Clinical Intervention for Bilingual Children: An International Survey

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Key Words

Bilingualism • Speech and language therapy

Abstract

This paper reports on the results of an international survey undertaken by the Multilingual Affairs Committee of the IALP, to investigate the intervention provided to bilingual children. Information pertaining to 157 children was obtained from 99 speech-language therapists in 13 countries. The survey addressed biographical details and language background of the children, the diagnosed communication disorder, language competence of the therapists, issues pertaining to the language of intervention, use of interpreters, advice given to parents regarding the use of each language, and possible results of intervention. The findings are specific to each country and related to the sociolinguistic context. Very few therapists provide bilingual intervention, although many have strategies for ensuring the development of both languages, such as advising parents to speak only the home language. Therapists were generally unable to provide quantifiable intervention results due to a paucity of assessment materials for bilinguals. The IALP Multilingual Affairs Committee used the results of this survey to develop guidelines for working with multilingual populations with communication disorders.

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The growth in bilingualism internationally, due to continued globalization and population movement, as well as increased official recognition of indigenous languages, has resulted in a corresponding increase in the number of bilingual and multilingual children in the caseloads of speech-language therapists. Bilinguals may be considered a special clinical population and thus pose a number of clinical challenges, which have been identified and discussed extensively in the literature [1–5]. The pertinent issues relating to comprehensive and accountable service provision for bilinguals include but are not limited to: assessment and therapy in at least two languages, which may be resource-intensive in terms of human and material requirements; appropriate counselling and advice for parents and teachers regarding the use of the two languages in the home and at school, as well as the language proficiency of the therapist(s) involved in the intervention. Furthermore, the sociocultural context in any particular country will determine relative language status and preferences, adding a further dimension to the management of bilingual clinical populations, and will undoubtedly affect service provision. In many countries, English for example has elevated status as the language of educational, social and economic empowerment [6]. These challenges require a thorough knowledge and understanding of the nature of bilingualism on both a societal and individual level, as well as application of the relevant theory and research to clinical practice. This

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study aimed to investigate how professionals in the international arena are dealing with these issues.

Bilinguals can be broadly defined as individuals who have been regularly and consistently exposed to two languages in a variety of contexts [7]. Cummins' 'common underlying proficiency model' [8, p. 132] of bilingualism suggests that the languages of bilinguals are not separate but interdependent and are served by the same underlying cognitive processes. This model implies that with adequate exposure to both languages, experience with either language can facilitate the development of the proficiency underlying both languages. In the case of clinical populations, the common underlying proficiency model also implies that it is not possible to have a language impairment in only one language, since the underlying impairment will affect the surface manifestation of both languages, thus emphasizing the need for assessment and treatment in both languages. Cummins [9] further proposes the 'interdependence hypothesis' claiming that the learning of a second language is dependent on the level of functioning in the first language. Cummins [9] found that a well-developed L1 facilitates the acquisition of a L2. The clinical implications of these well-documented frameworks and findings are important for speech-language therapists, who tend to assume that children with communication disorders will have more difficulty learning two languages than one and therefore advise against bilingual exposure in such cases. Another common error is that for various reasons, the home language is neglected in intervention leading to loss of the stronger language (L1) while the weaker language (L2), which is often the school language, is acquired, with potential negative effects on cognitive growth [8–10].

In general, the outcome of bilingual exposure and the resultant proficiency in each language is dependent on a combination of interacting variables including: various characteristics of the individual learner (such as motivation to learn the language and certain personality traits) as well as the quality and quantity of the exposure to each language and parental and societal attitudes to the languages [10].

Children with communication impairments who are exposed to bilingual language environments would presumably be as, if not more, susceptible to these influences as children with normally developing language. However, a number of additional factors, such as age of acquisition of the two languages, the type and severity of the communication impairment, and the amount and nature of therapy provided in each language, may determine the outcome of bilingual exposure for clinical populations.

