

The role of families in optimizing phonological therapy outcomes

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Abstract

Developed in Australia, Parents and Children Together (PACT) is a broad-based, family-centred phonological therapy. It is a treatment approach for developmental phonological disorders in the course of whose implementation speech and language therapists enlist the active participation of parents and significant others. It requires family members to learn technical information and develop novel skills to use, with professional guidance, in relation to their own child and his or her specific speech clarity issues. In this paper we review the 'family education' and 'homework' aspects of PACT and explore, with brief case illustrations, the participation of 13 families involved in its administration.

In preschool-aged and younger school-aged children, developmental phonological disorders are manifested as difficult-to-understand speech. They affect the organization of children's speech sound systems, and have been argued to occur at the (underlying) phonological level (for example, Grunwell, 1987; Ingram, 1989). Developmental phonological disorders are obvious to the listener because of the use, by affected children, of abnormal (surface) speech patterns, which impair general intelligibility. Provided that children with the disorder receive effective teaching and therapy, the prognosis for normal speech intelligibility is good (Gierut, 1998).

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Children whose phonological problems are at the severe end of the scale, who have Percentages of Consonants Correct (PCCs) (Shriberg and Kwiatkowski, 1982) below 50% when they reach school age might be at greater risk than their age peers for difficulties with literacy acquisition (Bird *et al.*, 1995). Importantly, however, children with concomitant language problems often have poorer literacy outcomes than children with disorders of expressive phonology alone (for example, Lewis and Freebairn, 1992; Lewis *et al.*, 2000). With respect to this possible association between phonological disorder and literacy acquisition we have observed, in multi-cultural, urban and rural Australian contexts, that parents of unintelligible three- or four-year olds often express concerns about the possibility of subsequent difficulties in reading development. Indeed, it may be the prospect of poor reading skills rather than the current, patently remediable, speech sound disorder that encourages many parents to become knowledgeable about the nature of phonological impairment and to become active agents in their children's therapy. Naturally, we counsel parents that phonological disorder *may* impair literacy development even after speech output approximates the norm (Lewis and Freebairn, 1992).

Family-based practices

There has been a long history in speech and language therapy of working collaboratively with parents. Traditionally, the invitation for parents to become involved in the management of their child's speech difficulties has reflected the therapist's preferred style of practice, or the service delivery model of the particular agency the family attends. So, in a sense, the motivation for parents to be part of therapy has come from the therapist, and not from the parents themselves.

The advent of powerful parent advocacy groups worldwide, as well as legislation supporting the rights of the child, means that well-informed parents know they can become effectively involved in their children's education and intervention. This tendency for parents to be more aware of their rights within the intervention process has been influenced since the 1980s in the United States by federal legislation in PL 99-457, which mandates the incorporation of family-based practices. Also relevant in this regard has been the rapid spread of information technology (IT), especially in industrialized countries, which has changed the face of health information provision, and communication between consumers and professionals.

Since mid-1998 information about phonological disorders and their treatment has been available internationally on the Internet. For example, about 200 links to a wide range of clinical phonology resources are located at <http://groups.yahoo.com/group/phonologicaltherapy/links>. Creative use of IT by professionals and consumers has expedited information sharing with parents regarding the implementation of therapy. It has also provided unexpected word-of-mouth publicity for phonological therapies (including PACT, which is described here), and assessment protocols such as the Computerized Articulation and Phonology Evaluation System: CAPES (Masterson and Bernhardt, 2001).

This rapid spread of information has been at a speed and level of detail unheard of in the pre-Internet era, in which specific aspects of new assessment tools and treatment methodologies were only available in journals and professional workshops, taking a long time to receive exposure in textbooks, public health information literature, or parenting manuals.

As a result of these developments, many parents in Australia now present in clinics with their children with intelligibility issues *expecting* to be team members in developing Individualized Education Plans (IEPs) or Individualized Family Service Plans (IFSPs) and to engage collaboratively and cooperatively in assessment and therapy (McWilliam *et al.*, 1996). At the same time, phonological therapies that explicitly specify a central role for primary caregivers, especially in naturalistic settings (Camarata and Nelson, 1992; Camarata, 1993) are becoming more common (Bowen, 1998; Flynn and Lancaster, 1996; Williams, 2003). While the literature is silent on the effectiveness of parent involvement, studies that highlight the role of parents are achieving prominence. For example, there are accounts of studies and practices incorporating parent satisfaction surveys (for example, Rvachew and Nowak, 2001), parent questionnaires as a vital component of assessment (Tyler and Tolbert, 2002; and others in a special forum on phonology), and parent-administered homework with multilingual children (Ray, 2002).

