level of word recognition and thus the whole conversation was spoiled if the vital word was not intelligible. Ogden and Richards have drawn attention to the necessity of sensory

discrimination by the hearer "as a preliminary to any understanding of words" (Ogden and Richards, 1936).

It seems all too obvious that young deaf children need technical help in tidying up their expressive language to a minimum level of intelligibility by the people they live with. British oralism has apparently ignored the necessity for technical intervention at this age. Story, in a paper to teachers emphasized the need to let the child "store up impressions of speech for later use", with no mention of speech teaching (Story, 1913).

Unintelligible speech is apparent amongst deaf school leavers, some of whom were interviewed by members of the Lewis committee, who noted that "some who had the greatest difficulty in making themselves understood were the most intolerant of those who did not use speech and lipreading" (D.E.S. 1968). There is evidence that teachers actively deter parents from learning how to help their child speak better. Wilders and Robson reporting on their model of parent guidance say that they consciously avoided giving parents speech help. They say "Having accepted the handicap, most parents were eager to learn the skills by which they could teach speech to their child. However, it was essential to look at the complete child rather than concentrating solely on speech and language development" (Wilders and Robson, 1980). This is in conflict with the stated aims of the project and the stated wishes of the parents!

It is indicative of the stamina of these children that they persisted as much as they did in spite of their unintelligible speech and the resultant frustration. By the parents' estimates 86% of these children

rarely or never gave up on any communicative attempt.

They were understood by strangers "frequently" according to 43 (41%) of parents and rarely or never by a further 43. 18% said the child did not meet strangers often. 50% of those who tried communicating with strangers failed. Figure 13 shows that childrens' preferred modes of communication with adults ~~is~~^{are} natural gestures and pointing, followed by crude physical contact, (pulling, moving and tapping adults). Of those children using speech with parents 76% also use it with strangers. This is the same proportion as those using natural gestures. Communication based on the alphabet were never used with strangers, i.e. writing or finger spelling. At this stage there is no instruction in either writing or finger spelling. Usually children encounter the written form in school. The one child using finger spelling was the child of a man who had learned it from a deaf friend in his youth. The Lewis Committee recommended controlled study of finger spelling with young children along the same lines as the Russian model. This has not happened yet and until that is done it is unlikely that finger spelling will be used in preschool education. The most famous example of the use of finger spelling involved Alexander Graham Bell and George Sanders. It is clear from the 1886 account they had fun. Bell used Dalgarno's glove with the letters on it. He reported as follows "For a long time he was very proud of his glove, and was delighted to find that he could communicate with his parents and friends and they with him by simply pointing to the letters on his hand " (Bell, 1886). Bell taught George articulation separately from the language lessons.

The power of this simple alphabetic system is shown by the progress of

No of Parents

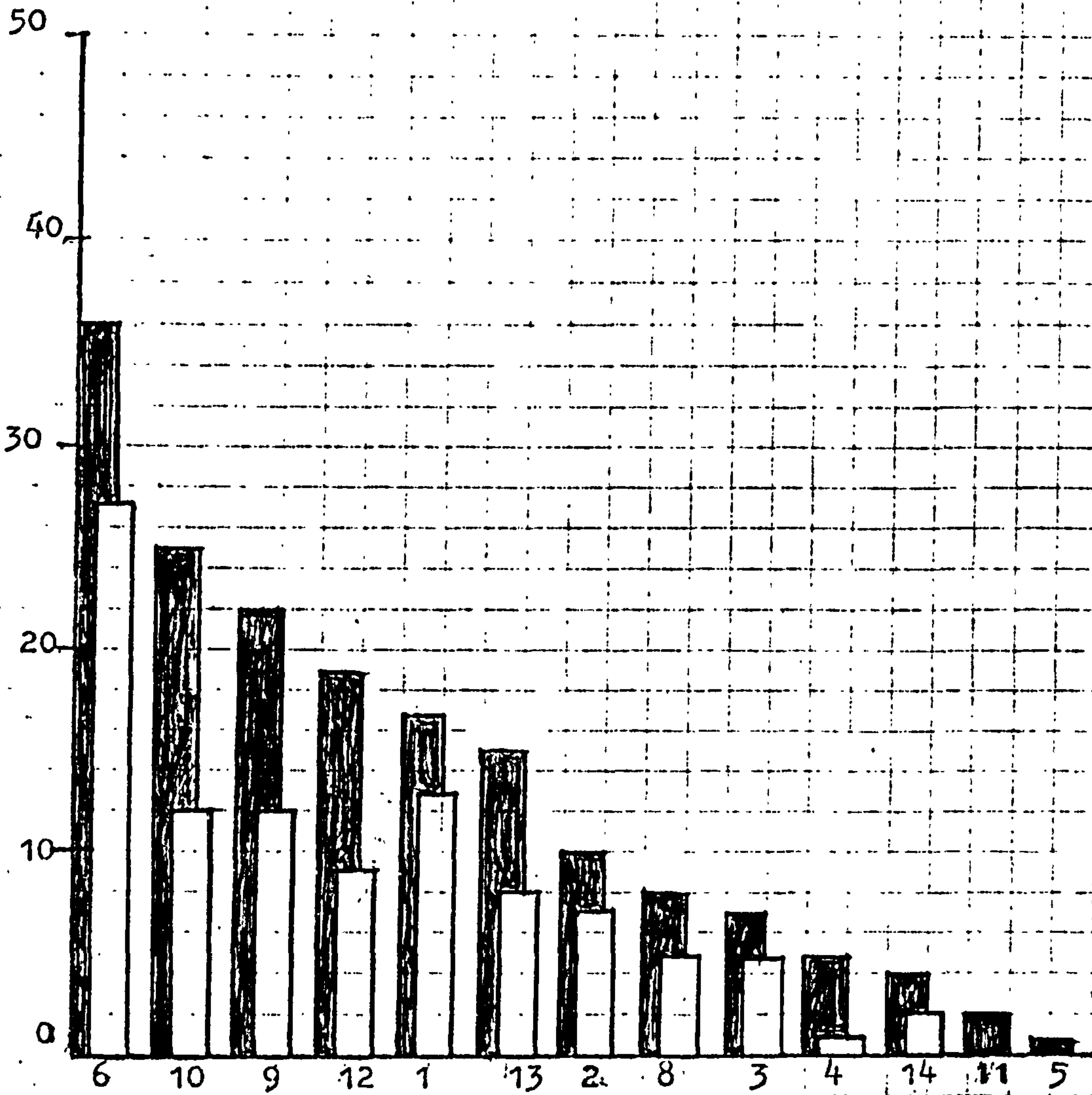




Figure 13. Communication with parents and strangers.

N.B. Seven parents said the child did not meet strangers.

Two parents said they had to act as translators for children with strangers.

 = parents

 = strangers

Helen Keller. Bruce says that Anne Macy Sullivan went to live with the Kellers in March 1887, by April 5th "things had names". Three months later Helen was writing letters! Miss Sullivan's method "was the constant spelling of natural idiomatic English into Helen's hand (Bruce, 1973). It is surprising that none of the teachers had even discussed finger spelling with these parents.

The model of communication presented to these parents was based on the mother-infant model which involves the mother, initially at least, in supplying most of the verbal input, in the form of clearly spoken, simple syntax, delivered at slower-than-normal rate. This has been described as "motherese" by Kretschner, who points out that as the baby contributes more speech, the mother helps by repeating, listening and extending in an individualized manner (Kretschner, 1979). This early parent-child interaction relies heavily on parent's sensitivity toward the infants' non verbal behaviour, it is not surprising that 23 (22%) of parents said they relied on the child's facial and bodily movements for understanding before they knew he was deaf. A further 22 (21%) said they relied on the situation for understanding. 18 (17%) relied on the sound of the child's voice.

Over time the parents developed a "different" way of talking to the deaf child as opposed to a "normal" way of talking to hearing children. 88 (84%) of parents said they talked differently to the deaf child and 91 (87%) said they had changed following the diagnosis. These changes were in the direction of face-to-face orientation, use of simple sentences and clear speech with or without gestures. 88 (84%) of spouses confirmed that the spouse had changed in this direction.

C.33 Mother of a profoundly deaf girl aged 3yrs. 4months

"Yes! I did change my communication with her. I always used to make sure that she was facing me and words were clearer, well I tried to. "Did he (husband) change?" "Yes! he used gestures right from the beginning, just the same and no baby talk. Everything was called by its proper name. Yes! he changed he had to go along with me. We never used baby talk to her; we did with him (older child). He has had to learn two words, (for the same thing) it is not worth it".

Some parents changed their talking more than once in response to different advice.

C.53 Mother of a severely deaf girl 3yrs. 2months

"Definitely, most important is face to face. I started talking directly into her ear. It was obvious she heard it, then into the hearing aid. Later on would go to face to face conversation. The biggest asset was the correspondence course."

Some fathers tried to maintain a "normal" conversational situation. This proved impossible as the child grew older.

C.57 Father of a profoundly deaf boy aged 3yrs. 11months

"I try to talk to him as normally as we can, as much as we can, but when it comes down to understanding; when you have got to get things across, then we have to treat him differently, as normal four year olds can understand far more. They can tell you far more than he can, I think. Trying to get the message across in a different way not so much in a verbal way, yes! (I changed) I think it was very sudden and part of the teaching we had been given. Before, we tended to concentrate, we tended not to talk to him, because he did not respond. You could not hold a

conversation whereas now I try to talk to him even though he does not respond. You have a tendency to realize he cannot hear. There is something missing, a big hole where communication should be."

This man's experience indicates the tenuous nature of trying to converse by speechreading (lipreading) with an immature child. An analysis of speechreading failures in profoundly deaf preschool children showed that poor learners got speechreading scores that were no better than chance. Even good learners were only able to identify 50% of single words and 40% of phrases and sentences (Neyhus and Myklebust, 1969).

In order for lipreading to take place, the child has to be lip watching. This involves maintaining a face to face stance by the parents. The data shows that this became a habit with parents. Brinich also found that mothers of deaf children used attention related behaviours and questions or instructions more than mothers of hearing children. He suggests that the maternal emphasis on control may be a normal adaptation to the breakdown in reciprocity of communication (Brinich, 1980). The data from this study suggests that much of the frustration arising from attempts to keep up a speech only method of communication could be avoided if systematic sign language or alphabet methods were used.

Ideally what hearing parents need is a signalling system used in parallel with ordinary speech so that hearing siblings could also use it with the deaf child. Cued speech is one response to the hearing parents need for a visible set of speech signals. It was imported into England by a parent of a deaf child in 1971 and developed at the National Centre for Cued Speech by Dixon. Seven parents in this group had started to practice it with their child. A comprehensive evaluative study of Cued

Speech by Nicholls, showed that linguistic information can be received "with exceptionally high levels of accuracy through cued speech" (Nicholls, 1979). One of the aims of the cued speech practitioners is to perfect lip reading skills with cued speech signals to the point where the hand signals can be withdrawn. It was shown earlier that this model was used with signs; the parents used signs and speech until the child could lipread the word and then "faded" the sign. A formal study of the teaching of signed speech by Schaeffer showed that the simultaneous production of signs and spoken words can act as an intermediary stage between spontaneous speech or spontaneous signing. The signs were faded out when children started speaking. Special speech teaching was supplied at this stage. (Schaeffer, 1980).

It is not surprising that the parents had to develop patience in the face of these communication difficulties. When asked about patience 64 (61%) of parents rated themselves as more patient since learning about the deafness. 25 (24%) said they were about the same. 22 (53%) of wives said their husbands had become more patient with the child. 24 (58%) of husbands felt the wives had become more patient.

Over a period of time the parents develop the habit of making eye contact with the child: this is the best indicator that the adult has the child's attention. Speech is delivered at a slower than normal rate with much repetition and frequent departures into gestures, pointing, showing and miming. One solution to these problems is for parents to learn sign language or finger spelling. Question 85 was designed to probe parents' views about this.

Table 52. Parents' views about Finger Spelling, Sign Language and

	<u>Deaf Teachers.</u>		<u>Number of Parents saying</u>	
	Yes	No	Undecided	Need information
1. Finger Spelling	54	23	5	18
2. Proper Sign Language	65	18	4	14
3. Watching a deaf teacher teach the child	79	7	2	12

There were fourteen comments that these issues were not appropriate: Five individuals accounted for all of them: these parents felt that as their child was as yet an infant or only had a mild speech loss that he/she would not require these forms of communication. The consensus was that parents would "do anything" if it would help the child. "Help" was conceptualized differently by different parents. One man indicated the fine line between the hearing parent's desire for normal speech development and the need to ensure that the child is actually coping.

D.34 Father of a severely deaf girl aged 2yrs. 9months

"Yes. I think I would do as my wife said, anything that was constructive: In other words, I have no prejudices against a sign language but I would prefer not to, and I would take that view all the time she is progressing well. But if I thought that she could cope more adequately by sign language then I'll do that. But I would rather not. If I thought it would help her learn more quickly then I would do it."

The commonsense viewpoint was put forward by a number of parents who also made it clear that the child's welfare was the primary issue rather than academic points in the communication debate.

C.27 Mother of a profoundly deaf boy aged 2yrs. 7months

"Well, I would learn anything as long as it did not confuse him. As long as he was not getting too much of everything, you know. A bit of different things. I am frightened you see with Paget Gorman, I am not continuing to learn that now. I am using what I have got, with him. But I am going to start and do Cued Speech. But I am not just going to dismiss Paget Gorman, I am going to continue doing that. But I would do anything if it would get him some good grammar, you know."

This mother was backed up by her husband who said "We will learn anything or watch anyone that we thought we would benefit by, and him".

Parents did recognise the necessity of sign language for adult deaf people and were willing to try this with their own child.

C.33 Mother of a profoundly deaf girl aged 3yrs. 4months

"I would use anything that would help her. There must be some form of communication between deaf people. If they cannot speak oral then they must be able to use sign language, finger spelling, whatever there is available. There must be some communication. They cannot be cut off completely just because somebody says, oh no you do not need finger spelling, schools do not like it now."

The attitude of parents is influenced by the oral nature of parent guidance; most parents had been led to believe that the child was going to speak well enough at some future date, to participate fully in a hearing society. Where parents had allowed for the possibility of speech failure, then sign language was viewed as a limited social option, a last resort!

D.22 Father of a borderline deaf girl aged 3yrs. 2months

"Well if she was not going to have any voice at all, well she would have to learn sign language. But the trouble is that it is so limited, she would only sort of communicate with us. I mean people on the street do not know sign language. So it is the best way of teaching her: how to speak. But there are a few that would never speak. If she was in that category, then they have to learn sign language. Well I try to learn it. If she was not going to speak at all, you would have to learn sign language, really it is the only alternative isn't it? Although there are some new methods coming out aren't there? This sort of half and half system Cued Speech. Well I should think that sign language would be easier at first, but it depends how young the child is. I do not know how difficult it is to learn, really. I could never learn Morse code. I tried for ages to learn that one. I was a bit better with the flags, Semaphore!"

The father of a four year old felt the same.

D.30 Father of a severely deaf girl aged 4yrs. 2months

"Undecided, on all of these, because I have a different view from all of these. The only thing about sign language, finger spelling and Cued speech is everyone has to know it, right?, not just the child and the parents. It is outsiders as well. Because if the child has got to sign whoever he is signing to has got to understand it. So if you do not understand it what point is the child doing it? I would need more information on that (deaf teachers). But that is my views on signing and that sort of thing. I feel with that sort of thing everyone has got to know it or the child might as well be left deaf and dumb. Otherwise it is a limited circle it can communicate with. The fact is that with any sort

of signing everyone has got to know it otherwise the child can only stay within it's circle."

The advantage of finger spelling is that it can be learned quickly as it is based on a familiar notation.

D.33 Mother of a severely deaf girl aged 2yrs. 9months

"I learned finger spelling on Wednesday. One of the ladies from the groups, she came round to teach me. She went through the alphabet with me on Wednesday."

These discussions with parents highlighted the great weakness of the oral philosophy; inability to predict speech in any given individual. Ewing and Ewing in a classic text "Teaching Deaf Children to Talk" emphasize the developmental approach to speech. This involves a belief deaf children will talk spontaneously as a result of reproducing the conditions natural to a hearing child of the same age. All the successful examples of aurally trained children they provide have hearing across the speech range to 4'000 or even 6'000 cycles per second and they do point out that normally hearing people can "follow ordinary conversations transmitted by telephone systems with an upper frequency cut-off at about 3'400 cycles per second" (Ewing and Ewing, 1964). The data from this sample showed that no child achieved normal levels of speech.

Two parents were frank about the inability of the professionals in this matter of prediction about speech. They had followed an intelligent and sensitively organised programme of language provision for the child.

A.30 Mother of a partially deaf girl aged 2yrs. 4months

"I would learn anything. I mean you have just got to communicate anyway they can. It is awkward. You see my husband and I have this feeling

all the time, I know it may sound bigheaded. You see her condition is so abnormal. Nobody knows whether she is going to speak. Although everybody says well of course she is going to speak, we know damn well they do not know that she is going to speak."

These parents recognised that deafness is an abnormal condition. Some parents whose children had only a few words by the age of four and a half still cherished the idea of speech.

A.33 Mother of a profoundly deaf girl aged 4yrs. 5months

"Finger spelling, well I do not think I would learn finger spelling because I do not think it would help her, you know speaking-wise".

Where parents were interested in having more information about communication systems which did not depend on speech, there appeared to be no easy way to get such information locally. Since the start of the study the Royal National Institute for the Deaf has begun courses in signing and finger spelling.

At the time of interview no parent in the study was using British Sign Language as used by the adult deaf in this country. 18 parents were using Paget Gorman Systematic Signs: three parents had started to learn finger spelling themselves: seven parents had started learning cued speech.

On the matter of deaf individuals taking up teaching careers some parents expressed concern that the medical standards were designed to cut out deaf graduates. (see Lysons, 1978).

C.25 Mother of a borderline deaf boy aged 3yrs. 7months

"I think that deaf adults do not have enough say in the education of our children. We have a lot to learn from their experience, but I would want to get into it more. I would need more information."