Although the clinical applications of bilingualism [11, 12] have been well described and some, albeit insufficient, research [13–16] has been conducted to give direction in this regard, this is a domain of practice in which it would seem that the realities are very different to the ideals suggested by theoretical models. This study thus focused on determining how speech-language therapists are dealing with bilingual language-impaired children internationally. The survey questionnaire used in this study was devised by the Multilingual Affairs Committee of the International Association of Logopedics and Phoniatrics (IALP), who were ultimately concerned with developing best practice guidelines for working with bilingual communicatively impaired children.

Method

Aims

The specific aims of the study were to:

(1) establish biographic information on the bilingual communicatively disordered children in the caseloads of speech-language therapists in different countries, including: (a) their language background with respect to the languages used at home, in the community and in education, (b) the nature of their communication impairments;

(2) establish the language profiles and proficiency of the speech-language therapists participating in the survey in order to determine how well these are matched to those of the children they are treating in therapy;

(3) establish how the therapists were providing intervention for the bilingual communicatively disordered children in their caseloads, with respect to (a) the mode of intervention (monolingual or bilingual), (b) the rationale for the selection of language/s of intervention, (c) the manner in which the languages are included in therapy, (d) whether interpreters or co-workers are available and used in intervention, (e) any available results of the intervention in order to determine whether therapists have been able to measure whether their interventions are effective or not, (f) advice given to parents regarding the use of the languages at home;

(4) establish the therapists' assessment of parental attitudes towards maintaining the home language, as this affects the outcome of bilingual intervention.

Research Design

A quantitative, descriptive survey method [17] was employed in this study as it was considered to be the most appropriate method of obtaining the required information.

Participants

Selection Criteria

The subjects invited to participate in this study were required to be speech-language therapists and to be providing or to have provided intervention to bilingual communicatively impaired

Table 1. Number of respondents, number of questionnaires returned and languages spoken by the children in each country

	Belgium	Bulgaria	Canada	Denmark	England	Iceland	India	Israel	Malaysia	Malta	South Africa	Sweden	USA
Therapists	– ^a	12	3	23	1	1	13	8	7	4	25	1	1
Questionnaires returned	41	20	9	1 ^b	1	1	16	23	7	8	25	3	3
Languages spoken	Turkish Dutch French Arabic Moroccan Kurdish Mandarin Yiddish Hebrew Bengali English Greek Irish Spanish	Turkish Bulgarian	French English Punjabi Tamil Spanish Cantonese Romanian Russian Bengali Chinese		English Punjabi Urdu Bengali	Icelandic Galup Bisaya English	Kannada Marath English Malayalam Tulu Tamil Bengali Urdu Hindi French Japanese Telugu	Hebrew Russian Arabic Bulgaria English French Hungarian Portuguese	Hakka Cantonese English Bahasa Malay Mandarin Chinese	English Maltese	IsiZulu English	Swedish Spanish Portuguese Serbo-Croatian	Hindi English Spanish

^a It was not possible to establish how many therapists from Belgium responded because the questionnaires were sent back without therapist details.

^b Only one questionnaire was returned from Denmark but was said to represent 23 therapists.

children. This would ensure that they had the necessary experience to provide relevant and meaningful responses to the survey questions. For the purpose of this study children were considered to be bilingual if they were regularly and consistently exposed to and expected to communicate in two languages [7]. This was communicated to the participants when they were invited to take part in the study.

Sampling Procedure

The survey was initiated in two stages. Firstly, the chairperson of the Multilingual Affairs Committee of the IALP contacted 30 professional associations affiliated to the IALP, asking for details on the languages spoken in each country and for the names of therapists who would be willing to participate in the survey. Only 10 responses were received. The questionnaire was then sent via e-mail to speech-language therapists who had agreed to participate. Questionnaires had to be returned by a specific cut-off date and were forwarded to the South African member of the Multilingual Affairs Committee for analysis.

Description of Participants

Ninety-nine practicing speech-language therapists from 13 countries participated in this study. The countries include Israel, Malta, Belgium, India, Canada, USA, England, Sweden, Malaysia, Bulgaria, Denmark, Iceland and South Africa. All participants were treating at least one bilingual or multilingual child whom they referred to in responding to the questionnaires. They were required to complete one questionnaire for each child. The number of participants in each country, the number of questionnaires returned from each country and the linguistic contexts of each

country are provided in table 1. The children were exposed to any combination of the languages listed in table 1.