Parents and children together (PACT)

Parents and Children Together (PACT) is an eclectic phonological approach to the treatment of developmental phonological disorders, in which parents are enlisted as active participants in the therapy process. Conforming to Kamhi's (1992) requirements for a broad-based therapy, PACT is founded on a model that embraces: *family education, metalinguistic tasks, traditional phonetic production procedures, multiple exemplar techniques* (minimal contrast, and

focused auditory input activities), and *homework*, administered by parents and significant others, including teachers.

Implementation of PACT

Information about the implementation of PACT is available from a clinical forum suitable for a professional readership (Bowen and Cupples, 1999a; 1999b), two case studies (Bowen and Cupples, 1998; 1999b), and a book for parents and teachers (Bowen, 1998). To supplement this information, a three-page summary for therapists, teachers and consumers, of the components of PACT, and how to administer them is currently available (free) on the Internet as an Adobe Acrobat[®] document (http://members.tripod.com/Caroline_Bowen/pactsummary.pdf). Copyright-free handouts, slide-shows and notes that can be added to children's speech books can be downloaded as required from http://members.tripod.com/Caroline_Bowen/adobe.htm.

Space only permits us to provide the bare essentials of this information here, and the five interacting, dynamic components of PACT are displayed in Figure 1.

Part of the appeal of PACT, for parents and therapists, is its focus on involving parents, and teachers too if possible, in the therapy process (Bowen, 2000). Parents report that they like it because they are included in a meaningful way, and are not relegated to the role of taxi driver, or banished to the waiting room. Speech and language therapists (SLTs) like it because they have well-informed, motivated adults implementing appropriate strategies and targeting appropriate sound patterns and structures, as partners in the therapy process. The parents of two of the children in the efficacy study commented as follows:

It's wonderful to be so involved: we feel we are really doing something constructive here [in the treatment sessions], but more to the point, at home too (participant 7's parents, in a letter to the author at the end of his first therapy block); Having a positive way of helping makes up for the times I have been angry with her when I haven't understood ... (participant 2's mother in an interview.)

Having something definite to do, that makes sense to them, appears to *empower* parents, and to have a beneficial effect on the three-way relationship between child, parent and therapist.

Parent education

Parents learn specific techniques including: modelling, recasting, encouraging self-modelling and self-correction by the child, using labelled praise, and providing focused auditory input.

Metalinguistic training

Child, parents and therapist talk and think about speech sounds and the way they are organized to convey meaning. Games and activities, at home and in therapy, involve sound picture associations (sh means 'be quiet'); phoneme segmentation for onset matching (John starts with J); awareness of rhymes and sound patterns between words (e.g., minimal contrasts); rudimentary knowledge of the concept of 'word'; understanding the idea of words 'making sense'; awareness of the use of revision and repair strategies; judgement of correctness tasks (a kitten is a little cat versus a kitten is a little tat); and, playing with lexical and grammatical innovations using morphophonological structures (boy versus boys, jump versus jumped). NOTE: A 50:50 split between talking tasks versus 'thinking and listening tasks' is recommended.

Phonetic production training

The therapist teaches the child how to make the sounds s/he has difficulty with, and parents work with the child at home with listening and talking games and activities, including production practice related to target sounds (observing the 50:50 split).

Multiple exemplar training

Parent and therapist read word-lists to the child, and the child learns to sort words (pictured on playing cards) according to their sound properties. Activities include:

'Point to the one I say.' Child points to pictures of the words, spoken in random order (e.g., key, car, cow, tea), or rhyming order (e.g., car, tar, key, tea) by the adult.

'Put the rhyming words with these words.' Three to nine cards are presented (e.g., bat, bill, bull, ball) and the child puts rhyming cards beside them (fat, fill, full, fall).

'Say the word that rhymes with the one I say.' Adult says words with the target phoneme, and the child says a rhyming nontarget word (e.g., adult says 'ship' and child says 'tip').

'Give me the word that rhymes with the one I say.' Adult says the nontarget word, and the child selects the rhyming word containing the target sound (e.g., adult says 'pill': child selects 'fill').