These parents were most receptive towards the adult deaf contribution

C.15 Mother of a borderline deaf girl aged 4yrs. 3months

"I would very much like to see a deaf adult teach the child."

SUMMARY

1. The data suggests that all degrees of deafness are critical for speech perception in the naive subject. Inability to hear speech affects semantic development and prevents full understanding of the intentions of the speaker.
2. Parents are just as likely to be misunderstood by and get irritated with partially deaf as with profoundly deaf children at this age.
3. The data suggests that parents rely heavily on repetition, natural gestures and a restricted vocabulary to maintain minimal communication with these children.
4. Inability to hear complete speech patterns is reflected in the children's inability to speak, which leads to frustration for the child.
5. The data on parent's own views about sign language and finger spelling shows that parent's receptivity towards these modes of communication is favourable, provided such modes will not hinder speech development.

Chapter 11

SERVICES FOR PARENTS

The Helpful and the not-so-helpful. Once a diagnosis is secured, the major task for parents is finding effective professional help. In the pursuit of expert help the parents talked to a wide range of people, some of whom they never wanted to meet again, others with whom, they could not spend enough time. When asked parents were able to rank helpful people very decisively.

Table 53. Parents estimates of Helpful People

Ranked in descending order	Number of parents who had	
	contact with	who preferred
1. A teacher of the deaf	95	40 (42%)
2. Your own spouse	90	14 (15%)
3. Another parent of a deaf child	87	8 (9%)
4. Ear, Nose and Throat specialist	82	9 (10%)
5. Close friends	72	1 (2%)
6. A neighbour	64	0 (0%)
7. Your own parents	63	1 (2%)
8. School teacher	61	7 (11%)
9. A deaf person/relative	45	0 (0%)
10. A social worker	41	4 (9%)
11. Your family doctor	37	2 (5%)
12. A speech therapist	27	4 (14%)
13. A psychologist	19	0 (0%)

The teacher of the deaf was also rated first in preferences of people parents "would turn to for help" about the deaf child. Of the 90 people

who said they would turn to their own spouse only 14 said they would turn to the spouse first for help or information re. the deaf child. These findings reflect the absolute necessity of the educator to parents. Hearing parents are not much help to each other as far as the technical aspects of deafness are concerned. Other parents of older deaf children are seen as valuable resources, usually because they have already faced up to various difficulties involved in becoming parents of deaf children. Some parents described the contribution parents can make especially in the period immediately following diagnosis, before teaching services are involved.

C.10 Mother of a profoundly deaf boy aged 4yrs. 6months

"Parents helping other parents of deaf children in general. I feel a little bit awkward sometimes, because I am the welfare representative now, of the local branch of the National Deaf Childrens Society. And I have been given some new peoples names, you know, newly diagnosed children; then when I mentioned it to the teacher of the deaf, just out of courtesy, she gets all het up because she has not heard about them and why should I hear about them, before she does? and to certainly not go and visit them or anything until she knows more about it...which I feel is wrong. If they are newly diagnosed they want to chat to other parents. I feel I would have liked to have talked to more parents of deaf children a lot earlier than I did. I did not meet another deaf child until well a year after he had been diagnosed as being deaf. And I think if I had met more, you know right from the start it would have been a great help."

The Family

The majority of deaf children in this sample came from hearing families.

Very often the grandparents were unable to give any advice or support to their own sons and daughters, on how to manage the deaf grandchild. Only one parent said they preferred to talk to grandparents about child rearing problems. Some grandparents were unable to accept the deafness and so made life worse for the parents.

C.25 Mother of a profoundly deaf boy aged 3yrs.

"People you would have liked to talk to more - both sets of parents. To be able to talk without being interrupted and to put your point to both of them. Not to be told that I do not know what I am doing, and they know better. Yes, to put our point of view and need to tell them what we expect of them and not to be told anymore what they expect of us. It may sound a bit unkind but it is very difficult. I can understand how they feel, but they are not helping us with their feelings by not listening to ours. But I must say that has improved. It is difficult for them to accept that they had normal children and that their children have produced something abnormal. It is quite a handicap it must be. I mean he is my parents' first grandchild. They have no other grandchild, all they have is one handicapped grandchild. But his (husband) parents have at least got three other normal grandchildren."

Family attitudes towards children, handicap in general and this particular child varied from total helplessness to overindulgence by grandparents.

C.21 Father of a severely deaf girl aged 2yrs. 11months

"Our parents not really. I think they are more - I think pitying is the right word: I do not know. They are quite nice about it. My mum is quite sort of pitying isn't it a shame sort of thing. But she is not, it is no good sort of thinking, No! no help there."

Mindel and Vernon have pointed out that the newly diagnosed parents of a deaf child have a complex educative role within the family; the mother has to learn herself and educate her parents and other members of the family as well, this can be made more difficult where the grandparents take up an unaccepting or dogmatic role towards her (Mindel and Vernon, 1971).

C.15 Mother of a borderline deaf girl aged 4 years 3months

"She (deaf child) does not say anything. Everytime my mother rings up she will keep saying what is she saying now. It has only been a week or fortnight you know and I do not know what to say. You know they do not make progress every week. I cannot get this over to her (grandmother) you know. She knows somebody who is deaf and this child only has a fifty per cent loss, but the comparing, she cannot get it into her head, that it varies such a lot in deafness. She cannot see this. So I let her (deaf child) go there for a week and grannie quite enjoyed having her and she sort of knows what she said and got to grips with the situation a lot better."

Both the tape recordings and the data indicate that hearing families at both generations are poorly equipped for life with a deaf child. One father explained:-

D.34 Father of a severely deaf girl aged 2yrs. 9months

"Your own parents. I do not find them very helpful. Not on anything to do with deafness. I think they want to be helpful. My father is a bit detached about it all. I mean he is very concerned but he never seems to get very far. He loves her and he will give her all strokes and cuddles and things, but there is nothing very positive to work on. My

mother is sort of a bit frightened about the whole thing and it amazes me how she ever muddles it up. She cannot cope at all. I think If I am honest a lack of support there. She is more worried about the deaf one than anything else I can think of, you know. But the prospect of looking after her, you know, what shall I do if she wakes up? So I do not think we have had a tremendous amount of support from my parents."

This sort of situation means that children cannot be left with grandparents overnight or for short holidays, which would under other circumstances permit relief for the parents. Neighbours and close friends are likely to be hearing people who are equally limited in their ability to help parents of deaf children however willing they may be. Only one parent preferred to talk to close friends out of 72 who had tried this.

The mother of a newly diagnosed deaf child finding herself in this situation is a prime candidate for the "Named Person" recommended by the Warnock Committee, who would provide sympathy, support and information, locally (Warnock Report, 1978).

D.43 Mother of a profoundly deaf girl aged 3yrs. 8months

"Not enough is done in the beginning. I wish someone had told me in the beginning. Not enough is done in the beginning when you just learn your child is deaf. I think that is a big downfall. I mean you learn as soon as you find out; you start reading books and trying to learn. But that first couple of months when you are getting used to the fact that your child is deaf, and your whole way of life is going to change, and there is no one there, That is a bad point. Or when you are waiting for a verdict, there is no one there, because you have not got a teacher, your family doctor does not know, because it is too specialized. The

specialist is in London."

Professionals

When parents were asked if there were people they would have liked to talk to more, the Ear, Nose and Throat specialists came out top of the list. 11 (10%) of parents said they needed to talk with that professional more. Only three parents said they wanted to talk more to a psychologist. Three parents wanted to talk with Nuffield staff more and these needs are likely to be met as the courses there can be repeated.

Commonsense

When parents were asked about child rearing, they opted for commonsense. 74 (70%) said commonsense was the main element in child rearing. A further 62 (59%) said talking things over with the spouse was important. 51 (48%) said experience with your own child was a good guide to child rearing. 23 (22%) felt it was adequate to treat their own children as the grandparents had, in other words to bring up the deaf child as they themselves were reared. A mere 8 (7%) said they would take family advice in respect of the deaf child, this finding supports the results of Table 86. The child rearing styles of hearing grandparents are not reliable models for parents of deaf children. Direct experience of living with the deaf child, plus commonsense, and a modicum of discussion with ones spouse is the usual choice.

Information

Time is required for parents to get used to being parents of a deaf child and then more time is needed to formulate needs and seek specific help outside the family. In this sample one young couple in a village were

drawn into a support group by a diplomatic post mistress. Another couple on the fringes of the Capital city got so desperate for help they advertised in their local newspaper. Sources of help need to be specialized to be of any use to these parents.

Parents as experts

The concept of parents as experts in their own right has grown over the past twenty years in respect of parents of all kinds of handicapped children (see Care of the Handicapped Child, Apley, 1978). For the "new" parent other parents of children with the same handicap are very much perceived as experts. These parents ranked other parents of deaf children top of the list as experts, together with doctors.

Table 54. Sources of Information for parents

	Number of parents	
	Contact	Helpful
Discussions with experts	88	61 (69%)
Watching a teacher work with the child	82	71 (86%)
Magazine articles	81	44 (54%)
Parents groups	79	61 (77%)
Books on deafness	70	46 (65%)
Visiting deaf schools	63	32 (50%)
Television programmes	62	20 (32%)
Films	50	14 (28%)
Correspondence courses	37	26 (70%)
Newspapers	33	3 (9%)
Radio Programmes	21	1 (4%)

Parents felt that "being prepared" for a deaf child meant getting some

broad band information about handicaps before marriage and certainly before having a baby. Information packs for expectant mothers were suggested by one father,

C.57 Father of a profoundly deaf boy aged 3yrs. 11months

"The professionals can be helpful, but they have a timetable. That is they cannot concentrate on one. I think I would have been a lot happier if I had been given the address of the Royal National Institute for the Deaf, contacts, etc. This would have been part of the package of course; address of social workers etc."

There appears to be an unbridgeable gap between deaf adults and hearing adults who happen to be parents of deaf children.

C.58 Mother of a profoundly deaf boy aged 4yrs. 1month

"A deaf person. The only deaf people we have seen, really are the ones at the deaf centre. But they are all in their late 30's and 40's, they all use sign language, so we cannot compare them, can we? We do not know any deaf adults who have been taught more or less with the methods he has been using, you know and hearing aids and everything."

This passage indicates the difficulties in evaluating educational methods which confront the average parent who is unlikely to be a teacher or educational bureaucrat. Of parents who had contact with deaf persons no one said they would contact them again (see Table 86).

Parents Groups

These groups were mentioned frequently as meeting the needs of parents in so many ways.

D.30 Father of a severely deaf girl aged 4yrs. 2months

"The local branch of the National Deaf Childrens Society, we are.

We went there because the consultant wrote to the chairman, which was there explaining that there was a rather deaf child in the locality. So they, in their turn got in contact with us and invited us to the meetings which I feel has been a great help. Because when you see other people you are not all on your own you know. Your problem changes, you can carry on."

The data suggests that for those new parents who need it the group functions in a therapeutic manner and a source of information. When asked to rank experiences which had helped them, the results were as follows:-

<u>Table 55.</u>	<u>Helpful Experiences.</u>	<u>Number of parents</u>
1.	Watching a teacher of the Deaf working	71 (86%)
2.	Parents Groups	61 (77%)
3.	Correspondence courses	26 (70%)
4.	Discussions with experts	61 (69%)
5.	Books on deafness	46 (65%)

These results suggest that it is the degree of specificity which makes a given experience "helpful" to the parents. All the experiences in Table 55, are specially designed to deal with deafness.

Parents also belonged to parent-teacher organisations and the Break-through Trust. The latter group was started by deaf adults who are parents of deaf and hearing children. They offer friendly contacts between deaf and hearing people in non-threatening ways, i.e. barbeques, hobbies, outings, etc. Nine couples did not belong to any group, Out of the single interviews 11 women belonged to the National Deaf Childrens Society. They met approximately once a month in 11 local branches.

In nine branches they met quarterly. The value of these groups lies in their ability to respond to specific needs of parents. Some were involved in learning sign language, others concentrated on political action and others ran a lecture programme with invited experts.

Some parents felt that the social services departments should provide a comprehensive information pack for parents.

A.20 Father of a severely deaf boy aged 2yrs. 11months

"He was registered as a deaf child and I can see no reason once he is registered as a deaf child, there should not be - they should publish a list of ALL the services for deaf children. All we do is register him and thats all. No one tells you about the Nuffield Centre. No one tells you about the John Tracy Scheme. No one tells you about the attendance allowance, the Rowntree Fund - there's nothing. You are given a Peripatetic teacher for one hour a week and a Medresco hearing aid and thats your lot, Thank you very much! I think it is wrong!"

<u>Table 56 . Satisfactory Services according to parents.</u>	<u>N</u>
1. Teachers of the Deaf	28
2. Crash course for parents	24
3. Ear, Nose and Throat service	8
4. Deaf schools	6
5. Audiology Clinic	5
6. Partially Hearing Unit	4
7. None	4
8. Prompt supply of hearing aids	4
9. Local welfare clinic	3
10. Nursery school	3

<u>Table 56. Satisfactory Services according to parents</u>	<u>N. cont'd.</u>
11. University service	3
12. Correspondence course	2
13. School Taxi	2
14. National Deaf Childrens Society	2
15. General Practitioner satisfactory	2
16. The Rowntree Trust Family Fund	2
17. Speech Therapy good	2
18. The local education authority	1
19. Partial hearing School	1
20. Parent-teacher association	1
21. Operation (adenoids out)	1
22. Private consultant	1
23. Paediatrician	1
24. The welfare service	1
25. Swift Diagnosis	1
26. Prompt entry into school	1
27. Handicapped childrens' playgroup	1

Changes in services for parents

The final stages of the interview were designed to allow parents the chance of modifying or expanding on previous statements concerning services for parents. Table 57 shows their answers to the straight forward question "If you knew as much about deafness in the beginning as you do now, what would you have done differently?"

Table 57. Initial Changes by parents of deaf children No's

1. No changes	31
2. Seen an ear specialist sooner	22
3. Not been fobbed off initially	11
4. Placed hearing aids sooner	10
5. More teaching	6
6. Detected the deafness sooner myself	4
7. Had an abortion	4
8. Done everything quicker	1
9. Done something about that peripatetic teaching	1
10. Not been so depressed	1
11. Would not have got angry/frustrated by it all	1
12. Ceased going to faith healers	1
13. Had child adopted into two parent family	1

Forty eight answers were concerned with "doing things earlier." The current emphasis on hearing aids had led some parents to blame lack of progress on the fact that they had not managed to get the aids on the child early enough.

1c. Mother of a profoundly deaf boy aged 4yrs. 6months

"Tried to get the aid on much younger, really. If I had known all the help existed, I would have phoned and asked for a psychiatric social worker much earlier on".

Others felt they would have used sign language much earlier if they had known about it.

C.16 Mother of a partially deaf boy aged 3yrs. 9months

"Had much more patience, would have learned sign language earlier and

got to know more parents of deaf children earlier."

One father made the point that knowledge about deafness is not the sort of information one gathers at random.

D.30 Father of a severely deaf girl aged 4yrs. 2months

"Well, If we knew as much then as we know now about deafness, when we knew that she was deaf we would have started from day one with the correct method of informing. Because it does not happen to everyone, there are not enough people who understand, who think of it you know. Although the Doctor was very helpful, he did not have a clue, you know. You just cannot answer that really, because nobody wants to know until it happens to them".

<u>Table 58. Additional Changes</u>	<u>Number of parents</u>
Talked to the child more, exposed to language	6
Would have been more tolerant of child	3
Got in touch with another parent	3
Asked for genetic counselling	2
Left out the local welfare clinic	2
Obtained aids earlier	2
Got a teacher of the deaf earlier	2
Made others more aware	1
Been more demanding of aids, spares, etc.	1
Just had one visitor coming to me	1
Made more noises into the hearing aid	1
Played tapes of filtered amplified speech	1
Studied ways of getting attention	1
Spent more time with him as a youngster	1

Table 58. Additional Changes cont'd. Number of parents

Used Cued Speech	1
Would have asked for social worker earlier	1
Would not have forced set teaching daily	1
Used sign language earlier	1

Many of the changes were concerned with treating the child in a more humane manner than they had done previously. When parents were asked about what sort of advice they would pass on to other parents who suspected the child might be deaf the tendency to recommend doing everything earlier came to the fore.

Table 59. Parents recommendations to other parents No's

1. See a specialist quick for a diagnosis	43
2. Do not be fobbed off, get second opinion	14
3. Talk to the child	8
4. Pass along experiences	8
5. Get hearing aids on child, quickly	7
6. Treat them as a normal child	5
7. Do not be depressed (get information)	4
8. Go to assessment centre immediately	4
9. Console them advise on future problems	4
10. Give time to this child	4
11. Make them aware	3
12. Put pressure on	3
13. See G.P. (demand hearing tests)	3
14. Go to the Nuffield Speech and Hearing centre	3
15. Do everything promptly	2

<u>Table 59. Parents recommendations to other parents contd.</u>	<u>No.'s</u>
16. Contact National Deaf Children's Society	2
17. Could not advise	2
18. Leave training to specialist teachers	2
19. Do not panic	2
20. Get teacher	2
21. Find out parents rights, insist on them	2
22. Nursery school	1
23. Go along to test with them if it would help	1
24. Pass along techniques to get child talking	1
25. Medresco aid no good for hard of hearing	1
26. Make noises into the hearing aid in a meaningful way	1
27. How lucky she was (not something worse)	1
28. Refer to welfare visitors	1
29. Ear moulds, not good locally	1
30. Don't knock him about	1
31. Get in touch with local clinic	1

These recommendations reflected the personal experience of each parent, and in some cases represented what they had actually advised another parent. Some parents felt that they had limited ability, and the special education of the child should be left to the teacher. They argued for separation of roles on the grounds that educating a deaf child was too complex to learn quickly.