A total of 158 questionnaires were returned, indicating that many participants were treating more than one bilingual child. As is evident from table 1, there were more respondents and questionnaires from some countries than others and the results of the study should thus not be interpreted as representative of all therapists working in a particular country. Neither can the responses be interpreted as representative of all countries since the exact response rate could not be determined. As indicated above, only 10 responses were received when the initial letters were sent to the 30 affiliated societies.

The Questionnaire

The questionnaire was designed to allow the participating speech-language therapists to respond without revealing any personally identifiable information regarding the children or families referred to in answering the questions. The questionnaire addressed the following areas:

- (1) biographic information of the communicatively impaired sample, including age and gender, educational level and the language profile, specifying languages used at home, by the community and in the school environment;
- (2) a description of the communication disorder the child presented with;
- (3) the language profile of the therapist referring to the therapists' primary language and the therapists' proficiency in the language/s of intervention;
- (4) a description of the intervention with respect to mode of intervention (monolingual or bilingual); the reasons for the selec-

Table 2. Demographic information on communicatively impaired children

Demo-graphics	Sample	Children	
		n	%
Gender	male	62	98
	female	38	59
Age and school level	not of school going age (2–4 years)	8	11
	pre-school age (4–6.11 years)	39	54
	primary school age (7–14 years)	53	75
Communi-cation disorder	delayed language development	95.5	150
	articulation and phonology disorders	7.6	12
	mental retardation	6.4	10
	autism, delayed speech and language	1.9	3
	cleft palate, delayed expressive language	0.6	1
	stuttering	2.5	4
	pervasive developmental disorder	1.9	3
	dyspraxia	3.2	5
	selective mutism, global delay	0.6	1
	developmental dysphasia, attention deficit	2.5	4

tion of language/s of intervention; the manner in which the languages were included in therapy, what advice was given to parents regarding the use of the home language, whether interpreters were used in intervention as well as any available results of intervention;

(5) parental attitudes to maintaining the home language because this will influence the results of therapy. If parents lack an understanding of the importance of the L1 or do not convey a positive attitude to the L1, they will not aid the intervention process by enhancing the development of the L1 at home.

Data Analysis

The data was analyzed separately for each country according to the aims of the study and then organized into tables and figures. Where appropriate, raw data was converted to percentages for ease of comparison.

Results and Discussion

The results of the survey are presented in accordance with the aims of the study.

Biographic Information on the Communicatively Disordered Sample

Biographic details of the communicatively impaired children are provided in table 2. The information in table 2 indicates that the majority (n = 98) are male. This is to be expected as there is a higher reported incidence of communication disorders in males [18]. Furthermore, a

substantial proportion (53%, n = 75) of the children was of school going age. This may suggest that bilingual children with communication disorders are being identified primarily at this stage. There are a number of possible reasons for this. Firstly, the complexities of bilingual language acquisition and the fact that the young child's use of a particular language depends on sufficient input in that language may mean that it is difficult to distinguish a language impairment from lack of exposure to any particular language in the pre-school years. Some language structures may take longer to develop in bilinguals, and some bilinguals may know fewer words in one particular language than monolinguals who have only had to learn that single language, but on the whole, bilinguals know more words if their languages are combined [19]. This may mean that language impairments are difficult to identify early on and clinicians may not necessarily react to subtle language difficulties displayed by this population, attributing delays to the bilingualism, rather than impairment. They may be reluctant to overdiagnose language impairment at this early stage.

A variety of communication disorders were reported for the bilingual language-impaired children. Developmental language delay was by far the most common (95.5%, n = 150) possibly also in keeping with the fact that the questionnaire enquired specifically about this problem. However, the information in table 3 indicates that for 68 of the children, the participating speech-language therapists were able to provide test results in only one language, which would not provide a valid reflection of the bilingual children's abilities. The diagnosis of language delay is thus questionable in almost half (45.3%) of these cases.

Other reported co-occurring problems included articulation and phonology difficulties and language difficulties due to mental retardation.