'Tell me the one to give you.' Child says the word, and the adult responds to the word actually said. For example, if the child attempted to say, 'pin', but produced it as 'bin', the adult would give him or her 'bin', causing them to experience a communication failure. The aim is for the child to realize the failure to communicate his/her message, and attempt to revise the production. This particular activity is not included in homework.

'You be the teacher: tell me if I say these words the right way or the wrong way.' Adult says the words in rhyming or random order, or in sentences, and the child judges whether they have been said correctly.

'Silly sentences.' Child judges whether a sentence is a 'silly one' or not (e.g., 'He gumped/jumped into the pool').

'Silly Dinners': is a variation of 'Silly Sentences'. The adult says what s/he wants for dinner, and the child judges whether it is a 'silly dinner' ('I like fish and ships/chips').

'Shake-ups and Match-ups.' The child is presented first with four picture cards representing minimal meaningful contrasts (MMCs) such as: cow/couch; pow/pouch. The word-pairs are repeated to the child several times, then the cards are put in a container and 'shaken up'. The child is asked to take the cards and arrange them on the table 'the same as they were before' (i.e., in pairs).

'Find the two-step words.' The child sorts the words with consonant clusters SIWI from minimally contrasting words with singleton consonants SIWI (e.g., four/floor).

'Walk when you hear the two-steps.' The child 'walks' with his/her fingers when s/he hears a consonant cluster SIWI as opposed to a singleton consonant SIWI.

Homework

Parents perform some of the above activities, with the child, in 5 to 7 minute practice periods, once to three times daily, as directed by the therapist. Homework incorporates activities from the child's preceding therapy session.

Figure 1 The five components of Parents and Child Together (PACT).

Treatment efficacy

An equally important advantage of PACT is that it is the first phonological therapy whose efficacy has been tested with treated and untreated groups of children (Bowen, 1996; Bowen and Cupples, 1999a; 1999b). Fourteen preschoolers, aged 2;11 to 4;9 at the outset of therapy, participated in the treatment efficacy study (Bowen, 1996), which comprised a longitudinal matched groups design involving assessment, treatment and re-assessment (probe) phases.

Table 1 comprises a summary of the characteristics of children when they entered the study, in terms of their gender, age in years and months, initial PCC and severity rating applicable to children aged 4;0 years or more (Shriberg and Kwiatkowski, 1982), Clinician Severity Rating (Bowen and Cupples, 1999b), Initial Peabody Picture Vocabulary Test – Revised, PPVT-R (Dunn and Dunn, 1984) Standard Score, and Initial Mean Length of Utterance measured in morphemes (MLUm).

The primary dependent variable in the efficacy study was the change in children's phonological development, determined by the difference between their initial and probe severity ratings. Secondary dependent variables were receptive vocabulary, represented by the PPVT-R standard scores, and MLUm scores. The PPVT-R and MLUm scores were used to gauge the *specificity* of the treatment effect, against a more general effect of the treatment, in accelerating language acquisition.

At the probe assessment, the 14 treated children showed accelerated improvement in their phonological patterns, compared with the untreated eight, who did not. Analysis of variance of the initial and probe severity ratings (Bowen and Cupples, 1998; 1999b) of the groups showed highly significant selective progress in the treated children only ($F(1,20) = 19.36, P < 0.01$). On the other hand, no such selective improvement was observed in either receptive vocabulary or MLUm, reflecting the specific effect of the therapy.

The initial severity of the children's phonological disorders was the sole predictor of the frequency and duration of consultations required for their speech patterns to fall within the normal range.

Two published accounts of PACT therapy in practice are available. In 1998 we presented a case study of participant 1: Nina, in this journal (Bowen and Cupples, 1998), and the following year we looked in detail at participant 12: Ceri (Bowen and Cupples, 1999b). In this article, we move away from an individual focus, and explore the participation of the 13 families of the 14 children (participants 4 and 11 were sisters) and their role in maximizing phonological outcomes.