C.9 Father of a profoundly deaf boy aged 4yrs. 6months

"Do not panic, try nursery school, get a decent hearing aid as soon as possible, treat the child as normally as possible, use interesting

speech as much as you can. Enjoy yourself with the child. Leave training to special teachers. Teaching deaf children is such a complex specialist thing, parents cannot pick it up quickly enough to be of any use."

When parents were asked about unsatisfactory services they had so far, complaints about unsatisfactory earmoulds came to the fore, for the second time in the interview (see Table 60).

One enterprising mother proposed that mothers should be trained to make impressions for earmoulds themselves. This proposal has the advantage that the child would not have to put up with going to hospital and the experience of a stranger pouring a strange mixture into his ears.

C.33 Mother of a profoundly deaf girl aged 3yrs. 4months

"What good is a hearing aid without earmoulds? Even if you get them quickly, say a week, half the time they do not fit anyway, they are a bad fit. There are not enough facilities for you to get earmoulds. You have to travel such a long way. I think they should find a way of teaching mothers to take impressions themselves. It could not be that difficult. I have heard so much about it. The hospitals only take the impressions. They send them away. Why can't we do them? There is only two lots of mixture, a white one and a hardener. That is all there is and mix them together in the palm of their hands."

Apathy, particularly pre-diagnostic apathy on the part of the "authorities" was perceived as very unsatisfactory by parents who contrasted the pre-diagnosis situation with the post diagnosis era.

<u>Table 60. Unsatisfactory Services according to parents</u>	<u>No.'s</u>
1. Poor earmoulds	17
2. Hearing aid maintenance poor	12
3. Delayed diagnosis	12
4. Poor liaison at professional level	10
5. Unsatisfactory local services	10
6. Poor testing, inconclusive results, lack of information	9
7. None (services all satisfactory)	8
8. Unsatisfactory education	6
9. Delayed hearing aids	5
10. National Health Services constant apathy	5
11. Insufficient knowledge at G.P. level	4
12. Delay at every level	4
13. Medresco's poor	4
14. Lack of services	3
15. Conflicting opinions, hospitals and schools	3
16. Professionals uninformative	3
17. Social services unsatisfactory	3
18. Speech therapy not good	3
19. Appointment system	3
20. Parents have to fight for services	3
21. Unprofessional assessment by educationalists	2
22. No causal explanation for deafness	2
23. Lack of clarity re services	2
24. Battle for school transport	2
25. Pre-diagnosis lack of attention	2

Table 60. Unsatisfactory Services according to parents cont'd. No.'s

26. Lack of medical continuity	2
27. Poor medical by D.H.S.S. doctor	2
28. Education slow	2
29. Poor N.H.S. pre-natal care	2
30. Poor N.H.S. post-natal care	2
31. Should have special reading and induction loop	1

A.31 Father of a partially deaf girl aged 2yrs. 5months

"Earlier diagnosis and much earlier hearing aids, sometimes I get quite vicious about the fact that she wasted all that time you know. There is this attitude - oh yes, there might be something wrong, but you cannot do much now anyway. So you might as well wait until you can, this is the attitude. We know this is the attitude because the moment THEY have decided that they are hard of hearing all the stops come out, you know. You know at that moment if you had kicked them hard enough you probably would have got exactly the same service. The really sad thing is that she babbled at the right time, which, presumably, because she could not hear herself, she just stopped babbling you see. All that was just wasted. Until she had the aids she did not babble at all. She sometimes goes about now saying Da.Da.Ba.Ba. you know just babbling, because she can hear herself. And it was almost heartbreaking when she put that aid on. She sat upstairs on the carpet in the bedroom and she just made a sound again and again. And I think that was the first time she had heard anything, heard herself at all because she has a very tiny voice. She had heard us because we have loud voices, but she has a very tiny voice. She did not hear herself at all."

Although she was only partially deaf this girl still was not speaking nine months after she got the aid. The aural approach posits that the deaf child equipped with aids and bathed in verbal language will go through the same stages of speech development as hearing children. This mother had been led to believe this would happen and confessed to being very worried that it had not. Although one can sympathize with the lack of urgency before diagnosis it is very difficult to know how a diagnostic and treatment procedure can function in any other way. Assessment procedures at the local clinic were the alternative and these were viewed as dilatory by many parents. Others found the whole process unprofessional also.

C.24 Father of a profoundly deaf boy aged 3yrs. 7months

"Unprofessional assessment by education on future, the medical officer of health on educational assessment meetings. There were several of the team wandering in and out, personal questions asked in front of other parents, who are waiting to go in. Feelings against normal schools for deaf children. The fault is yours."

One response of local assessment teams to special educational needs is the provision of all-handicap nurseries. Deaf children are also sent to this facility, but parents were not very satisfied by this. They argued that deaf children are not mentally retarded but they imitate the bizarre and unintelligent behaviour of the mentally retarded within the same programme.

C.33 Father of a profoundly deaf girl aged 3yrs. 4months

"They pick up so many bad habits, the deaf from the mentally retarded children. A deaf child is perfectly normal apart from the fact that he

cannot hear - no communication. Physically and mentally handicapped are not a good situation to put deaf children in, because they can pick up too many bad habits. I mean even at the assessment centre, where they have mentally retarded children."

The peripatetic service was rated as satisfactory by only 28 (26%) out of 105 parents. 24 (23%) rated crash courses away from home as being satisfactory. The remaining figures are scattered over a wide range of services, some of which are only remotely related to education of deaf children such as school transport; where parents have no car this is essential as special schools for the deaf are likely to be in the nearest large town.

Table 61. Satisfactory services according to parents

	<u>Numbers of parents</u>
1. Teachers of the deaf	28
2. Educational crash courses for parents	24
3. Ear, Nose and Throat surgeon	8
4. Deaf School	6
5. Audiology Clinic	5
6. Partially hearing unit	4
7. None	4
8. Prompt aids	4
9. Local Clinics	3
10. Nursery School	3
11. University service	2
12. Correspondence course	2
13. School Taxi	2

Table 61. Satisfactory services according to parents cont'd.

	<u>Numbers of parents</u>
14. National Deaf Childrens Society	2
15. General Practitioner satisfactory	2
16. Family fund (Rowntree Fund)	2
17. Speech therapy good	2
18. Local Education Authority	1
19. Partial Hearing Boarding school	1
20. Parent teacher association	1
21. Adenoids out	1
22. Private consultation	1
23. Paediatric consultation	1
24. Welfare service	1
25. Swift diagnosis	1
26. Prompt entry into school	1
27. Handicapped childrens group	1

Table 61 reflects the parents' needs for any sort of educational guidance they can get in order to cope adequately with life with a deaf child, before he or she goes off to school.

Parents' Needs

When the parents were asked to make final statements about their present needs, two sorts of adult needs emerged. One group can be described broadly as a need for adult education and the other as a need for relief from the child.

Table 62: Adult Needs

<u>1. Educational Needs</u>	<u>Number of parents</u>
Education for self	10
Educational prognosis	7
A good peripatetic teacher	5
More ideas on teaching	4
More crash courses for parents	3
Greater involvement from the schoolteachers	5
Help with Cued Speech	2
Help with sign language	1
More expert teaching assistance	1
<u>2. Relief/Support for parents</u>	
Relief from household chores	4
More support	4
A regular listener	3
Help in coping	3
More time needed	3
Meeting parents of boarding school pupils	2
Relief from the child	1
Variety of adults	1
Meeting other parents who are housebound	1
<u>3. Medical Needs</u>	
An independent opinion needed	2
More information about the hearing loss	3
More help with poor sleeping patterns	1
None	11
Do not know	3
Rehousing	3
Financial needs (for loop system)	8

Mothers felt more time educating the father would bring a lot of relief for mothers, some fathers voiced this view also.

A.20 Father of a severely deaf boy aged 2yrs. 11months

"Education - needed more. More time than the other children. The burden falls on the mother, the father needs time. If the services could give more time it would ease the burden on the mother. More of a one to one relationship from a professional educator."

For those families that had had a poor peripatetic teacher the crash courses at the Nuffield centre were the only alternative adult education course.

D.19 Father of a profoundly deaf boy aged 3yrs. 1month

"If you have had a bad peripatetic teacher you are rather stuck. The Ealing course told you exactly what to do, very constructive, to do and follow up, plus talking to other parents with the same problems. Need More."

Some parents who had put a lot of effort into the oral way of living confessed to a need for moral support.

D.16. Mother of a profoundly deaf boy aged 4yrs. 5months

"Moral support not to give up before he talks. That really is true. Because I think after 3 years it is quite difficult. Because I think we are doing the right thing, but it is very difficult. It is human nature I suppose. It is very difficult to keep on doing the right thing when you are not getting the response you want most of all. I know that his understanding has developed, but he is still not talking and yet we must keep on doing it (talking) and I need someone constantly to hand, to say it is alright, carry on; I know there is nothing to be gained by giving

up and everything to be gained by carrying on."

Childrens' Needs

Table 63. Childrens' Needs

<u>1. Educational</u>	<u>Number of parents</u>
Correct schooling	11
School placement	8
Boarding School place	2
Direct Education for the child	2
Speech therapy	1
<u>2. Equipment</u>	
"Phonic Ear" (radio aid) for child	9
Improved earmoulds	4
Technical equipment (unspecified)	2
Faster hearing aid service	1
Headphones so I can teach him myself	1
Books and toys	1
<u>3. Medical</u>	
Audiogram	2
Surgery on ears	1

The parents' perception of the childrens' needs indicates the felt need for special educational treatment first and secondly, the need for better hardware in the form of good amplifying equipment. This may reflect the emphasis on amplification by the teachers or the parents' own faith in hardware technology. Medical needs were a minute part of the childrens' needs at this stage.

When parents were asked "Are there some things which are definitely not helpful to parents of deaf children?" there was a wide range of responses.

Table 64. Unhelpful responses to parents' of deaf children

1. Ignorance of G.P.'s, the public and professionals	26
2. Insensitivity	10
3. Sentimentality	4
4. Delays of all kinds	4
5. Overcompensation	3
6. False Hopes	3
7. Condescension	3
8. Conflicting opinions/arguments	3
9. Parents struggles, legal, educational	2
10. National Deaf Childrens Society "Do gooders"	2
11. Lack of organization/liaison between services	2
12. Minority successes overgeneralized	2
13. Ignoring the deaf child	2
14. Mixing up deaf and non-deaf handicapped	2
15. Underestimating deafness	2
16. Constant pressure on the mother	2
17. Reticence with information	2
18. Poor hearing aid maintenance	2
19. Lack of TV coverage for deaf children	2
20. Putting down parents	1
21. Comparisons (hurtful)	1
22. Lack of electrocochleography	1
23. Insensitive relatives	1
24. Being told you are neurotic	1
25. Blanket prognosis	1
26. Sorry for you	1
27. Cruelty of other children	1
28. Specialist Apathy	1

The parents were highly sensitive towards other people's ignorance about deafness: it appeared to be almost the obverse of their own hunger for education.

D.37 Mother of a severely deaf boy aged 4yrs. 3months

"One thing I realized when I took out my two year old deaf child was the lack of public knowledge. There are so many people who think a deaf child must be dumb. There are many who have never seen a child with a hearing aid before. There are too many who are afraid to be attentive to the child because what is the use he cannot hear. On the whole the public have been so kind to my deaf child, but there are many others who do not know. Before I knew he was deaf I was one of those people."

The invisibility of deafness lends itself readily to common misunderstanding and parents are exposed needlessly to widespread misconceptions. In addition there is a tradition amongst parents that "the system" will not yield up what it is supposed to, without great effort by the parents. One couple who had been led to expect nothing from the Health, Education and Welfare services without a fight were pleased with all the services.

D.22 Father of a borderline deaf girl aged 3yrs. 2months

"Well compared with what we were told, we seem to have done quite well ourselves: we was told speech trainers would be hard to get, teachers of the deaf and getting into schools and that. Most of that come without any trouble at all really, so we were more pleased. We were more sort of prepared for the fight and it never came."

Margaret Brock herself the mature mother of a deaf and blind son, also commented on this tradition amongst the parents of handicapped children she sees now (Brock, 1976). She suggests that from the beginning

parents are tense and very anxious and always in the wrong mood to take in advice. All the evidence of this study points to the need for sensitive handling around the time of diagnosis and for the need for continuity of staff so that parents have a chance to build up trust in one identifiable person.

Table 65. Helpful Experiences for parents

	<u>Number of parents</u>
1. National Deaf Childrens Society	12
2. Listeners/confidants	10
3. Other parents (problem sharing)	9
4. Relief from the child	8
5. Common problems	6
6. Peripatetic Teacher	6
7. Teachers of the deaf at school	5
8. A caring physician	5
9. Baby sitters	4
10. Understanding of child's problems	4
11. More information helpful	4
12. Ealing Hostel Crash course	4
13. Visiting schools/partially hearing units, etc.	4
14. Parents who treat the child normally	3
15. Acceptance of profoundly deaf child in other homes	3
16. Support	3
17. Commercial hearing aids	2
18. Educational side	2
19. Documentaries, case histories	2
20. Specialized periodical "Talk"	2

Table 65. Helpful Experiences for parents cont'd.

	<u>Number of parents</u>
21. Specialist group (problem centred)	2
22. Books for information	2
23. Correspondence Course	1
24. Sign Language for child	1
25. Specialist help	1
26. Individual discussions on your own child	1
27. To sit in on a teacher and a child	1
28. Support from the family	1
29. Rowntree Trust Allowance	1
30. Attendance allowance	1
31. Speech Trainer	1
32. Earphones and TV	1
33. Induction Loops in public places	1

The first five experiences judged as helpful are all concerned with the need to share common problems, mutual support and peer group exchange of ideas. The second group are concerned with the personal impact of other adults on the situation. The third five are all concerned with situational resources for parents. The data suggests that parents have a primacy of needs which have to be met before they can cope with the child's needs. The data suggests that community resources need to be mobilized in three stages corresponding first to the parents' need to break down emotionally, secondly to the child's needs to be taken care of medically and educationally and thirdly the provision of adult type learning experiences which meet the parents needs to take up an active role in the child's management. The data suggests that short crash

courses for parents, in vivo or by correspondence meet that need: films, relevant discussions, are all suitable vehicles for parent guidance in their own right. Direct teaching for the children needs to be treated as a need in it/s own right.

When asked if they had had too much or too little advice from the system many said they had had too little.

Table 66. Advice to parents

	<u>Number of parents</u>
1. Had too little	67 (64%)
2. Enough	14 (13%)
3. Had too much advice	7 (6%)
4. No comment	13 (12%)
5. Cannot have too much advice	4 (4%)

"Can you think of any way to improve this piece of research" was the final question, 76 parents made no comment at all, 10 said "No"! the subject was fully covered and 12 said "Yes"!

Table 67. Parents' views about research

1. Obtain responses from the teachers for comparison	2
2. Investigate psychological effects on parents	2
3. Get more people to join in	1
4. Get a number of parents together sometime	1
5. Include investigations of social/sleep problems of deaf children	1
6. Try out a questionnaire on people who do not come into contact with deaf persons for comparison	1
7. Provide space (more Space) for comments throughout	1

Table 67. Parents' views about research cont'd.

8. Perhaps if we had had the questionnaire earlier we might have thought of "Better" answers	1
9. A discussion of the statistical aspects of the study	1
10. Improve question 85	1

Seven comments related to publishing the results, the writer was advised to:-

a. Publish in the right quarters	(4)
b. Make written reports	(1)
c. Publicise the need for discussion groups beamed at parents	(1)
d. Treat all assertions of excellence on the part of the authorities with the utmost scepticism	(1)

The suggested research topics show where the parents' interests lie and something of the disillusioned flavour of their outlook. The emphasis on publication shows a belief in any publicity being better than none as far as deaf children are concerned. The final comments reflect a need to get and give information about deafness. Some comments showed the parents' sensitivity to how they are perceived during the period of adjustment to their child's handicap.

1. "All doctors, specialists included seem to think that parents are not able to cope psychologically. Complaints against inefficiency, incorrect diagnosis and malpractice are simply dismissed as coming from an upset parent unable to handle the emotionally difficult period of diagnosis."

2. "Most "experts" only know deafness and its problems as associated with old folk."

3. "Set up an ombudsman with teeth to act against not only the administration of the national health service but the diagnostic and treatment aspects as well."
4. "Give relevant societies, i.e. National Deaf Childrens Society the right in law to be consulted when provisions, planning of facilities etc. is being considered by local authorities."

<u>Financial Aspects of Research</u>	<u>Number of parents</u>
More money for research re. causes of deafness	3
More investment in area of ear transplants	1
More cash for speech trainers and modern aids	2
Shortage of equipment to loan (needs more cash)	2
Reembursement schemes needed for parents to install aids	1

One couple commented on the high cost of toys purchased to fulfil teaching obligations. This appears to be a reflection of the emphasis on play in the language teaching by the peripatetic service.

Applied Research

For these parents the medical model of research was inherent in their comments about what they wanted for cash investment; they were seeking small group therapy for parents of deaf children only: better demonstration teaching for fathers particularly. (This relieves the situation of the wife nagging the husband). Of course all parents were interested in cures for the condition.

Two parents suggested sociological research about the stigmatizing effects of deafness on the family.

Information

Two parents suggested that all pre-natal courses should have some information about deafness in it. Others asked about written reports from this study.

Lack of Educational Services

Comments about education covered lack of travelling teachers: school was too far away which meant the child was "living in the taxi": the quality of the schools was poor: the doubtful quality of all-handicap playgroup: need for daily tuition for deaf child: need for more day schools for deaf children: need for more qualified teachers of the deaf working with deaf children only.

Diagnosis

Some parents whose children were at risk from birth expressed the following views:-

1. All babies in intensive care should have hearing tests after such care, or near the end of it.
2. Diagnostic testing should be done on a baby following a difficult birth.
3. There is a case to be made for independent opinion/assessment of child's amplification equipment.
4. More local facilities needed for maintenance of all equipment.