The language profiles of the children, specifically referring to the number of children from bilingual or monolingual homes and the number of children in bilingual or monolingual education, are contained in table 4.

The majority of the children (71%, n = 111) come from bilingual homes. The remaining children (29%, n = 45) were exposed to additional languages outside the home (e.g. in school). This may imply that many of the children were simultaneous bilinguals, having learned both their languages early on in the home environment. Furthermore, for 75% (n = 118) of the children, education was primarily monolingual. This did not apply to children from Canada, Malaysia and Malta, where bilingual education policies seem to be in place. The provision of

Table 3. Reported results of intervention

	Belgium	Bulgaria	Canada	Den- mark	England	Iceland	India	Israel	Malaysia	Malta	South Africa	Sweden	USA	Total
No results available		20	6		1		3	17		6	25	3		81
Results in both			1					2		2				5
Results in one language	41		2			1	12	4	5				3	68

Table 4. Language exposure profiles of language-impaired children

	Belgium	Bulgaria	Canada	Den- mark	England	Iceland	India	Israel	Malaysia	Malta	South Africa	Sweden	USA	Total
<i>Languages in family</i>														
Bilingual homes	31	5	8	–	1	1	10	11	7	6	25	3	3	111
Monolingual homes	11	15	2	–	0	0	3	12	0	2		0	0	45
<i>Languages in school</i>														
Monolingual schooling	39	20	4	–	1	1	8	11	0	4	25	3	2	118
Bilingual schooling	1	0	5	–	0	0	3	4	6	4	0	0	1	24

Figures indicate number of children. – = Information not available.

monolingual education would mean that children need to be prepared to cope with the language demands of the school curriculum, and this in turn may strongly influence the language of choice for intervention. Therapists may believe that the child should function in the language of learning and teaching and concentrate on this language in therapy. This appears to be one of the commonly held beliefs amongst clinicians despite theoretical notions such as the interdependence hypothesis [8, 9], emphasizing the importance of the first language for the development of the second language, as well as research findings indicating that with sufficient support for the acquisition of both languages in the home, in school and in intervention, it is possible for language-impaired children to become bilingual, learning each of their languages to the same level of proficiency as monolingual language-impaired children [13].

Participant Language Profiles and Languages Used in Intervention

As is evident from figure 1, the majority (74%, $n = 73$) of the speech-language therapists who participated in the study were monolingual. In all of the questionnaires ($n = 158$) the participating speech-language therapists said

that they were fluent in the language of intervention, and figure 2 further indicates that in the majority of cases (87%, $n = 136$) participants reported using only one language for intervention. The implication of these findings in combination is that many therapists were providing therapy in their own language rather than the languages of their clients. The question then is whether they had in fact assessed both languages of the client and if so, how. It would not have been possible to identify a communication disorder if only one language was assessed. In the light of the recommendations in the literature, the clinical value and ethics of such practice can be questioned. In addition, it would seem that the lack of availability of bilingual clinicians is an international problem, and the question arises as to whether clinicians would provide bilingual therapy if they were able to. If providing bilingual therapy implies additional resources such as an interpreter or even another therapist who speaks the other language, the costs involved may be prohibitive in some countries. If, on the other hand, the therapist was able to speak the two languages, both could easily be incorporated into therapy, but the manner in which this would be done could vary. Since the questionnaire did not probe attitudes, beliefs and practices regarding bilingual thera-

Fig. 1. Proportion of monolingual and bilingual therapists.

Fig. 3. Rationale for choice of language of intervention.

Fig. 2. Proportion of children receiving monolingual and bilingual intervention.

Fig. 4. Advice given to parents about use of languages at home.

py, this question cannot be answered conclusively, but can be addressed in future research.

Monolingual intervention, particularly if provided in the child's second or weaker language, has been shown to be less effective than when intervention in L1 is followed by intervention in L2 [16]. According to figure 3, the decision about the language of intervention was reportedly made primarily on the basis of the language of the school, the language the child spoke, the language of the therapist, the language of the community and parental insistence, with language of the school and parental insistence emerging as the major determinants. This confirms that both parents and therapists feel under pressure to work in the language of education, so that the child will manage at school. The language of the community was also a deciding factor, suggesting that in many cases, the socio-linguistic context determines the use of a higher-status or more prestigious language in intervention.