Table 1 Initial characteristics of the participants

Participant	Gender	Initial age	Initial PCC	Severity relative to PCC	Clinician severity rating	Severity relative to clinician rating	Initial PPVT-R (1981)	Initial MLUm
1	F	4; 4	Shriberg and Kwiatkowski, 1982	Severe	Bowen and Cupples, 1999b	Moderate	115	5.30
2	F	4; 8	48	Moderate-severe	3.75	Moderate	106	5.20
3	M	3; 10	50	—	3.75	Mild	105	4.50
4	F	4; 2	59	Severe	2.50	Moderate	104	4.37
5	F	4; 2	41	Mild-moderate	3.75	Mild	106	3.17
6	F	4; 3	70	Moderate-severe	2.75	Mild	105	4.00
7	M	4; 9	64	Moderate-severe	2.75	Mild	105	4.00
8	F	2; 11	63	—	3.25	Moderate	127	4.00
9	M	4; 1	40	Severe	2.75	Mild	94	3.40
10	M	4; 3	44	Severe	3.50	Moderate	91	4.30
11	F	3; 10	27	—	4.00	Severe	97	3.64
12	F	4; 5	52	Severe	3.25	Moderate	99	3.50
13	F	3; 8	35	Mild-moderate	3.75	Moderate	113	4.80
14	F	3; 11	67	—	2.50	Mild	114	4.00
			49		2.75	Mild	96	3.50

The families

Because the role of primary caregivers was an important component of the study, and because the therapy methodology was family centred, an attempt was made to obtain participants whose families' socio-economic status, child-rearing practices, and family structure were similar (Bowen and Cupples, 1999b).

All except participant 12 lived at home with both their biological parents. Participant 12 was in a single-parent household. She had irregular weekend access visits to her father and his partner, who were encouraging, but who took no active part in the therapy. All of the children had one or more siblings. None had extended-family members living in the household, and all had at least one parent in full-time employment.

Potential participants were not excluded on the basis of family history of communication impairment or learning disability. Indeed, six families in the study made an immediate connection between their children's speech disorders and their *own* problems with communication and/or literacy as children. They recalled and reported family history of speech, language and literacy difficulties in one or both parents, summarized as follows: participant 2, dyslexia and speech delay; participants 4 and 11, dyslexia and stuttering; participant 5, language delay; participant 7, speech delay; participant 8, dyslexia; and participant 10, stuttering. In addition to this, every parent could nominate at least one first degree relative [for example, their child (other than the participant), parent, sibling, aunt, uncle, nephew, niece, or cousin] with a significant history of communication impairment.

Family education

In PACT, family education occurs through a combination of observation and participation in assessment and therapy, direct instruction, in-clinic consumer slideshows, role play and discussion (Bowen and Cupples, 1999a). Written information is also provided in the form of books (Bowen, 1998; Flynn and Lancaster, 1996), handouts, and via the Internet. A speech book (an exercise book, scrapbook or ring binder) is used to facilitate communication between therapist, family and teacher. It includes written information provided by the therapist, and specific to the individual child. This information might comprise: current targets and goals, a progress record, homework activities, as well as developmental norms and information about therapy for developmental phonological disorders. Parents and teachers are also encouraged to

contribute to the book: recording progress, commenting on the ease or difficulty of implementing homework, noting favourite activities or their own innovations, and often giving important feedback to the therapist that might otherwise be unavailable. For instance, participant 6, Sophie, talked constantly at home, and was animated and chatty in the clinic; nonetheless, her teacher surprised (and enlightened) the therapist and her parents when she wrote in the speech book:

I enjoy working with Sophie and doing the activities in her book. She is very responsive in the one-on-one – loves it – but if I try to involve another child or two she clams up completely. I think you should know that she never speaks to her kindy peers – only to teachers and the aide, and only one-to-one, and in a quiet voice we can hardly hear.

Having this information led to providing the preschool personnel with strategies that succeeded in gradually increasing Sophie's communication with her peers.

Assessment sessions

The collaborative partnership with parents in PACT begins with the initial consultation and assessment. A key aspect of the initial consultation is the administration of a screening assessment of phonological development. From a number of suitable tests available, we chose the screening tool from the Metaphon Resource Pack (Dean *et al.*, 1990) (with the picture/word 'gun' replaced with 'gone'). It was selected because its administration and scoring (with parents watching throughout) provided such a good demonstration, at the outset, of our focus on phonological patterns rather than on individual sounds. A larger sample is later submitted to phonological analysis, usually involving an independent and relational analysis (Stoel-Gammon and Dunn, 1985; Velleman, 1998).