Conflicts

Parents were disturbed by obvious conflict between professionals or between various branches of the professions and the National Deaf Children's Society. Some parents expressed the view that if "they" have

differences that parents should not be involved: that antipathy between parents' groups and teachers was "wrong": that necessary relief from the child should not be interpreted as parental rejection of the child: daily relief from the child was necessary. There was some dissatisfaction with nylon holders for National Health Service aids.

The parents' main worries are about education at this stage. They created the impression during these interviews of a tremendous urge to inform and educate the whole world about deafness. Hence the emphasis on the importance of publishing results.

SUMMARY

1. Gradations of help and information are detectable by parents of deaf children.
2. Education was perceived as the primary requirement in the case of irreversible deafness.
3. Absence of family knowledge about deafness curtails hearing grandparents ability to give support advice or personal assistance with the deaf child.
4. Parents become "experts" on the basis of living with the child, plus accumulation of general knowledge about the handicap.
5. Demonstration teaching of the children ranked as a valuable form of adult education at the same time as giving a direct education to the child.
6. The data suggests that services and support for parents are at their best if they are tailored to deafness, rather than handicap in general.
7. The range of suggested research topics offered by parents show large support for curative medical research although their main concern involved lack of education of one kind or another.

Chapter 12

A SPECIAL CASE: DEAF PARENTS OF DEAF CHILDREN

Halfway through 1975 it became clear that there were no deaf adults in the sample. Special efforts to contact deaf parents resulted in a "snowball" method of sampling; they were all friends of the initial contact. The subsample consisted of 9 couples having a total of 17 children between them, 12 (66%) of whom were deaf. Only two of these were of preschool age at the time of interview. All but one couple were biological parents.

<u>Table 69.</u>	<u>Deaf Parents Ages</u>	<u>Mothers</u>	<u>Fathers</u>
	25 - under 30 years	1	0
	30 - under 35 years	1	2
	35 - under 40 years	2	2
	40 - under 45 years	3	2
	45 - under 50 years	1	1
	50 - under 55 years	0	0
	55 years plus	1	1
	Unknown	0	1
		9	9

As these were parents of older children not surprisingly they were older than the parents in the main sample; 22% were under 30 (in the main sample, 35% were under 30).

Table 69. Social Classification of Deaf Families

Class 1	(Professional)	1
Class 11	(Intermediate Occupation)	3

Table 69. Social Classification of Deaf Families cont'd.

Class 111 (N) (Non-manual, skilled occupations)	2
Class 111 (M) (Manual, skilled occupations)	3

Social class for the deaf families was determined by the Registrar General's Classification of Occupations 1970. Although some of the oral deaf mothers had been educated privately they were all in unskilled occupations such as shirt folding, laundry processing, and pattern cutting except two women. One was a comptometer operator, the other a wages supervisor.

Table 70. Family size deaf parents of deaf children

	<u>Number of families</u>	<u>Number of children</u>
Singletons	2	2
Two children	6	12
Three children	1	3
	9	17

There were seven deaf boys and five deaf girls whose parents were interviewed. This left five girls (three deaf, two hearing) who were not involved, as subjects of interviews.

Table 71. Distribution of children by age

	<u>Numbers</u>
0 - under 5 years	2
5 - under 8 years	5
11 - under 13 years	1
13 - under 15 years	3
15 years plus	1
Total	12

Out of 18 parents only one man was wearing an ear level aid at the time of interview. He confessed to great communication difficulties when he attempted to follow an evening class in car maintenance. Eventually an interpreter was provided. The remaining seventeen all claimed to have binaural deafness which were severe enough to preclude any benefit from hearing aids. One man was known to be deaf from meningitis in his early school days. One woman who could read three European languages did have an ear level aid, but it was unclear how much she wore it. Her spoken English was unintelligible .

Six children were described as profoundly deaf and six as partially deaf, one teenage boy had hearing across the speech range: his speech sounded absolutely natural.

When they were asked if they had expected the baby to be deaf 14 out of 18 deaf adults said "Yes". Two parents said the question did not apply as they knew about deafness; they already had older deaf children. One couple only said they did not expect deafness.

Table 72. Reasons for deafness in nine deaf families

	<u>Number of parents</u>
Hereditary	9 (50%)
Rubella	3 (17%)
No particular reason	5 (28%)
Adenoids	1 (5%)
<hr/>	
Total	18

Deafness simply held no mysteries for these parents. One man signed and spoke his family tree for three generations back and they were all deaf.

Table 73. Detectors of infantile deafness in deaf families

Deaf Mothers	7
Deaf fathers	1
Both Spouses	6
Routine Testing	2
Grandfathers	2
<hr/>	
Number of parents	= 18
<hr/>	

The reasons for suspecting deafness are shown in table 11(s) they are remarkably similar to those amongst hearing families.

Table 74. Reasons for suspecting hearing loss in deaf families

	<u>Number of parents</u>
1. Lack of response to general domestic sounds	5
2. No comments	3
3. Delayed speech, child not communicating	2
4. No response to speech	3
5. Husband and wife suspected together	2
6. Both knew from beginning	2
7. German Measles	1
<hr/>	
	18

One deaf mother who had an older hearing child used her experience of the first baby as a guide,

E.13 Mother of a partially deaf boy aged 13 years

"The baby looked bright, but did not communicate very much, played on his own. Was not as sharp as his sister in responding to sound."

This extract dispels once and for all the notion that deaf adults have no concept of hearing. In the case of this couple they had been able to discriminate subtleties between their hearing infant and the deaf infant. The father added the following comment,

E.14 Father of a partially deaf boy aged 13 years

"Had a precautionary hearing test at 6 months old and repeated at six month intervals. The baby was too young to be sure. We were constantly on the lookout."

This boy was not diagnosed officially until he was four and a half years old. His father said "It confirmed our suspicions. He hardly communicated and was very withdrawn. The doctor said, we are sorry to tell you that he has a hearing loss, but not much: The doctor was obviously embarrassed by his boob!"

<u>Table 75. Age at which deaf parents suspected deafness.</u>	<u>N</u>
0 under 3 months	6
3 under 6 months	3
6 under 9 months	1
9 under 12 months	2
12 under 15 months	1
24 under 27 months	5

18

N.B. The first six parents included two mothers who suspected the infant was deaf while they were in the maternity ward and one mother who suspected when the baby was a week old. One mother described the situation on the ward that aroused her suspicion.

E.15 Mother of a profoundly deaf girl aged 17.10 months

"She did not cry or make faces when the nurse rattled her trolley in the ward."

When these parents were asked if the spouse was worried about the deafness, the majority (12) said "No". Four fathers said the wife had been worried. Only one wife reported that the husband was as worried as she was. In one case where the husband was unaware of the wife's concern, it was the grandparents who suspected deafness.

Six couples talked about their "suspicions" immediately to professionals outside the family. Three children were taken to the clinic doctor, two to the family doctor and one to the audiologist. Only one went directly to a consultant. The remaining two were seen by health visitors. In one family a big family pow-wow seems to have taken place.

Table 76. First persons to test the child's hearing

	<u>Number of children</u>
1. The family doctor	2
2. The health visitor	1
3. The welfare clinic doctor	3
4. Ear, Nose and Throat specialist	1
5. Audiologist	1
6. The school doctor	1
<hr/>	
	9
<hr/>	

One child had a hearing test under one month old. Two were tested under 6 months old: a further three were tested between 9 and 12 months of age.

The remaining three were all over one year old.

When asked if they were satisfied with the first test, six women and six men said they were satisfied. Of three other couples two mothers were not happy about the first test. This was due to the professionals pronouncing the baby as "too young for testing" one father quoted the same reason for his dissatisfaction. The remaining parents were not surprised by the results of this first test.

Table 77. Results of the first test

	<u>Number of Mothers</u>	<u>Number of Fathers</u>
No Comment	1	0
Not present	0	1
Diagnosed deafness	4	2
Too young to test	1	1
All systems go	1	1
Not applicable (knew already)	2	4
	9	9

Following this test 6 couples said that they "did nothing", "did not mind", "came home, took it for granted". It is clear from these interviews that there was no trauma for these parents. In the case of one child who was described as withdrawn his parents sent him to a nursery school "continuously". The mother who felt the baby was deaf on the ward, said that she and her husband simply waited for the next series of tests. As in the main sample it was the ear, nose and throat specialists who confirmed deafness in the majority of cases.

Table 78: Diagnosis of deafness by professionals

	<u>Number of parents</u>
1. Family doctor	1
2. Welfare Clinic	4
3. Ear, Nose and Throat Specialist	7
4. School Doctor	2
5. Audiologist	1
6. Do not know	3
<hr/>	
Total	18
<hr/>	

Age of children at diagnosis

Unlike the main sample, the deaf parents were not particularly anxious about the diagnosis. The writer (who was the interviewer) had the impression that the exact dates of diagnosis were simply not that important to these deaf parents. Two children were reported as diagnosed deaf between the ages of 6 and 12 months old. Five were between 2 and 3 years old. The remaining two were said to be over three years old before deafness was confirmed by a professional. Six parents recalled the doctor's comments about fitting the child with an aid. Eight deaf parents said they were satisfied with the conclusive testing. One mother who was not too happy with this diagnostic test said this was because she already knew the answer. (This was the same mother who suspected in the ward).

Hearing aids were issued in the same pattern as the main sample; eight children had two aids and one child had one.

Table 79. Age of children at first hearing aid

	<u>Number of children</u>
6 - under 12 months	1
12 - under 18 months	3
18 - under 24 months	1
24 - under 36 months	2
Aged 3 years and over	2
<hr/>	
	9

Eight of the children had also been issued with a second set of aids. Two of the children got more powerful aids and two got more suitable aids, the parents could not specify what made the aids more "suitable".

One child was three years old when the second aid was fitted, four children were four years old, one was six, one was nine and one twelve. Only three children were still on Medresco's. 12 (66%) parents stated they had no trouble getting the children to wear the aids. Five had had difficulties and they felt that the children simply did not like the aid. Only one man commented on the poor fit of the earmould.

Amplification equipment

Speech trainers. Only one of these deaf families had a speech trainer at home. One had a loop system at home. One couple reported Hi-Fi headphones at home. Six of the children were reported as wearing the hearing aids at school only. These deaf parents perceived this as one of the accepted aspects of school. One child was described as wearing his aid only when he was with hearing people. There was some disagreement

amongst men and women with some fathers insisting that the child wore the aids all the time and mothers insisting that the child only wore the aids at school.

A father of one partially deaf boy reported that the loop system was useful. One child out of nine was reported as enjoying the headphones of the speechtrainer. Six parents claimed that the child heard household noises through their individual aids. Three were said to respond to voices. The parents had difficulty in answering exactly what the children heard through aids: many of them used their own inability to follow speech on television, as an example of the kind of limitation imposed by deafness. There was unanimous agreement that anyone who can hear even a little was a very valuable person in the household. The writer could not avoid noticing that television ran silently in most of these deaf households, even though six children were reported as partially deaf.

Table 80. Specialist opinion about the child's hearing

	<u>Number of children</u>
No change	5
She can hear something	1
A slight improvement	1
Does not hear anything	1
Pleased, very good speech	1
<hr/>	
	9

Some parents were not happy about the specialists' opinion.

E.2 Mother of a profoundly deaf girl aged 6.6 months (first child)

"She can hear something (according to the specialist). It seems to be his policy to say such things, like that, whereas I believe she is deaf."

The criteria this mother was using was that of useful hearing for speech and this appeared to be the criteria for the "born deaf". Eight deaf couples were unable to decide about consultant opinion. Eight agreed with the consultant.

E.9 Father of a profoundly deaf boy aged 3yrs. 3months

"They never mention how he has made progress with his hearing or how he can hear."

This may be due to the communication difficulties faced by doctors when they are dealing with deaf adults in the clinical situation. It is possible that if the doctor had some training in lip speaking or some competence in sign language, deaf adults would get more details of the condition of the children. The parents themselves, in spite of their astute observations when the child is young, have a difficult time tracking a response to its origin in the case of an older active youngster. When they were asked about recommending the specialist to other parents 5 women and 4 men said "Yes".

Preschool Training

One child was reported as having poor eyesight and was selected for a series of eye tests. One child was felt to be slow learning by his parents and one was reported as being shy of the phone! Seven children were at schools for the deaf, one was at a partially hearing unit.

The oldest girl was due to start at college shortly. Five children had had teaching at home from the peripatetic service. It is evident that some of these families had been brought to the attention of education service early on, as three children had 12-15 months teaching. Two others had had over two years service before going to school. Four children were visited once a week, three others were seen at various intervals. "Others arrangements" in one case included once a week at home, plus once a week at school. Two others were not seen at home at all!

Question 52. "Do you feel that children with hearing difficulties need specially trained teachers of the deaf to teach them?" Six mothers and 5 fathers said "Yes", two couples said "No". One very perceptive, profoundly deaf father (E4) said "I think I could teach him better myself" later he added "my wife (is) the best teacher".

The mother of the partially deaf boy felt very differently however,

E.13 Mother of a partially deaf boy aged 13 years

"Yes, in schools the teacher knows how to handle them and communicate with them properly and encourage them."

Table 81. Effects of home teaching on deaf children of deaf parents

	<u>Number of children</u>
Slow progress	1
Some learning	2
Rapid Progress	4
Too young	1
<hr/>	
	8

One child had no home service. Some of these deaf parents said that the peripatetic service had nothing to offer.

E.17 Mother of a profoundly deaf boy aged 8yrs. 7months

"Nothing to offer which we did not know already because of our experience apart from information on services."

Those parents who were keen on good speech felt that the service had not given sufficient attention to speech development.

E.15 Mother of a profoundly deaf girl aged 17yrs. 10months

"It was a waste of time for words but a great help with hearing."

It is difficult to assess this judgement as the child was said to be profoundly deaf. Direct observation showed that both parents could talk fluently and they placed a high priority on speaking well (i.e. so that hearing people could understand them).

When questioned about specific educational help, the deaf parents had their own experience of being deaf pupils to help them assess modern methods of preschool training.

Table 82. Educational help for deaf parents

	<u>Number of parents</u>
To take care of hearing aids	9
To play educational games with the child	8
To use books with the child	6
How to talk to the child	4
How to develop the ideas behind words	3
How to use a proper sign language	0
How to use finger spelling	0

E.1. A father (like many of the hearing fathers) confessed to relying on his wife "nothing from the teacher. I relied on my wife" he said.

E.2 Mother of a profoundly deaf boy aged 4yrs. 6months (second child)

"Many of these (table 82) did not apply to me as I was aware of these problems. She had checked only two items, taking care of aids and how to play educational games with the child.

E.9 Father of two deaf boys, when he came to sign language said "it depends on themselves".

E.14 Father of a partially deaf boy aged 13 years

"Possibly if parents were hearing the teacher might have told us something, on the other hand, the teacher who visited the nursery never met the parents."

In this case all the peripatetic contact was accomplished at the nursery school, without the parents being involved in any way. Ten parents reported that they never met the teacher of the deaf. Three said they rarely met them. When asked if they wanted more contact 12 said "No". Only four of these deaf parents felt the need of more time with the teacher.

When asked about what they needed from the peripatetic service six said "Yes" to support and six said "No". Five said "Yes" to information and 6 said "No". Three wanted more child teaching, six said "No". Six said "Yes" to more direct teaching, six said "No". The three couples who said "No" said no to everything. This suggests that a polarising factor is at work as with the hearing parents, but no statistical comparisons can be done in view of such small numbers and the age range of the children. What can be said is that deaf parents do not automatically reject

the peripatetic service. Five out of 18 parents said they would have liked more home visits. These parents reported that the teachers had some very positive things to say about the children. Like the reports of the larger sample the teachers comments were of a global, encouraging nature. Nine parents had positive reports relating to the child's intelligence, three had negative reports. 50% of parents agreed with these positive reports.

The deaf fathers were in the same position as the hearing fathers, i.e. out at work when the home teaching was carried out. Six men said they could not judge the teaching. Six mothers said they would recommend the teacher to other couples. When the question of working with the child came up for discussion the answers of the deaf parents showed they had very few difficulties.

Table 83. Difficulties for deaf parents working with deaf children

	<u>Number of parents</u>
Holding the child's attention	1
Not enough teaching materials	2
Communication problems	1
Child won't co-operate	2
Lack of time	1
Demands of other children	1
Other problems	3

The "other problems" concerned lack of playmates for the deaf child.

The remarks made by these parents were brief and to the point on the issue of working with the child. (E.2) "None whatsoever" (no problems)

(E.3) father "no problems with the child". (E.7) mother "Very easy girl to work with". The writer formed the view that one advantage which deaf parents have in contrast to hearing parents is that they are able to deal with child rearing issues directly, i.e. uncomplicated by poor communication. Lack of shared communication is not one of the problems in these deaf families. However, speech attainment proved to be a prominent issue; good speech in the child is a source of great pride for deaf parents.

E.18 Father of a profoundly deaf boy aged 7yrs. 8months

"He talks incessantly but his speech is not usually understood by strangers because he cannot yet utter sounds clearly. We lipread him ourselves. His grandmother and some playmates understand his speech because they are used to it."

Table 84. Speech development in deaf children of deaf parents

	<u>Number of children</u>
No speech	0
A few words	3
Puts words together	2
Muddled speech	1
Uses voice only	3
Silent words	1
Speaks words clearly	1
Natural speech	3

One profoundly deaf man felt he could not assess his 7 year old son's speech, (E.3). "I am deaf, do not know about his speech or voice too well".

On the issue of speech teaching the non-interventionist bias of the peripatetic service came in for criticism.

One deaf mother with intelligible speech and good lipreading ability felt that this policy left much to be desired.

E.17 Mother of a profoundly deaf boy aged 7yrs. 8months

"We would have liked more help with his speech in preschool days. The teacher did not actually give any speech training and we understood her to mean such speech training is not appropriate so early in life. If that is correct, we will accept it, but we feel it is a pity his speech was so far behind his intellectual and language development, e.g. At three years of age he understood and said at least 350 words (by signs and lipmovements) but could not articulate the words."

The father of this boy mentioned this same point in his discussion of unsatisfactory services. Direct observation by the writer showed that signing, plus lip movements were common in the deaf families.

The three children described as having natural speech were heard to talk fluently. The writer had a number of opportunities to observe "code-switching" in action. This is a linguistic process by which individuals alternate between English syntax and sign language syntax; it is a sort of bilingualism. The writer observed deaf and hearing siblings in the same family, changing from the normal order of English syntax, to the order of sign language and back again. This usually happened when several people, deaf and hearing were participating in the same conversation. The children appear to have developed a facility

to make rapid judgements of the linguistic status of the person with whom they intend to communicate, and adjust their language accordingly. There appeared to be no conflict between spoken language and sign language as far as these children were concerned. Previous studies of code-switching in the adult form show that it takes place easily and without self consciousness (see Schlesinger and Meadow, 1972). Studies of the early stages of development of this type of bilingualism would help settle issues of educational method in preschool language teaching. The children were "lipreadable" by their parents, also. The adult's skill in lipreading plus the code-switching provided wider communication channels than in the hearing families, and probably eases the socialization of the deaf infants. Eight couples reported that they did not get irritated when the youngster did not understand them. When the child did not understand, the parents took up a positive stance (E.2) father "I make him understand". Fifteen parents said they never gave up in the matter of getting the message across. These deaf adults have daily practice in communicating with hearing people as most of them work with hearing people; it is likely this leads to a well developed repertoire of skills to make themselves understood. Total communication (including signs, speech reading, writing, finger spelling, drawings) was used throughout the interviews.

It seemed to the writer that these parents had a very straightforward approach to child rearing, unencumbered by the constant communication breakdowns which ensnare hearing parents. The writer observed deaf parents going up and down stairs constantly to check on sleeping children.

Although this is a fatiguing business the deaf parents insisted it was the only way to ensure the child's welfare. One man felt his son constantly tested him "because I am his father". The father (E.6) was ready for this and held his ground through the negotiation of a compromise. This man had no complaints about communication difficulties.

Table 85. Parent-child communication in deaf families

	<u>Number of parents</u>
Sign language	13
Simple sentences	12
Pointing	12
By speaking slowly	11
Showing things to the child	10
Miming	9
By looking at things	9
Finger spelling	8
Natural gestures	8
Writing	7
Situational clues	7
Repetition	6
Moving the whole child about	4
Shouting	0

In the case of one boy who was partially deaf, both parents (E.11, E12) said that the list did not apply. However, as the interview wore on the writer noticed that this boy was bilingual in sign and speech.

In the case of a couple both of whom had exposed the child to speech

and signs the mother said,

E.17 Mother of a profoundly deaf boy aged 7yrs. 8months

"Always with speech, not so much signing now, because he lipreads well."

When they were required to select the easiest ways to make their child understand them, sign language, speaking slowly and natural gestures came top of the list. The results in Table 86 show that the symbolic communication modes are rated higher than the non symbolic modes, with sign language taking precedence as in the main sample. One couple claimed to rely on speech only; their son was the partially deaf boy who had fluent speech. Nine claimed to use a single mode and two said they used bimodal (speech and sign) communication.

Table 86. Easiest modes of communication parents-children

	<u>Number of parents</u>
Sign language	10
By speaking slowly	5
Natural gestures	5
Pointing	4
Simple sentences	2
By finger spelling	2
Miming	2
Writing	1
By shouting	0
Repetition	0
By drawings	0
By moving the whole child about	0
By looking at things	0
By showing things to the child	0
Situational clues	0

One couple who claimed to use five modes of communication were the parents of younger children.

Deaf parents like hearing parents said they judged understanding by behaviour. The exception to this was where older children were able to talk back to their parents. Six parents using the behavioural criteria said that the child understood strangers, a further six felt that their child could not understand strangers.

Expressive communication

When child-parent communication was ranked mode by mode, sign language, speaking slowly and natural gestures were the top three most frequently used modes. The communication patterns of the children appear to be a direct reflection of those used by parents.

Table 87. Child-parent communication in deaf families

	<u>Number of parents</u>
Sign language	13
Speaking slowly	13
Natural gestures	11
Pointing	8
Showing you things	8
Simple sentences	8
Finger spelling	7
Moving, tapping, pulling the adult	5
Repetition	4
Writing	3
Looking at things	3

Table 87. Child-parent communication in deaf families cont'd.

	<u>Number of parents</u>
By drawings	1
Miming	1
Situational clues	1
Shouting	0

Clues to the development of sign language were found in the incidental comments of parents.

E.2 Mother of a profoundly deaf girl aged 6yrs. 11months

Does the child do any of the following to get the message across to you?

(Q 73) "Yes! by sign language, her own!"

The deaf child's inventiveness as regards esoteric sign language appears to flourish independently of the hearing status of their parents. These children used speech and signs in parallel as described by Schlesinger and Meadow in their book "Sound and Sign".

The speech of the children with residual hearing does not appear to have been retarded by learning sign language. This applies equally to their hearing siblings. Parents judged these children to be very persistent in expressing their intentions. Fourteen said that their children never gave up. The easiest mode of communication from child to parent was sign language.

Table 88. Easiest modes of communication child-parents

	<u>Number of parents</u>
Sign language	8
Natural gestures	7
Speaking slowly	5

Table 88. Easiest modes of communication child-parent cont'd.

	<u>Number of parents</u>
Showing you things	4
Pointing	2
Writing	1

Six children were described as using one mode, three were bimodal and one child used three modes. Communication with strangers improved with age with seven parents saying their child was understood frequently by strangers. Within the family current communication patterns resolved themselves around speech and sign language.

Table 89. Child-parent current communication patterns.

	<u>Number of parents</u>
Sign language	10
Speaking slowly	7
Natural gestures	5
Pointing	1
Writing	1

Table 90. Child-strangers communication modes

	<u>Number of children</u>
Speaking slowly	4
By sign language	4
Writing	2
Miming	2
Natural gestures	2

When communicating with strangers speech moves up to top the list with sign language. Writing moves up to third place; this is different from

the results of the main sample. Possibly it reflects the deaf populations' common practice of carrying a scribbling pad about on the person, for use in situations where speech is not understood.

Both adults and children were very willing to use all means of communication to exchange ideas during these interviews. The writer was impressed by the patience displayed by deaf adults towards faulty signs, inadequate speechreading and clumsy finger spelling. They rated themselves as not changing as regards "patience" before and after diagnosis. As observed in their own home, both deaf fathers and mothers appeared to be extraordinarily patient with their children. Six men rated themselves as "the same". None of the adults dwelt on the topic of frustration in anything more than a passing manner. Lip speaking by deaf adults to deaf children differs from normal speech between two hearing persons in tempo (slower) formation (wider mouth movements) emphasis (key words). Five parents said they talked differently to deaf children in these respects plus sign language or gestures. Nine claimed that they did not speak differently to other children, i.e. hearing children.

E.2 Mother of a profoundly deaf girl aged 6yrs. 9months

"I speak slowly and using gestures"

E.1 Father of a profoundly deaf boy aged 4yrs. 5months

"Do not sign to hearing children"

E.3 Father of two profoundly deaf children

"Use sign language with deaf children"

E.13 Mother of a partially deaf boy aged 13years

"No need to treat him differently, he is intelligent and communicates well. now" (there were hearing siblings in this family).

E.18 Father of a profoundly deaf boy aged 7yrs. 8months

"The only difference might be a slower tempo. Language and vocabulary the same."

The changes follow the same direction as those of hearing parents minus the use of signs, as few hearing parents knew sign language. Several deaf couples in this sample could be placed in the category of successful oralists in the sense that they were fully literate, and very verbal people. When they came to answer the question "Did you change your way of communicating with this child after you knew about the hearing loss?" their answers indicated the amount of thought they had given to the whole question of communication. Fourteen people (7 men 7 women) said "No, no change". They used signs and lipspeaking to the child. Two couples said "Yes changed" The father (E.1) said "Oralism at first, changed to sign with (first) one then the second child, no regrets" This father explained that they had added signs "for the child's sake". His wife (E.2) said "Yes he previously believed in oralism but changed to other methods." She had also changed in the same direction. One mother (E.7) said of her husband "He never talks". Another father (E.3) said "No change I have an older deaf daughter already". There were two couples that came from long established deaf "silent" families, the first couple were quite open about the fact that they could never maintain a speech environment for their children. The interviews were conducted in a silent manner. Although neither spouse had difficulty with lipreading their speech was not vocal and lacked 50% normal articulation. In the other "silent" household, pencils and paper came out as speech was unintelligible. Seven of these women said that their husbands had not

altered domestic communication patterns at all. Eight of the men claimed that their wives had not altered at all. This suggests that however verbal the deaf adult may be outside his home, in relation to hearing workmates, shopping, banking and other public affairs, the traditional sign language of the deaf takes over indoors. It was obvious that all the deaf adults were already familiar with sign language and finger spelling both two handed (English) and one handed (U.S.A.). This came to the fore when they were asked "If you were convinced that it would help your child to learn the English Language quickly and easily would you learn any of the following?"

Table 91. Would learn	Number of parents			
	<u>yes</u>	<u>no</u>	<u>Undecided</u>	<u>Information</u>
A. Finger spelling	8	4	1	0
B. Sign language	10	3	0	0
C. Watch a deaf teacher teach the child	10	3	0	1

Because they were all discussing known material, the fish-in-water effect was felt. E.1 simply said "It comes naturally to me" in reference to sign language. E.1. commenting on finger spelling said "finger spelling is useful for learning to spell words."

The data suggests that communication problems within these families are well within the normal range, i.e. arising out of interactions between naive users and mature speakers of the same language.

Resources for deaf parents

These deaf couples presented a united front in most areas of this questionnaire. In some cases the writer had serious difficulty in

persuading the husbands that the wives could (theoretically) hold a point of view different to their own, and it would be a good idea for them to go through the interview themselves. Six husbands verbally and in writing stated that both of them felt exactly the same on everything. It was not surprising that "own spouse" was rated top of the helpful people list.

The interview confirmed, in fact, that these deaf couples do share a unified perspective on the world. The writer saw none of the arguments about diagnosis, services and communication in these families which were seen in the hearing families. These particular couples seemed to be remarkably free of those kind of worries, but no generalizations can be drawn from such small numbers.

Table 92: Helpful people rated by deaf parents

	<u>Number of parents</u>
Own spouse	13
Teacher of deaf	9
Another parent of a deaf child	7
Own parents	7
Close friends	7
School teacher	6
Ear specialist	6
General practitioner	5
Social worker	4
Deaf parents/deaf relatives	4
Neighbours	4
Speech therapists	4

When asked who they would turn to for help or information with the deaf child five parents said nobody on the list. This indicated some self reliance on the part of these parents. One man who appeared to have had lots of dealings with his local council, simply said he would contact his local council. A second man said he knew his local education officer well and described that officer as a "specialist" and said he would contact him. Nine parents felt they could turn to the teacher of the deaf for help or information. The writer had the impression that these deaf parents were very keen to see their children had a decent education, almost every couple mentioned the Mary Hare Grammer School for Deaf, in connection with hopes the child would get there. For some it was their Alma Mater and this was an additional reason for them to get the child there. One couple said they preferred to discuss problems with parents of older deaf children. As Table 93, shows for most deaf parents commonsense was the main ingredient of successful child rearing.

Table 93. Child rearing is a matter

<u>of</u>	<u>Number of parents</u>
1. Commonsense	15
2. Talking it over with your spouse	15
3. Experience with your own children	9
4. Treating your children the way you were treated	4
5. Family advice	0
6. Any other	0

There were some sharp opinions expressed about the inability of hearing parents to bring up deaf children satisfactorily. (E.2) a father said

"No, I had hearing parents" in the discussion about treating his children the same way he had been treated as a child. Unfortunately he did not elaborate further. Only one mother said she would treat her children as her own mother had treated her. She described that relationship as "very close". A useful exercise for the future would be the investigation of deaf people's reactions to upbringing by hearing parents.

Information for parents

The internal world of deaf society is one of highly personalized relationships in which deaf adults tend to marry the people they know from school days in one or other established schools for the deaf. Otherwise marriages arise out of friendships formed at the deaf club. Not unexpectedly 10 (55%) deaf parents said that getting information without going to other people was not applicable to them.

Quite frequently the writer was subjected to a lengthy personal interview about herself and the mutual contact who provided the introductory letter, plus a whole host of social inquiries before the interview proper could get started. Deaf adults consider these preliminaries essential to any kind of business and it would be most unwise to ignore these conventions in this kind of study.

Table 94. Information for deaf parents

	<u>Number of parents</u>
Watching a teacher of the deaf	7
Books	6
Visiting deaf schools	6
Discussions with experts on deafness	6
Newspapers	5

Table 94. Information for deaf parents

	<u>Number of parents</u>
Magazine articles	5
Television programmes	3
Parents groups	3
Correspondence Course	3
Films	2
Radio programmes	1

The most helpful sources of information are shown below

Table 95. Most helpful sources of information

	<u>Number of parents</u>
Magazine articles	7
Watching a teacher of the deaf	7
Discussions with experts	6
Visiting deaf schools	5
Parents groups	5
Books	4
Correspondence course	1

Parents Groups

Ten parents said they did not belong to any parents groups. Two were members of the Breakthrough Trust which aims to integrate deaf and hearing families in a social manner, to break down prejudice on both sides. The two people who belonged said they wanted "to gain experience". Where people did not belong to groups, the attitude appeared to be one in which the "we are deaf" syndrome predominated.

When they were asked if they would have done anything differently 14 (60%) said "No". E.11 (a father) said "this is really for a hearing

person to answer". E.13 (a father said) "being deaf myself, I knew a lot and I would have sent her to a deaf residential school, when she was two years old but she was sent to a local day school". One man had already changed his children from local schooling to an oral school with a very good reputation amongst hearing parents.

Advice from deaf parents to parents

Two parents only, advised taking the child to a doctor. Two said "see a specialist". Six advised talking and gesturing to the child.

E.13 Mother of a partially deaf boy aged 13 years

"Talk to the child. Use methods of communication suitable for the child. In any case use gesture very generously with profoundly deaf children with communication difficulties. I would use sign language and speech together."

E.17 Mother of a profoundly deaf boy aged 7yrs. 10months

"Use signs as well as speech and gradually drop the sign when you know your child can lipread what you say."

It was obvious these deaf parents used signs in their homes and with their children. Although they recommended the use of sign language to other parents, none of them made any suggestions as to how hearing parents could learn sign language.

Unsatisfactory Services

These deaf couples presented a unified front on the question of services for deaf people. One couple said "Not enough speech therapists". Another couple said "Lack of attention from the government for deaf children", and then focused on the need for "research to improve children's hearing

turned towards the things which are not helpful to parents 9 parents had no comments. One parent simply said "hearing people" but did not elaborate any further. One mother felt strongly about the poor service from the specialist, "The specialist should reveal the truth about hearing loss". One man felt that it was not helpful to the hearing parents of deaf infants to underestimate deafness. "Parents refusal to accept the child as deaf not actively discouraged. Teachers and audiologists often play up to parents desire for normalcy by extolling virtues of the oral method."

Three people had had particular difficulty in their relations with one elderly local otologist who was a great oralist; he resisted their preferences about schools and hearing aids. These deaf adults perceived his attitude as dogmatic. One mother said "dogmatic assumptions and lack of understanding of visual communication" were decidedly unhelpful to any parents of deaf children. Her husband, E.18 said it was not helpful to support a "Dogmatic belief in oral/aural communication for all deaf children". His view is particularly valuable as he went deaf from disease, and so has the experience of learning sign language as a second language.

Deaf parents shared the need for a cure for deafness with their hearing counterparts. Every adult supported the need for basic research. Two deaf parents felt they had had most help from other deaf adults. One mother took a very broad view that all services were helpful if they were applied appropriately. One couple (E.11/E.12) took the view that "Deaf parents are the very people to help hearing parents with better understanding of deafness", but they did not volunteer any detailed

by operations." One man complained that "being deaf myself I have not been given a chance to use my own initiative." E.13 and E.14 said they had experienced a good deal of insecurity about schooling for their son "A lot of uncertainty about his future schooling when he was 5-9 years old. A lot of talk about units being established, but nothing ever happened." E.17 and E.18 both felt that "teachers did not understand deaf childrens' needs for a more visual communication and that parents should lipread too." E.15 and E.16 both felt that their child needed a commercial aid and were dissatisfied because she had not got one. E.18 expressed the view that there was "a lack of knowledge by experts on visual communication needs."

One parent had a totally subjective complaint that the child had failed to reach the grammar school for deaf children. She claimed that the child had been rejected because of poor speech. It was impossible for the writer to verify this statement. It appears that many deaf adults believe that poor speech is the reason why many children do not get into the Grammar School. This tradition is a product of respect for a grammar school education and admiration for good speech.

The complaint about lack of speech teaching was raised in this section again.

E.18 Father of a profoundly deaf boy aged 7yrs.8months

"We would have liked more advice on speech therapy for him. He has always picked up language quickly through lipreading and signs. Thus he knew words and sentences but not how to pronounce them. We do of course realize speech is a most difficult accomplishment for a profoundly deaf child.

However, the teachers do not seem to know how to use "old-fashioned" speech training methods, or at least I have not seen them use them".

One man the father of two deaf children had strong opinions about amplification "I think use of sign language, finger spelling, and speech is altogether the best way. The Council waste my money on hearing aids for profoundly deaf children. For some with hearing, okay; but for profoundly deaf it is a waste of money". He had the wrong financial body but his point is a good one.

Satisfactory Services

According to the deaf parents the most satisfactory service came from the education authority; the only exception was the parent who was aggrieved about the child's failure to get into grammar school. All the other parents appear to have got the child into the school of their choice. This may be a result of their personal experience in the schools for the deaf. Two couples felt they had had a lot of personal attention from their local school and from a unit for the partially hearing.

Current Needs

The need for speech therapy for the child was mentioned once again. Need for a better school plus a better aid was mentioned once. One father talked about the financial stringencies involved in keeping a teenager at college.