At the conclusion of the initial consultation, the general outcome of the assessment is discussed, and parents' questions of immediate concern are answered. During this period a display book of developmental expectations and material regarding phonological disorders is used. Parents are provided with a written report of the baseline assessment, to share with teachers and significant others at their discretion. The report includes recommendations for intervention with a broad outline of how they can participate, and examples of the procedures they will be using. Reports are written in accessible language, and are provided within 10 days with an informed consent form, which both

parents sign, permitting their child's data to be used in clinical research, and mindful of client confidentiality and privacy legislation, providing permission for therapist and teacher to liaise.

Treatment sessions

Treatment sessions are usually of 50 minutes duration. Within this time-span, the child spends 30 to 40 minutes alone with the therapist. The minimum amount of parent participation at the clinic involves the parent joining the therapist and child for 10 to 20 minutes at the end of a session, or 10 minutes at the beginning and 10 minutes at the end. The maximum parent participation entails the parent being actively involved in a treatment 'triad' with his/her child and the therapist, for approximately half of the treatment session. These segments of parent participation require the child's continued involvement, in order to demonstrate properly what should happen during homework.

Blocks and breaks

Therapy is administered in planned blocks and breaks. The first block and the first break are usually of approximately 10 weeks duration each, after which the number of therapy sessions per block tends to diminish, with the period between blocks remaining about the same. During the breaks, the parents were asked to do no formal practice for about eight weeks. Two weeks prior to the next treatment block, they were asked to read the speech book with the child a few times and to do any activities the child was interested in doing. Throughout the breaks, they were to focus on providing modelling corrections, reinforcement of revisions and repairs, and metalinguistic activities, incidentally, as opportunities arose. They continued to employ the strategies of modelling and reinforcement learned in the therapy block(s).

Therapy attendance

Therapy attendance and punctuality figures for all the children in the study were good, although a few appointments had to be postponed due to childhood illnesses. Sometimes, it was not actually the treatment participant who was sick but a parent. On other occasions, a sibling was in quarantine, restricting the family's movements. Punctuality was important because it meant the

Table 2 Participation in consultations and homework

Participant	Gender	Consultations	Mother only at consultation	Sibling/s (occasions)	Homework with parent (times/week)	Percentage of homework with mother
1	F	27	27	5	18	100
2	F	32	26	2	12	60
3	M	12	12	11	24	50
4	F	36	28	35	12	60
5	F	15	15	14	8	100
6	F	19	18	17	24	80
7	M	24	21	2	12	20
8	F	24	23	3	12	50
9	M	22	22	21	12	100
10 ^a	M	42	42	2	12	85
11	F	14	06	13	6	0
12	F	23	23	1	24	100
13	F	10	06	3	24	50
14	F	21	21	2	12	100

^aParticipant 10 completed 42 sessions of PACT therapy, but returned after a break for 12 sessions of fluency intervention, with a successful outcome. The data reported in Table 2 do not include these fluency therapy sessions.

children all had treatment consultations of approximately the same duration (on average, 50 minutes). This consistency would not have been possible had they arrived late for appointments, as typically there was no provision for extended time for individual consultations.

The good attendance figures meant that the approximately 10-weeks on – 10-weeks off pattern for the first therapy block and the first break from therapy was maintained consistently across participants. In practice, the range of consultations in the first block, including assessments, was from 9 to 14. The duration of the first break from therapy ranged from 8 to 13 weeks. At the time, ten weeks break was considered optimal, but it was not always possible to arrange, especially when the breaks incorporated school vacations, or coincided with parents' holidays from work.

All the children attended their appointments in the morning or early afternoon (8:00 a.m. to 2:00 p.m. appointments, finishing no later than 3:00 p.m.). Their mothers accompanied the children to the majority of consultations, around 90.3% of sessions on average (see Table 2). In the remaining sessions, both fathers and mothers were present for about 3.1% of consultations, fathers only for 4.4%, and grandmothers only for 2.2%. No siblings attended the initial assessments, although siblings were often present during ongoing assessment (for 40.8% of consultations on average; see Table 2).

Homework

Parents play a major role in PACT in terms of homework during therapy blocks, and ongoing management during breaks from therapy (Bowen and Cupples, 1999a). Homework incorporates activities from the preceding therapy session and takes the form of what are portrayed to children as 'talking and listening games', and to the parents as 'language play' (see Crystal, 1996; and particularly Crystal, 1998). Parents administer homework in 5 to 7 minute periods, once, twice or three times daily, 5 or 6 days a week. Practice periods may be as little as 10 minutes apart, always in good listening conditions (for example, not in a moving car, or against television background noise). As a general rule of thumb, parents are encouraged to create at least a 50–50 balance between the talking tasks, and listening and thinking tasks, contained in the homework. If anything, they are encouraged to tend towards reducing the talking tasks and increasing the listening and thinking tasks. This optimal balance is sometimes difficult to achieve, however, as many parents see practising saying words as the key to improved intelligibility. Above all, they are urged to make the homework regular, brief, naturalistic and fun.