It became clear during these sections of the interviews that these deaf parents were very sensitive towards the vocational aspects of further education based on their own work experiences. When the discussion

suggestions as to how this might be done.

Advice for deaf parents

The group split evenly about advice they had been given: six felt that one could never have enough advice and six said they had had insufficient advice themselves. Only one couple said they had got too much advice. The remaining four said they did not need any; these parents had very clear a priori ideas about education and child rearing.

Responses to the final items of the questionnaire indicated that it was not designed for deaf parents. For example E.14, a man said that he felt that one way to improve the research would involve a section specially designed for deaf parents. He said "the questionnaire is difficult in that I have to consider what I would have done/not done had I been a typical hearing parent." This revelation of course invalidated his interview, well intentioned though it was. His comment suggested that the questionnaire had met the design criteria, i.e. hearing parents of preschool deaf children. His second comment concerned questions associated with age of the children, he felt the need of "another section for parents who have children in secondary schools, as I am undecided whether questions here want answers relative to my child when he was at primary stage, rather than now. Deaf parents and hearing parents have completely different outlook, attitudes and experiences. children's development is affected considerably by whether their parents are deaf or not." This man felt that a survey of "the typical attitudes of National Deaf Children's Society members and officials would be re-realing. Deaf adults often feel these parents do not want to know deaf

adults. Adults (i.e. hearing adults) cling to hopes that their children will grow up into completely normal people etc. so that their children suffer incalculable damage". This man was not to know that the main sample included just such a population as the one he proposed. His comments supported the case that the original questionnaire was "on target" relative to hearing parents. This particular deaf man would be an invaluable member of any future research team involved in investigations of sign language or communication within the deaf community. Another deaf father (E.17) in fact proposed that just such a study should be done. "Expand the investigation to find out how deaf people compare with hearing people in their approach to the handicap of deafness and their expectations of their deaf child". Such a study would involve study of the communication patterns within both types of families.

Although it was not possible to make statistical comparisons with the results of the main sample, the reactions of the deaf adults are valuable in so far as they have content validity; such comments could form the bases of specific studies of deafness considered critical by the people with direct experience of the handicap itself.

SUMMARY

1. The data suggests that speech teaching and the development of intelligible speech are very important issues for deaf parents. The responses of the deaf parents indicated that they consider speech as something which can be learned and therefore taught by established methods. For them speech production is a set of skills which can be automated separately from language learning. This is a very different view from that of the hearing parents who had been led to believe that speech would develop in the same way, but later than in hearing children. The lack of speech teaching in early education evoked criticism from the deaf adults. The notion that deaf children will develop speech skills spontaneously has little credence amongst the deaf adults.
2. A good education is associated by the deaf parents with the grammar school for the deaf and the technical school for the deaf in Britain. The deaf parents were very concerned to see their children in these schools or schools having a good reputation. The deaf parents have an advantage which hearing parents do not; their own schooling provides them with a background for informed choice. Several deaf parents had succeeded in obtaining the desired school placement against the current "integrationist" policies of local education authorities.
3. The data concerning communication patterns in these deaf families shows sign language is the easiest mode of communication in these

SUMMARY cont'd.

families. This supports the results obtained in the main sample. Bimodal communication involving speech and signing is common. The whole area of bimodal communication needs further study. The results and observations in these families suggests that sign language is equally effective as a communication media with deaf and hearing children.

4. Deaf parents distinguish communication development from child development from birth. This distinction enhances the child rearing process in the sense that all infants in deaf families are given the full benefit of being naive users of the language. Deaf adults perceive the child as one who needs a visible means of communication and they provide it. Child rearing procedures allow for insecurity arising from the "acoustic" gap caused by deafness. Thus the infant in a deaf household is never far from sight or physical contact with the parents. Deaf parents were seen to take considerable trouble to keep up this physical contact; witness the numerous trips up the stairs to childrens' rooms after dark. There were frequent complaints from hearing parents about restless, agitated, distracted deaf children. There were no such complaints from the deaf parents. Study of child rearing practices in these families could shed light on what is needed to provide tangible "security" for young deaf children and be of real benefit to hearing parents.

SUMMARY cont'd.

5. The interviews with deaf parents indicate a helpful attitude towards hearing parents and deaf children. Deaf parents suffer from the-fish-in-water problem, for example they learned sign language naturally and so fail to understand the problems facing the hearing parent who must learn sign language as a second language. Deaf parents themselves would need some sort of training if they were to function as adequate models for hearing adults in this area.

CHAPTER 13

THE GUIDANCE OF PARENTS: SUMMARY AND CONCLUSIONS

This survey has presented information about various aspects of the complex business of guiding parents of deaf children. It has been shown that a number of controversial issues relate to the modern oral approach to the education of deaf children. The basic tenet of this method is that deaf infants will learn to talk by imitation of amplified speech together with lipreading. Oralists claim that this can be accomplished by early diagnosis, followed by continuous use of powerful hearing aids and "expert" guidance for the parents (see Galbraith, 1963). Failure is popularly attributed to late diagnosis, lack of application of the talking/listening method; either the parents did not talk enough or they talked in some insufficiently defined manner (see Reeves, 1976, Taylor 1977, Watson 1976). It is not clear how the parents should talk from the writings of these authorities.

Parent Centred Guidance

The pilot study showed that it is possible to examine elements in the communication process in a systematic manner, by carefully designed questions, direct observation and tape recordings. The results of the pilot study showed that the peripatetic teachers are oralists in the main and they are very influential in such families.

The first chapter contained a review of parent guidance and outlined the evidence for a breakdown in the transmission of skills in the training of teachers of the deaf. This led to a gap between theory and practice. During a century of oralism, the original successful practitioners have

passed on, their techniques have been lost and current methods depend on osmosis rather than a demonstrable training procedure. Other investigators have suggested that a more scientific attitude towards the education of the deaf is required (Robinson, 1958). Since oralism is beamed at parents, a systematic study of parent guidance was necessary in order that myths can be replaced by facts, useless procedures eliminated and a rational practice established (see Conrad 1979, Roith 1963, Gaskill 1952, Botting 1976, Watson 1976).

Interviewing Parents

The results of this survey showed that a gap between theory and practice exists at the shop floor level. The parent/s' interviews showed that they are not interested in theories; they need practical help in developing communication with their deaf children and advice on sound child-rearing practices. Everything about these interviews indicated that parents are capable of evaluating services and of making suggestions for improvements. This applies to deaf and hearing parents.

The communication problems in hearing families of deaf infants arise because the child does not hear speech and hearing parents are not acquainted with sign language or finger spelling. Typical communication in these families consisted of a mixture of gestures, physical actions, pointing and speech. The results of the main sample confirmed the hypothesis that this mixed form of communication was typical of such families.

The only exceptions to this were children who learned sign language or finger spelling. Direct observation confirmed that both deaf and hearing

infants of deaf parents learned sign language. The hearing children develop sign and speech in normal sequence and apparently without adverse effects. This confirms the findings of other studies (see Mindel and Vernon, 1971, Mayberry 1976, Alterman 1970, Schlesinger and Meadow 1972). Deaf and hearing infants in these families receive speech as "lipspeech" which is silent speech from the lips of the deaf adult, or articulate speech with very little voice in it.

Separation of language and speech does not preclude the acquisition of language or speech in deaf families. The evidence indicates that language and speech are learned separately. Deaf adults insist that speech can be taught and should be taught by teachers of the deaf, incorporating kinaesthetic feedback into the methods.

These views are based on feedback from the subjective experience of deaf people rather than the experimental manipulation of elements in communication. This feedback relies on content validity rather than methodological precision. Nevertheless in the absence of experimental evidence it is patently obvious that infants in deaf families develop a mother tongue which suffices for all the reasonable needs of preschool children. There were only two families who were "silent" in the sense of no articulate speech. They were products of several generations of deaf people.

Delay

In 1976 Watson of Manchester University stated "I also recognise that the present practice of Oralism is not universally satisfactory, but this is not because of the imperfections of the technique so much as the human imperfections, failure to diagnose deafness sufficiently early, failure

to give early good help to parents, failure to provide enough good qualified teachers who have high levels of aspiration, amongst others. If our energies were developed to dealing with these failures rather than supposed failures of children, it might be a great deal better for both".

Chapters 4 and 5 are addressed to the question of delay in obtaining a conclusive diagnosis of deafness. The results showed that all but four parents suspected deafness before the first test of hearing. 84% of cases were suspected in the first year of life. This does not guarantee early diagnosis. Delay in diagnosis is associated with the operating procedures of welfare clinics. These factors are beyond the control of parents. It is impossible to trace detrimental effects directly to this delay, although it is known that hearing parents may give up trying to communicate with their infants during this period. The fact that parents advice to other parents consists largely of "do everything earlier" (see Table 59) may be the results of parents trapped in the tautology of oral success/failure, which simply explains failure in terms of late application of a method which depends for success on early application of that method. The case for delay producing failure in oralism is not proven.

What is known from interviews with deaf parents is that they continue to communicate with the baby before and after diagnosis. There is no question of lack of language stimulation to the brain. These findings accord well with the Conrad thesis that such children are "more intelligent because they have learned a language sooner than children in hearing

families (Conrad, 1979). There are two logical reactions to the question of delay. One is to eliminate it. The results of this survey indicate that prompt referral to a specialist is the quickest way to a diagnosis, rather than protracted attendance at welfare clinics. Elimination of delay is helpful in that the range of factors to be accounted for is reduced by one. The second is to eliminate the use of a technique which depends for success on early diagnosis and early amplification.

Amplification

Chapter 6 is concerned with the effective use of hearing aids and speech trainers by preschool deaf children. In one of their early books, Ewing and Ewing suggested that 72% of all deaf children have sufficient hearing to benefit from amplified speech. Given powerful amplification these children can hear their own voices and monitor their own speech. The authors suggested that 28% of deaf children are totally deaf and can only perceive sound as vibration, through the sense of touch. Such children need feedback from all their senses to gain information about speech articulation (Ewing and Ewing, 1938).

Current practice, as it impinges on these parents, assumes that amplification is the easy way to establish the voice-to-ear link; that all deaf children can do it by wearing hearing aids. Speech therefore, is assumed to be the easiest form of communication for all deaf children (see John and Howarth, 1973). This is reflected in a trend towards supplying deaf preschool children with two powerful hearing aids since 1974. Badly fitting earmoulds and poor hearing aid maintenance prevented use of aids at full power. Fifteen children (23%) were reported as having any awareness

of speech through individual hearing aids (Table 26). Parents reported only one clear case of amplification establishing voice-to-ear feedback, but the child did not start talking as a result of this.

There was no evidence to suggest that parents were trained in those microphone techniques considered essential in establishing the voice-to-ear link in individual children, as described by Ewing and Ewing in more recent publications (Ewing and Ewing, 1971).

The majority of these children, according to the reports of their own parents, did not discriminate sufficient of amplified speech to learn to talk on that input alone (see Table 27). This applies to all degrees of deafness at this young age, and supports the findings of others that even very minor hearing losses cause retardation in oral skills (see Botting, 1976, Conrad, 1979). In short, where young deaf children are concerned there is an identifiable gap between theory and practice in the matter of learning to speak by amplified speech.

The findings of this survey suggest that auditory training is linked to hardware at the expense of the other intact senses. Parents efforts were linked to the presence of an aid. One parent only, described talking into the child's ears before the arrival of an aid. Descriptions of auditory training sessions sounded more like audiology tests than training procedures designed to internalize sounds through vibration perception (see C.24). Where speechtrainers were used parents needed help in keeping the child occupied in educative ways. According to some accounts the hardware acted as a distraction within the tutorial situation.

Expert Guidance

In 1955 Professor Alexander Ewing outlined the history of the Department of the Education of the Deaf at Manchester. His first sentence was taken from the Report of the Royal Commission on the Blind, the Deaf and the Dumb of the United Kingdom 1889. "The great want in the whole subject of the education of the deaf is the want of competent teachers". In chapter 7 it was shown that parents felt that children should be taught by trained teachers of the deaf; they expected expertise from the teacher. Information about parent guidance was summarized in terms of support, information and child teaching, together with direct teaching for the parent. The results point to an unmet need for direct tutoring of the child. 38 parents said they needed more direct child teaching regardless of any other aspects of the peripatetic service. These results confirm the findings of Education Survey No.6 in which the peripatetic teachers stated they could not meet the needs of some 700 children (D.E.S. 1969).

Special Educational Treatment is usually based on educational deficiencies arising out of the primary handicap. Where childhood deafness is concerned the basic problem is how to overcome the acoustic gulf between the infant and his parents, from whom, in the normal course of events he would learn his mother tongue. The results of this survey show that the usual solution to bridging that gap took the form of concentrated talking and wearing a hearing aid. Table 36 shows that of seven areas of help from parent guidance teachers "How to talk to the child" was the main principle of parent guidance. Direct tutoring of the child took the form of concentrated talk-and-play sessions. Parents reported difficulties

in holding the child's attention, in establishing communication and in securing co-operative play. These are precisely the areas to be developed according to the literature on parent guidance (Ewing and Ewing, 1971).

Eye contact is an indicator of attention. As deaf children use their eyes on the environment as well as on the speaker, the speaker in effect is in competition with the environment for eye contact from the child. If the speaker continues to speak to the deaf child when the child is looking elsewhere, the speaker cannot be sure that the child has either seen or heard the message.

Direct observation of talk and play sessions confirmed that parents adapted to this situation either by continuing to talk in accordance with the global auditory approach: (and hope the amplified speech had reached the child's brain) or that they physically manhandled the child's face and body in attempts to gain eye contact (see Schlesinger and Meadow, 1972). These measures tended to destroy rapport between parent and child, with the child refusing to co-operate.

Chapter 7 contains comments throughout from parents about their difficulties in these talk and play sessions. They show that the oralist imperative to talk to the child had failed to deal with the associated problems of trying to hold the child's attention, and securing his co-operation. Few parents had any help in developing concepts. This is fundamental to language growth (see Table 36).

In discussing their difficulties parents indicated teacher reactions to these sorts of problems. These appeared to be of a global nature and unrelated to the described difficulties of the parents own child in his

own circumstances: teachers emphasized that inattentive, distractible behaviour was "normal" in young children: that the child was proceeding through a given developmental stage or alternatively, was arriving at a "readiness" stage for some other form of learning! In answer to Question 60 (what does the teacher say about the child's learning?) parents reported generalized comments about the child's native intelligence. This constitutes the parent guidance as perceived by these parents. It adds up to a recipe for training the sorts of behaviours usually associated with children who are brain damaged or those who have been raised in circumstances without individualized care. The fact is mothers particularly wanted to know what they should do with the child and how they should do it. They failed to get that sort of help from the peripatetic service. Lack of detailed behavioural procedures that parents can copy and adapt to their child in their own home has been noted independently, by Professors Chazan and Mittler, and Wilkinson of Sussex University (see Chazan in Davis 1977, Stone and Taylor 1972 and Wilkinson 1979). Wilkinson on the basis of her study of language needs of preschool deaf children, emphasized that even where detailed accounts of educational strategies exist, teachers of the deaf were either unwilling or unable to apply them in their own practice. This inability to get to grips with the interactive processes of the tutoring situation is traceable to defective teacher training. This was discussed in some detail in chapter 2.

Parents wanted the teacher of the deaf to show them how to teach their own deaf child. Where parents witnessed teachers doing this they gave that experience the highest rating out of all the other experiences (see Table 55).

Conrad has drawn attention to the sorts of transneuronal changes which follow prolonged deafness in animals and suggests that similar neurological changes may occur in deaf infants deprived of language over long periods of time. He concluded that forcing young deaf children to rely on speech provides insufficient stimulation to the brain, therefore they should be taught by signs. Their parents should learn signs. Conrad maintains that this approach would permit the children to choose signs or speech as their preferred mode of communication later on (Conrad 1980).

The results of this survey point to hearing parents not learning sign language. Although 65 (62%) said "Yes" to learning sign language, not one learned the native vernacular sign language of the British adult deaf (see Table 52). Eighteen only learned a form of signed English (Paget Gorman). The parents claims that the use of these signs and speech together caused an improvement in the childrens' speech may be a result of parents delivering more language in total to the intact sense - the eyes. In contrast the parents who practised the talk-only approach said they found it fatiguing, unrewarding and resorted to use of esoteric gestures, and restricted vocabulary to relieve the stress of undiluted oralism. Table 47 shows that the majority of parents used a mixture of gestures, signs and speech but the majority of children did not use speech to their parents.

Parents learned from the experience of living with their own deaf children to pace their communications to eye contact from the child. When they were asked about changes in communication processes they said they talked "differently" to the deaf child. Parents changed in the direction of

face-to-face orientation, use of simple sentences and clear speech with or without signs. The attention of the child has to be secured as a precondition to sending a message be that in lipsigns or body signs and this is best done by face to face orientation and eye contact.

For those parents who choose oralism (and the findings of this study indicate this will be the majority) the training could be improved in a) direct tutoring of children and in b) the adult education elements:-

1. By adapting existing methods to intact senses

It is possible to transmit speech by vibration by the simple expedient of placing the "listeners" hands on the face of the "speaker". Vivian points out that this method of speech reading and speech sending and speech teaching has been used at Perkins Institute for the Blind since the 1920's. She points out that the hand positions can be adapted for use with children who are deaf only and for children who are partially blind and partially sighted (Vivian, 1966). More recently Botting has demonstrated that this method of inputting spoken language produced fluent verbal language in a partially deaf three year old who had failed to learn language by acoustic channels (Botting, 1976).

Printing or writing onto the hand and finger spelling are other tried and true methods of communication which are beamed at the intact senses of the deaf blind. There is a photograph of Helen Keller in Bruce's book, with Alexander Graham Bell and her teacher. Miss Keller's left hand is on her teacher's face for speech reception and the other hand is palm up receiving finger spelling from Bell. Such methods can be used with the deaf also.

Evans in his thesis quotes the case of Hofstater, a deaf man who learned his mother tongue (English) by finger spelling. He also learned to read the printed version of bedtime stories by passing his eyes over the script while his mother followed it with a finger-spelt analogue. The man himself claims this system eliminated all phonetic ambiguities (See Evans, 1979). Donald Moores also reported good results from finger spelling at the Institute of Defectology in Moscow (Moores, D. 1972). Galloway and Scouten describing the Rochester method of finger spelling and speech in parallel, claim that its success depends on filling in gaps in lipread speech patterns (Scouten 1963, Galloway 1963). Finger spelling was the last choice for hearing parents in this survey. Only one child used it and the accuracy was reported by her parents as 100%.

2. Independence of tactile methods from hardware

Parents accounts of their struggles with aids and speech trainers suggest that the actual hardware causes more problems than it solves: in terms of sheer interference with the psychological comfort of the children. The advantage of all hand-mouth communication systems is that they do not depend on hearing aids and they do not pin the child down to one place as the speech trainer does. The child simply puts his hand to the face of the speaker or offers the hand for finger spelling. This procedure also has the additional advantage of bringing the adult closer in to the child. It is very easy then to speak to the ears and allow the child the chance to receive undistorted speech. Ling has already been quoted on the advantages of exposing the children to undistorted speech in simple ways. This type of communication is independent of the state of the ears and the aid.

The parent can "feed" language to the child at any time, and anywhere. This could correct the tendency of parents to associate talking with the speech trainer.

3. Identification of processes in the interactions of adults and children

Concentrating on processes instead of ultimate goals involves taking note of behavioural details. Where this has been done already and the filmed record analysed, workers have discovered that certain interactions between mothers and babies are the prelinguistic forerunners of verbal conversations (Snow 1977, Lewis 1979, Moores.J. 1980). Lewis suggests that these "pseudo" conversations serve to rehearse the baby in the role of the listener, the sender of messages, turn taking and mutual orientation. In short the baby learns "how a conversation is put together". Use of video tape recordings of this nature could sensitize parents and teachers first to the necessity of these conversational features, and secondly to the desirability of incorporating them into their own behaviour when interacting with their own child. This permits analyses of the kind used in micro-teaching where individuals record and analyse films of their own attempts to teach a tiny fragment of an area of work. Written records can be used to provide permanent blueprints of successful procedures and form the basis of future planning.

4. Rehearsals

In vivo rehearsals on an unknown concept which is to be made known to the child lend themselves to a teaching "rehearsal" in which the parent teaches the teacher. This allows the parent to make initial mistakes on the teacher rather than the child. Blueprints and rehearsals involve

paying attention to details and procedures rather than some distant goal. Support for this strategy comes from headstart programmes for disadvantaged children in the U.S.A. In "Teaching parents how to Teach", the authors recommend substitution of behavioural goals for standardized tests as these are of little value in helping parents do something educative with their own children (see Payne, Mercer, Payne, Davidson, 1970). In brief the teacher of the deaf who intends to work with parents must be prepared to answer the question "What should I do with my child?" as well as "What can you do with my child?"

The writer has argued that concentrating on the processes of real interactions between teachers and parents and between adults and deaf children will result in attention to detail. This will correct a tendency for teachers to deal in generalities. In vivo sensitization and rehearsals also overcome the reluctance of teachers to read about novel or creative or merely different ways of tackling educational issues. It was noticeable that reading books about deafness did not score highly with parents: the only written material which scored consistently was the John Tracy Clinic lessons which are characterized by detailed sketches and detailed instructions on how to carry out teaching procedures. Substituting in vivo sessions of specific chunks of learning and teaching would do much to improve the transmission of skills from the expert to the parents. This is what they want. All the findings of this survey leads to the conclusion that transmission of skills in the language learning area cannot be done casually.

The existential situation of the infant is such that he or she is

utterly dependent on mature users of the language to bring the language (and the experiences which make that language meaningful) to him. Babies are completely dependent on their parents and other caring adults for this. The use of "close in" methods as described here place the responsibility for doing that on the parents of the deaf child in a tangible and special manner. It is conceivable that use of methods which look special, sound special, and impinge on the intact senses in "special" ways, may stimulate hearing parents to increase input as was noted in the case of those parents using Paget Gorman Signs. Quite apart from the "specialness" of the operating procedures it is possible to employ tactile communication media in the dark which is not possible with lip-reading. Tactile methods tackle the problem of establishing a means of communication directly. This does not mean they are easy, spontaneous, or natural, in the beginning. Mature users can be seen finger spelling and speech "feeling" at public gatherings of all kinds. Interpreters can translate at very high transmission rates, sufficient for the audience to follow scientific papers.

5. Artificial Communication systems (non-iconic systems)

Some parents in this survey mentioned their interest in learning cued speech. This system is intended to reduce the ambiguities of sounds which look alike on the lips, e.g. M, N, B. The system functions by aligning eight hand shapes near the mouth during speech to signal differences which would go unnoticed otherwise. Good results have been reported with older children by Nicholls. This survey can offer no data on this system, except to note that the same rules for beaming the system at the intact sense apply to cued speech also. Direct observation of cued

speech being performed in the tutorial situation showed that it suffered from the same defects as the auditory approach (Dixon, 1980).

Eighteen parents used Paget Gorman Systematic signs combined with speech. Parents claim that this input resulted in improved active speech in children needs investigation. Direct observation in these families confirmed that parents using these signs and speech in combination were at ease communicating with the children. The findings of chapters 9 and 10 suggest that where an arbitrary symbol system is used the esoteric gestures are eliminated. Reports from deaf and hearing parents show that young deaf children invent their own esoteric signs, independent of the hearing or linguistic status of their parents. The parents' response is critical. In the hearing families natural gestures are endemic but only 29 (39%) rated them as the easiest ways to get the message across. It was shown that gestures are negatively associated with speech production in the children.

In the deaf families "natural" gestures are eliminated or modified by interaction with the arbitrary signs of British sign language. The language is learned separately from speech in these families. In the families using Paget Gorman signs in parallel with speech the parents descriptions suggested that a similar, if not identical process takes place. Comparative studies of the rates of acquisition of the signs of various sign languages are needed, plus speech counts under these conditions. What is obvious by direct observation is that the deaf and hearing infants of deaf parents have the chance to become bilingual (speech and signs). Deafness and the skill of teachers limit the

intelligibility of deaf children's speech but obviously there are no limits on speech development of the hearing infants (see Moores J. 1980). Meadows observations of hearing infants in deaf signing families suggests that signs may be easier to learn than speech. What is undeniable is that signs suffice for thinking (see Furth 1966).

Several children in the deaf families were observed "code switching" between the word order of spoken English and the syntax of sign language. Speech development and reading skills in hearing children of deaf parents appear to develop on time and unaffected by signs or the intelligibility of parents speech.

In the families using Paget Gorman signs it was suggested that sign language functions as a reminder to keep parents talking to the deaf child. The effects of using Paget Gorman on speech development and incidence of temper tantrums needs further study. The advantages of Paget Gorman and Cued Speech is that both follow the word order of spoken English. Hearing parents do not have to learn a foreign grammar when they learn these systems. This means they can be learned quickly and put into practice rapidly while the child is young enough to learn a mother tongue. These are distinct advantages for the hearing parents (see Dixon 1980, Fenn 1975). There appears to be no reason why parents should not use these systems with preschool deaf children providing they beam them at the intact sense in a consistent manner. Observation of parents using cued speech showed that the casual approach was typical. This could be improved by use of in vivo training techniques mentioned earlier.

Speech Development

Chapter 8 contains the results of a speech scale designed to show levels

of speech development in young deaf children. Only 16 children could speak and none reached known minimum levels associated with speech in hearing children. Parents comments showed disappointment with delayed speech development in the face of constant talking to the child. It does not comfort these parents to explain that "natural" gestures have a negative association with speech production in the children. Speech is perceived differently by deaf and hearing parents. Hearing parents are led to believe that their deaf infants will learn to understand their mother tongue by lipreading speech from the lips of their parents and hearing it through hearing aids. This approach leads parents to associate speech with language. Alternative forms of language are only acceptable to hearing parents if and only if they do not impair the child's chances of learning to speak. The burden of proof rests on the sign language users and the cued speakers in a manner that is different from the expectations of the oralist teachers. This could be related to the emphasis on aids, or the emphasis on the "normality" of the aural/oral approach. The casual, naturalistic methods used by these parents is undemanding initially. Sadly, sometimes it is only after three or four years that parents finally give up on the oral method and turn the child over to the school teachers. In interviews with parents who had tried for three or four years with talking methods the bitterness and disappointment was evident. Deaf parents perceived speech as a discrete set of skills, separate from language. They were concerned about lack of speech teaching in the modern educational treatment of the deaf. They were able to show the writer the "old fashioned" methods by which they learned speech. These methods not surprisingly, had much in common with the vibration perception methods

and kinaesthetic methods used with the deaf blind. None of the deaf adults accepted the developmental model of speech whereby articulate speech is an overflow of a reserve of passively understood words. Deaf parents never confused speech and language. They expect to develop language first in the child and spoken language later.

Improving Parent Guidance

The results of this survey indicate a real need to specify services (see chapter 11). When parents were asked about satisfactory services, the answers showed that services for parents of deaf children are at their best when tailored to deafness rather than general handicaps e.g. language disordered, mentally retarded etc. Direct teaching for preschool deaf children remains an unmet need. The most frequently mentioned weakness in parent guidance was a lack of explicit strategies which parents could copy. The most obvious way to remedy this is to devote resources to the development of an explicit form of adult training.

Suggestions of ways to externalize training procedures are applicable to parents and teachers. It seems sensible to include feedback from the adult deaf into training of teachers and parents especially on the neglected areas in training e.g. speech. The adult deaf are the end products of the educational system and this survey showed they have valuable feedback to offer about the process of that system.

Developing the role of the adult deaf

Traditionally deaf persons have been assigned the role of experimental subjects in research. In order to benefit from their intelligence and experience of deafness they need to be included as advisors or

consultants in future research. They are needed to help deaf parents translate their obvious goodwill into workable, detailed programmes of adult education suitable for hearing parents of deaf children. In particular child management of deaf children might be improved by study of how deaf parents proceed in this area.

Deaf adults and sign language studies

Deaf adults are needed to act as mature models in sign language studies. Persons who have gone deaf and learned sign language as a second language may prove to be the best models for hearing people wanting to learn sign language. Deaf adults who are fluent native signers are needed to help evaluate studies of artificially devised sign languages such as Paget Gorman Systematic Signs and the Cued speech system. Such deaf persons will need training themselves in order to appreciate the problems faced by hearing persons trying to learn sign language.

Scientific Objectivity in future research

Including deaf individuals in future research projects concerned with sign language and human information processing would redress the balance away from exclusive oralism which has dominated this field so far in England. The injection of the experience of the adult deaf in this area would hopefully improve general understanding of symbol processing by non-verbal means.

Deaf teachers of the Deaf

Training deaf persons to be teachers of the deaf would have a broadening effect on existing teacher training programmes. Currently deaf people

have difficulty getting past medical requirements for entry to such courses. Getting into Universities is not so difficult, providing deaf students meet the prerequisites in their chosen field of study. This study showed that hearing parents are prepared to watch and learn from deaf adults teaching their children.

Experience of family life with deaf children

Some hearing parents suggested that teacher training students would benefit by "live-in" experience with families of deaf children. This could be extended to deaf families. Students would have the opportunity to experience the problems of living with deafness at close quarters. The problems lie in finding sufficient numbers of families to accommodate the students.

Implications for teacher training

The results of this survey indicate large discrepancies between theory and practice of parent guidance and preschool training. If teacher training departments were to provide laboratories in which staff demonstrated "special educational treatment" with parents and deaf children the gap between theory and practice could be closed in one generation. Where the treatments are informed by deaf adult experience and controlled study the benefits in the form of improved practice would pass directly to families attending such programmes. Where these departments are sited in universities the training programmes would benefit from related research in the usual way.

This proposal requires a shift away from conventional arrangements in teacher training departments, where the academic institution has little

or no control over teaching practice for the students or over practice in teaching at all. (see Gordon, 1981). The shift involves extending the medical model of training into the special education field. This implies that students get involved in treating real people only after much observation and copying of method under careful supervision within the training establishment. This implies that training departments will have to recruit staff that can practice what they preach. The Warnock Committee recommended a "dual appointment" arrangement whereby staff can divide time between working with children and theory building (see Warnock, 1978).

This is not a novel proposal. Manchester's University department of Audiology and Education of the Deaf began with the marriage of two outstanding teachers of the deaf. Together they planned and executed a series of research proposals to solve problems encountered in working with individual deaf persons. The department gives a diagnostic and guidance service directly to the public in addition to the teacher training course and audiology courses. This combination of service and research proved to be the best recipe for successful innovation in the oral education of the deaf. Alternatives to oralism will need to be equally dynamic if they are to improve education and add to the general stock of scientific knowledge. The basic ingredients of communication programmes will be gifted individuals deaf and hearing, who are capable of teaching hearing parents what they need to know before the deaf infant is beyond help. As most deaf infants are born to hearing people the need for such courses appears to be endless.

Unsolved Problems

1. The relationship of speech to sign language is not clear. Study of "bimodal" communication is needed. Hearing parents in this survey claimed that by exposing their children to speech and signs in parallel the children developed speech. Filmed conversations of parents and deaf children over time would permit analysis of the relationship of speech and signed English.
2. The development of "bilingualism" in deaf families needs investigation. Filmed versions of "born deaf" people conversing with each other and with hearing people would permit analysis of the interplay of speech word order and sign order.
3. Studies of deaf parents communicating with deaf infants are needed to tease out the prelinguistic processes at work in such families. Moores' analysis of films of deaf parents and deaf infants suggests that deaf adults expose their infants to "baby-sign" which is characterised by processes which do not appear in adult conversations (see Moores 1980). Such processes may have universal validity for language learning in humans.
4. Investigation of speech controls used by deaf people who cannot utilise acoustic feedback may lead to improved speech teaching. There is scope for application of cybernetic principles in this area.
5. Follow up studies are needed to assess the effects of early language training of deaf infants. The scale used in this survey would serve as a comprehensive measure of communication changes over time. Long term studies are the only way to provide reliable predictions about results of different communication media.

The combined effect of applying behavioural criteria would be the elimination of some major weaknesses in the home training offered to parents and children. These weaknesses are traceable to assumptions inherent in the auralist approach to deaf education. The assumption that undiluted exposure to amplified conversational English, plus or minus lipwatching results in deaf children learning vernacular English, is not supported by the findings of this survey. The findings indicate that pure oralism is non-existent for the majority of families. Pure manualism is rare.

In practice the deaf infant in hearing families spends large stretches of what should be their language learning years not seeing or hearing verbal language. Where parents are advised to keep on talking and prevented from learning a sign language the child has no perceptible means of acquiring a mother tongue. This is the end product of 100 years of British oralism and cannot be remedied by more of the same.

Direct observation showed that deaf parents can provide a detailed model of language learning, because they are the only people who know how to close the acoustic gap created by deafness. They do this by systematically addressing the infant in vernacular sign language, plus or minus speech from birth. This input is adapted spatially and chronologically to the child's eyes, ears, skin, body, hands and so to the brain (Moores, 1980). It is significant that hearing infants learn sign and verbal language on time in these conditions (Mayberry, 1976).

The logical solution is to provide hearing parents with deaf parents or teachers who are fluent in vernacular sign. Hearing parents then would

have the opportunity to choose to sign or not. Unfortunately the results of this survey do not support the notion that hearing parents can routinely achieve fluent vernacular signing fast enough to teach the child a mother tongue.

The results of this survey showed that hearing parents who exercised choice in the matter, preferred contrived communication systems such as Paget Gorman Systematic signs and Cued speech: finger spelling was a last choice. These systems are easy for the hearing parent to learn because they follow the normal word order of spoken English and can be used in parallel with it. The parents have good reports about ease of communication and speech development following the use of Paget Gorman Signs. The children continued to wear their hearing aids. It would appear that they received a more complete pattern of language in this situation than the oral-only situation.

These findings do not suggest that British vernacular sign is the alternative to oralism for deaf children in hearing families. Hearing parents as well as deaf parents expressed considerable anxiety about the lack of speech teaching for the children. Only the profoundly deaf adults dismissed hearing aids outright. Deaf preschoolers will continue to wear hearing aids in the foreseeable future.

The findings of this study do indicate that demonstration teaching is needed in speech, concept formation and auditory training and that the specialist teacher of the deaf is needed to supply this. Where the mother language is established by use of a contrived communication system selected "chunks" would form the content of tutorials in speech,

in listening practice and as the basis for reading and further concept development. The findings suggest the need for greater expertise in these areas. The teachers role will become more specialized not less.

The findings suggest that parents are ahead of teachers in the matter of incorporating alternative forms of communication into their lives.

Some parents admitted that they used signs and cued speech secretly: they maintained a pretence of oralism in front of their official advisors. This in itself is clear indication that oralism is failing to convince the very people for whom it is designed and changes are long overdue. This thesis has presented some indications of change and suggested further changes to enhance parent guidance together with criteria for evaluating this service.

Appendix I. The Sample.

Table 96. Distribution of Invitations by Local Branch Secretaries of the N. D. C. S.

Action	Branches
Delivered invitations	22
Declined (Involved in the Warnock Study)	4
Declined (Felt the Parents unable to contribute)	1
Declined (No Parents of Pre-Schoolers)	1
Late Replies - after study completed	4
No Response	29
<hr/>	
TOTAL	61

Table 97. Distribution of Parents and Children.

Parents	Hearing status	Children	Status	Age
105	Hearing	64	Deaf	preschool
56	Hearing	32	Deaf	schoolage
18	Deaf	12	Deaf	all ages
9	Hearing	9	Deaf+other	all ages
<hr/>				
168		117		

Table 98. Distribution of Interviews by Mothers and Fathers.