Homework activities provide practice and reinforcement and an opportunity to generalize newly learned skills, for both the child and the family. For the child this practice, reinforcement and generalization involves aspects of learning more about their own phonology, and for parents, it involves developing their skills as collaborative co-therapists. Engaging in homework activities away from the therapist's supervision gives space for (and empowers) parents and significant others to engage in independent experimentation with, and development of, the tasks presented.

Mothers reported that homework was done around 15 times per week on average, with a range from 8 times per week to 24 times per week (see Table 2). According to self-report, the majority of homework (around 68.2%) was administered by mothers, but fathers also played a significant role, administering homework on the remaining 31.8% of occasions. Notably, although grandmothers occasionally became involved in bringing the children to therapy, none participated in formal homework sessions.

All the families reported that they did the homework as recommended. They were compliant and consistent about the length of homework sessions, which they all estimated to be of 5 to 7 minutes duration, and they did homework 5 or 6 days a week, as suggested. Most of the families, except those of participants 9 and 14, adopted the suggestion to incorporate the homework into a storytime routine of practice-story-practice-story (Bowen, 1998). They all used a behavioural reward system for doing the homework, following the therapist's guidelines (Bowen, 1998).

It must be noted that the families in the study were more compliant than a typical group of families in our clinic. Of the 13 families, only participant 10's parents did not conform as expected. On reviewing the next two cohorts of 13 families referred to the clinic for phonological therapy, we found that 10 out of 13 families were compliant in each cohort. A possible explanation for this difference in compliance was the seriousness with which all 13 families regarded their participation in the efficacy study.

Close observations of PACT in action, and discussions with parents have revealed that as parents' confidence increases they become more constructively critical and innovative in their approach to the homework. Before long, most parents initiate appropriate next-steps in therapy, arising from something that occurs during homework. Homework is conducive to internal development, so each family can individualize it somewhat, making it relevant and interesting for their child. Because the homework is dynamic, it influences the form of therapy sessions, soon acquiring the family stamp (as well as the therapist's 'signature'), and allowing the therapist to mould the activities that occur in the clinic to suit the individual child and his or her family better.

Directions for future research

As outlined earlier, for purposes of the research described here, which was aimed primarily at evaluating the efficacy of the PACT approach, we thought it important to impose strict selection criteria on potential participants in terms of their family characteristics. A valuable direction for future research would, therefore, lie in systematically examining the extent to which a family-centred approach like the PACT could be used successfully with children from a variety of other family situations. Our clinical experience is that PACT can be used successfully in a range of diverse situations (including single-parent families and families where both parents work full time). In addition, PACT has proven effective with children from various cultural backgrounds (including Chinese, Fijian, Indonesian, Japanese, Korean, Lebanese, Sri Lankan and Thai, amongst others). Notwithstanding this anecdotal evidence, it would be of obvious interest to obtain more systematic evidence for the generalizability of the PACT approach.

Another possible avenue for further research lies in providing more objective evidence of the value of parental involvement in PACT and other family-centred approaches to treatment of developmental phonological disorders. Although there was no obvious association in the study described here between aspects such as the total number of treatment consultations required and the frequency with which homework was completed, the sample size was limited (at 14), and homework requirements were not manipulated in a systematic manner across participants. Future investigations should address this gap in the literature.

Conclusion

In this brief overview we have seen that the PACT approach is a broad-based family-centred phonological therapy model. It is a relative newcomer to the clinical phonology scene, but has already been shown to be effective in treatment of phonological disorder (Bowen, 1996; Bowen and Cupples, 1999a; 1999b). The PACT model differs from previous approaches in the emphasis given to the role of parents in therapy, the way in which therapy is scheduled in planned blocks and breaks, and the amount and type of technical information disseminated and explained in detail to parents. We believe that the ways in which parents and significant others, including teachers, are involved in the therapy process make a key contribution to the efficacy and effectiveness of PACT.

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