	Mothers	Fathers	Interviews
Singles	20	3	23
Married	41	41	82
<hr/>			
TOTAL	61	44	105

Table 99. Distribution of Parents by Age

Years	Mothers	Fathers	Totals	%
20,under 25	6	3	9	8.5
25,under 30	19	9	28	26.6
30,under 35	21	18	39	37.1
35,under 40	10	11	21	20.0
40,under 45	3	3	6	5.7
Unspecified	2	0	2	1.9
<hr/>				
TOTALS	61	44	105	100.0

Table 100. Distribution of Children By Age

Ages	Frequency	%
Under two years	3	4.7
Under three years	16	25.0
Under four years	18	28.2
Under five years	27	42.9
<hr/>		
TOTAL	64	100.0

Table 101. Distribution of Family Sizes and Number of Peers of Deaf Children

No. of Children	No. of Families	Total No. of Children
1 (Singletons)	20	20
2 (Pairs)	3	60
3 (Triples)	12	36
4	0	0
5	2	10
6	0	0
<hr/>		
TOTALS	64	126

Table 102. Social Classification of 64 Families (Hearing Parents)

Class	Occupation	N	%
I	Professionals	9	14.
II	Intermediate	17	26.6
III (N)	Non-Manual, Skilled	12	18.75
III (M)	Manual, Skilled	17	26.6
IV	Partly Skilled	4	6.25
V	Unskilled	1	1.56
Unspecified		4	6.25
<hr/>			
TOTALS		64	100.01

Appendix II. The Questionnaire

Table 103. Distribution of Questions in the Schedule

Topic	N
Family Size, by Ages and Number of Children	6
First Suspicions, Cause, Onset of Hearing Loss	8
The First Test of Hearing, The Conclusive diagnosis	9
Amplification, The Child's use of Personal Aids	15
The child's Unaided Hearing, Professional Opinion	4
Pre-School Training, Length, Type, Effectiveness	11
Parent Guidance, Type, Effectiveness, Parents Needs	10
Speech Development Scale	1
Communication Difficulties, Parent-Child Communication	7
Communication Difficulties, Child-Parent Communication	8
Parent's Adaptation to Child's Communication Needs	6
Help for Parents, Relatives, ...	3
Information for Parents, The Media, Agencies, ...	3
Parental View of Health Education, & Welfare Services	8
Parental Comments on Research	1
TOTAL	100

APPENDIX III cont'd.

P.1

CONFIDENTIAL

No. _____

Name of parents _____ Date _____ 19 _____

Address _____

_____ Phone No _____

Dear Parents,

I very much appreciate your help in this study. Before you start, I would like to remind you that it is not a test. There are no right or wrong answers, just your answers. Most of the questions can be answered by drawing a circle round the answers of your choice, or putting a tick in a box. If you are in any doubt cross out the answers you do not want. If you cannot answer a question just go on to the next one. All your answers are confidential. Many Thanks.

Please return the form to me, Mrs. P. Botting.

Cybernetics Department
Brunel University, Kingston Lane
Uxbridge, Middlesex.

APPENDIX III cont'd.

1. What is your relationship with the child with the hearing problem? _____ Is the child adopted? YES/NO

2. Mother: Age _____ Occupation before marriage _____

3. Father: Age _____ Occupation now _____

4. How Many children in the Family altogether? _____

5. NAMES.....SEX.....AGES.....

1st. _____

2nd. _____

3rd. _____

4th. _____

5a. Deaf Child's name _____ BIRTH DATE day / month / 19

6. HOW WELL CAN YOU YOURSELF HEAR? (put a tick in the boxes below).

	<u>Left ear</u>	<u>Right Ear</u>
I hear normally in the	_____	_____
I am totally deaf in the	_____	_____
I am hard of hearing in the	_____	_____
I wear a hearing aid in the	_____	_____
I went deaf in the	_____	_____

7. Does your child have a hearing problem in,

The Right Ear

The Left Ear

Both Ears

Don't Know Yet

My child not old enough to have an audiogram yet

APPENDIX III cont'd

8. Did you expect your baby to have any kind of hearing difficulty?
- YES, because
- _____
- _____
- No, because
- _____
- _____
9. Can you think of any reasons for this child's hearing problems?
- YES (explain) _____
- NO _____
10. Who was the first person to think that the child did not hear very well?
- (circle one) FATHER MOTHER GRANDMOTHER GRANDFATHER
- FRIENDS NEIGHBOURS FAMILY DOCTOR
- HEALTH VISITOR OTHER?
11. What made you think that the child might not be hearing very well? _____
- _____
- _____
12. How old was the child at this time? _____
13. Was your Spouse worried about this as well? /NO / YES / DON'T KNOW /
14. Did you talk to anyone else about the child's hearing? /YES / NO /
15. WHO was the first person to test the child's hearing for you?
- (circle one) The Family Doctor
- The Health Visitor
- The clinic doctor
- Somebody else
16. How old was the child by this time? _____
17. Were you satisfied with this first hearing test? YES / NO /
- Explain _____

APPENDIX III cont'd

18. What were you told at this first hearing test? _____

19. What did you do then? _____

20. Which person told you that your child really did have a hearing loss -
 _____ Your Family Doctor
 _____ The welfare clinic doctor
 _____ An Ear Specialist
 _____ The school doctor.
21. How old was the child by this time? _____
22. Were you satisfied with this test/examination? YES / NO / DONT KNOW
 Because _____
23. What did this doctor tell you? (Explain) _____

24. How Many Hearing Aids does the child have _____
25. About how old was the child when he got his first hearing aid[s]
 year / month / day

26. Has the child had a second set of aid's / YES / NO / WHY? _____

27. How old was he when he got the second set? _____
28. Which aids does he wear right now? _____

29. Did you have any difficulty getting the child to wear the aids in the
 beginning? NO / because _____
YES / because _____

APPENDIX III cont'd

30. Right now does the child wear the aid(s) in,
 / The Left Ear / The Right Ear / Both Ears / Neither /
31. Do you have a speech trainer at home? / YES / NO /
 If YES who supplied it? _____
32. Do you have a loop system in your home? / NO / YES /
 If YES who supplied it? _____
33. Do you have any earphones to plug into T.V. / _____ / radio / _____ /
 If YES who supplied those? _____
-
34. Does your child wear the hearing aid(s) now, / NO / YES /
 a) all the time. (except in bed or the bath) _____
 b) mornings only _____
 c) afternoon only _____
 d) at home only _____
 e) in training sessions only _____
 f) at the / playgroup / nursery class / school /
 g) Never _____
 h) Not at weekends _____
35. Have you found the loop system, USEFUL / _____ /
 VERY USEFUL / _____ /
 NO USE AT ALL / _____ /
36. Does the child enjoy wearing the headphones of the speech trainer?
OFTENRARELYFREQUENTLYNEVER (circle one
 Answer only)
37. Do you think the child actually "hears" any sound through the loop? _____

APPENDIX III

38. Do you notice that the child "hears" any particular sounds with the individual aid on, which he does not hear without it? _____

39. Without any aids on is the child, Partially Deaf /_____/
- Severely Deaf /_____/
- Profoundly Deaf /_____/
40. What did the specialist say about this child's hearing the last time you saw him/her? _____
41. Do you agree with the doctor? / NO / YES / UNDECIDED / because _____

42. Would you recommend other couples to this specialist if they were worried about a child's hearing? _____ (you can request a second opinion under the national health service)

43. Check any of the answers below. Does your child have any other problems?
- Poor Eyesight / /
- Slow Learning / /
- Mental Retardation / /
- SPASTIC / /
- Something Else (explain) _____
44. Is the child receiving any help for this problem? / NO / YES /
Explain _____
45. Does your child attend / a nursery / a playgroup / a deaf school /
46. How long has the child been going to this group? _____

APPENDIX III cont'd

47. Is the child in a class for deaf children? / YES / NO / dont know /

48. Does the child have a teacher of the deaf? / YES / NO / dont know /

49. Before going to this programme did the child have any teachers at home? / YES / NO /

50. How long did the Teacher of the Deaf come to your home?

From _____ To _____

51. The Teacher of the Deaf came to the House,

a) about _____ a week

b) about _____ every 2 weeks

c) about _____ a month

d) about _____ a term

e) when I asked _____

f) any other arrangements _____

52. Do you feel that children with hearing difficulties need specially trained teachers of the Deaf to teach them? (explain)

YES, because _____

NO, because _____

53. What sort of progress did your child make during the teaching? (✓)

NO CHANGE (_____)

GOT WORSE (_____)

SOME LEARNING (_____)

SLOW PROGRESS (_____)

RAPID PROGRESS (_____)

CHILD WAS REALLY TOO YOUNG TO TEACH (_____)

THE CHILD AND TEACHER DID NOT GET ALONG (_____)

THE TEACHING WAS INTERRUPTED FOR OTHER REASONS (_____)

I NEVER SAW ANY TEACHING (_____)

APPENDIX III cont'd.

54. What sort of educational help did you receive, yourself, during this period of home teaching - if any? Did the Teacher show you how to carry out any of the following activities? (put ✓/s).

	/ no /	/ yes /
a. To take care of the hearing aid(s)		
b. To use books with the child... ..		
c. To play educational games with the child..		
d. How to talk to the child..		
e. How to use a proper sign language.		
f. How to use finger spelling		
g. How to develop the ideas behind words. ...		

55. Did the teacher spend any time just listening to your particular worries each time he came to the house? (✓)

OFTEN (____) FREQUENTLY (____) NEVER (____) RARELY (____)

56. Did you need more time to talk to the teacher yourself? / NO / YES /

57. Do you ever try to teach your child in the same way as the teacher? (✓)

OFTEN (____) RARELY (____) FREQUENTLY (____) NEVER (____)

58. Would you have liked MORE (1) SUPPORT / YES / NO /

(2) INFORMATION / NO / YES /

(3) CHILD TEACHING / YES / NO /

(4) DIRECT TEACHING (for you) / NO / YES /

From the Teacher of the Deaf. (cross out the answers you do not want)

59. If you had the choice, would you like...MORE home visits.....

...NO CHANGE.....

...LESS home visits.....

60. What does the teacher say about the child's learning? _____

APPENDIX III cont'd

61. Do you agree with the Teacher? YES, because _____
 NO, because _____
 CAN'T SAY, because _____
62. Would you recommend the teachers you have had to other couples who have a child who does not hear well? / NO / YES / UNDECIDED / (Choose one answer)
63. What sort of Difficulties do/did you have when you tried to work with the child yourself? (✓ as many answers as you wish)
1. Holding the child's attention ()
 2. Lack of Ideas ()
 3. Not enough teaching materials ()
 4. Communication problems ()
 5. Child won't co-operate ()
 6. Lack of space ()
 7. Lack of time ()
 8. Demands of other children ()
 9. Other problems ()

SPEECH

64. Does your child have (✓)
- No Speech ()
- A few words ()
- Puts words together ()
- Muddled speech... .. ()
- USES Voice only ()
- Silent words. ()
- Speaks words clearly. ... ()
- Has natural Speech, with a few mistakes ... ()

APPENDIX III cont'd.

COMMUNICATION DIFFICULTIES (circle the answer)

65. Do you find yourself getting irritated when the child does not understand you?...OFTEN.....FREQUENTLY.....RARELY.....NEVER.....
66. When the child does not understand you, is this mostly because of,
Lack of attention stubbornness Playfulness Cannot hear speech
ANY OTHER REASON?
-
67. There are many ways of helping young children understand what you are trying to get across to them,
HOW do you make him understand you? (✓ as many as you wish)
1. By speaking slowly /_____/
 2. Using simple sentences /_____/
 3. By shouting /_____/
 4. By repetition /_____/
 5. By finger spelling /_____/
 6. Natural Gestures /_____/
 7. Drawings /_____/
 8. Miming /_____/
 9. Moving the whole child about /_____/
 10. Pointing /_____/
 11. Writing /_____/
 12. Showing things to the child /_____/
 13. By Sign Language /_____/
 14. Using situational clues /_____/
 15. By looking at things /_____/
68. Do you ever give up? (Circle One Answer)
....OFTEN.....FREQUENTLY.....RARELY.....NEVER.....

APPENDIX III cont'd

COMMUNICATION DIFFICULTIES

69. Which was the easiest way to make the child understand you? (out of the list) Number _____
70. How can you tell that the child has really understood you? (explain) _____

71. Does the child understand strangers, when they talk to him/her?
.....OFTEN.....FREQUENTLY.....RARELY.....NEVER.....
72. EXPRESSIVE COMMUNICATION
Does the child ever get angry or frustrated when trying to make you understand what is on his/her mind?
.....OFTEN.....FREQUENTLY.....RARELY.....NEVER.....
73. Does the child do any of the following, in order to get the message across to you, (✓ as many as you wish)
1. By speaking slowly /_____/
 2. By using simple sentences /_____/
 3. By shouting at you /_____/
 4. By repetition /_____/
 5. By finger spelling /_____/
 6. By natural gestures /_____/
 7. By drawings /_____/
 8. Miming /_____/
 9. By Moving or pulling or tapping you /_____/
 10. Pointing /_____/
 11. Writing /_____/
 12. Showing you things /_____/
 13. Sign Language /_____/
 14. Situational Clues /_____/
 15. By looking at things /_____/

APPENDIX III cont'd

EXPRESSIVE COMMUNICATION

74. Does the child ever give up?

.....OFTEN.....FREQUENTLY.....RARELY.....NEVER.....

75. Which is the easiest way for the child to get the message across to you? (out of the list) Number _____

76. Before you knew the child could not hear properly did you,

...play a guessing game to understand the child.....()

...rely on the child's facial/bodily movements to understand him...()

...rely on the situation for understanding.....()

...rely on the sound of the child's voice.....()

77. Do strangers understand the child?

...Don't know....Never....Rarely....Often....Frequently....

78. How does the child communicate with you now? by _____

79. How does the child communicate generally with strangers now? BY _____

80. Since you learned about the hearing difficulty have you become...

.....MORE PATIENT.....

.....LESS PATIENT.....

.....ABOUT THE SAME.....

81. Has your spouse become...

.....MORE PATIENT.....

.....LESS PATIENT.....

.....ABOUT THE SAME.....

APPENDIX III cont'd

EXPRESSIVE COMMUNICATION

82. Do you talk differently to this child, than you do to the other children you know? / YES / NO / Explain _____
-
83. Did you change your way of communicating with this child, after you knew about the hearing loss? / YES / NO /
If YES can you say how you changed? _____
-
84. Has your spouse changed their way of communicating with the child after the diagnosis? / YES / NO / If YES How _____
-
85. If you were convinced that it would help your child to develop the English Language quickly and easily would you learn any of the following? (cross out the answers you don't want)
- (1) Finger Spelling / YES / NO / UNDECIDED / WOULD NEED MORE INFORMATION/
- (2) A proper Sign Language /YES/NO/UNDECIDED/WOULD NEED MORE INFORMATION/
- (3) Watch a deaf teacher teach the child /YES/NO/UNDECIDED/WOULD NEED MORE INFORMATION/

86. HELPFUL PEOPLE

No doubt you have talked to many different people by now about your child's hearing, some of whom were more helpful than others. Below is a list of possibilities. Cross out those people you have not talked to.

- (1) Your Family Doctor
- (2) A speech therapist
- (3) Another parent of a deaf child

APPENDIX III cont'd

HELPFUL PEOPLE

86. (4) Your own parents
- (5) A teacher of the deaf
- (6) A social worker
- (7) A deaf person/deaf relative
- (8) School teacher
- (9) Ear specialist
- (10) Your own spouse
- (11) A neighbour
- (12) A psychologist
- (13) Close friends

87. If you needed help or information in connection with this child who would you turn to? (choose from the list)

1st Choice _____

2nd Choice _____

3rd Choice _____

Any Other _____

Are there any people you would have liked to talk to more? _____

88. Usually parents try to do their best for their children even though being a parent may feel strange at first: do you think that child raising is (put a ✓ by the answers of your choice)
- a) Generally a matter of common sense.....()
- b) Experience with your own children.....()
- c) Treating your children the same way your parents treated you...()
- d) Family advice.....()
- e) Talking it over with your spouse.....()
- f) Any other.....()

APPENDIX III cont'd

89. INFORMATION

There are a number of ways of getting information without going to other people. Below is a list of possibilities. Cross out those which were not experienced by you.

- a) FILMS
- b) BOOKS ON DEAFNESS
- c) TELEVISION PROGRAMMES
- d) RADIO PROGRAMMES
- e) NEWSPAPERS
- f) PARENTS GROUPS
- g) VISITING DEAF SCHOOLS
- h) DISCUSSIONS WITH EXPERTS ON DEAFNESS
- i) CORRESPONDENCE COURSES FOR PARENTS OF DEAF CHILDREN
- j) WATCHING A TEACHER OF THE DEAF WORK WITH THE CHILD
- k) MAGAZINE ARTICLES

90. Some of these experiences were more helpful to you than others. Can you choose the five most helpful ones and arrange them below, starting with the MOST HELPFUL 1. _____

2. _____

3. _____

4. _____

5. _____

91. Do you go to any special groups for parents of deaf children?

NO, because _____

YES, because _____

Name of the group _____

How often do they meet? _____

APPENDIX III cont'd.

92. SERVICES FOR PARENTS. Professionals need to know a great deal more about the needs of parents when confronted with a child who does not hear well. This is why I am including parents in this study. If you knew as much about deafness in the beginning as you do now, what would you have done differently? _____

93. If someone felt their child had a hearing problem and came to you to talk things over, what would you say to them in the light of your own experience? _____

94. Is there anything that you feel is definitely unsatisfactory about the services you have had so far? _____

95. What was the most satisfactory service you have had so far? _____

 Why was this satisfactory? _____

96. What sort of help do you need right now? _____

97. Are there some things which are definitely NOT helpful to parents of deaf children? _____

98. Is there anything which is definitely HELPFUL to parents of deaf children? _____

APPENDIX III

SERVICES FOR PARENTS

99. (cross out the answer you don't want). Do you feel that you have had

TOO MUCH ADVICE? _____

TOO LITTLE ADVICE? _____

100. Can you think of some way to improve this piece of research? _____

ANY OTHER COMMENTS OR SUGGESTIONS?

THANK YOU ONCE AGAIN.

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