The fact that only a limited number of therapists provide bilingual intervention is concerning as it is, according to the literature, the best practice for this population

[11]. In only 13% of cases (n = 21) the therapists reported that they provided bilingual intervention. These therapists were working in India, Israel, Malaysia, Malta and South Africa, and reported various approaches to providing bilingual therapy. They would either start with one language and switch to the other, or provide intervention simultaneously in both languages. Structured research projects comparing the effects of different modes of therapy on the development of both languages would provide valuable clinical information.

A further implication arising from the finding that most therapists are monolingual is whether proficiency in more than one community language should be a selection criterion for entry into speech-language pathology training programmes. It would be easier to answer this question if the proportion of bilingual clients in each country was known. In some countries, most clients are bilingual and the language proficiency of therapists is an ethical-professional issue, necessitating investigation and regulation of selection practices.

Table 5. Reported use of interpreters in intervention

	Belgium	Bulgaria	Canada	Denmark	England	Iceland	India	Israel	Malaysia	Malta	South Africa	Sweden	USA	Total
Use of interpreters														
Yes	5	1	2	1			9	2	1		7		1	29
No	36	19			1		6			8	18	3		91

Table 6. Parental attitudes towards maintaining the home language

	Belgium	Bulgaria	Canada	Denmark	England	Iceland	India	Israel	Malaysia	Malta	South Africa	Sweden	USA	Total
Number who are														
Positive	52	33	7		2	1	10	30	8	11	25	1	6	188
Negative	4		10			1	8	4	2			5		34

Assessment of Intervention Effects

The reported effects of intervention are reflected in table 3. For the majority of children ($n = 81$) the therapists were unable to provide test results. The reason given was that there are no available formal tests appropriate for the assessment of bilingual children. As a result, informal assessments were done and scores were reserved for comparison over time.

The Use of Interpreters/Translators

The reported use of interpreters in intervention is reflected in table 5. In only 18% of cases ($n = 29$) did the respondents use interpreters either during assessments or intervention. Of these, 12 have trained interpreters available while the others ($n = 17$) reportedly used parents, siblings or the client to interpret during the sessions. According to Miller and Abudarham [20], suitable speech-language interpreters must fulfill a number of principal requirements, which include mastery of both the languages, as well as the ability to transmit exactly what the therapist has requested. Furthermore, the interpreter should be willing to maintain a neutral role in order not to dominate the session. Parents' personal involvement in their children's therapy may thus hinder the therapy process in the end, as they are unlikely to remain neutral. The need for trained interpreters or co-workers is highlighted by these findings, but also implies additional requirements for resources.

Parental Attitudes to Maintaining L1

The reported parental attitudes towards maintenance of the home language are reflected in table 6. The majority of the parents ($n = 188$) held positive attitudes to maintaining the home language. This applies to both parents and is an encouraging finding, as according to de Houwer [21] and Arnberg [22], the successful development of bilingualism in children is certainly partly dependent on parental beliefs regarding bilingualism and attitudes to the languages used. Importantly, this means that parents will ensure the continued development of the first language, which is so critical for bilingual acquisition.

Various authors have stressed the importance of parent counselling regarding the maintenance of the home language as part of the intervention process for bilingual impaired children [11, 12]. As is evident in figure 4, in the majority of cases the participants advised the parents to speak the L1 only, while intervention is provided in the L2. Since therapists often advise against the use of the L1, which is seen as a threat to the learning of the school language (L2), this is an encouraging finding in that support for the development of the L1 is then ensured. On the other hand, it is also another indicator that therapists are generally in doubt over the impaired child's ability to cope with bilingual exposure, and do not advise parents to use both the L2 and the L1. There is no reason why parents cannot also converse with their child in the L2, provided they are proficient.

Conclusion

Although the results of this study are based on a survey of a limited number of therapists and cannot be generalized beyond this sample, they do suggest that clinical practice with bilingual children is not always based on research findings and theoretical positions in the literature. One of the most important issues is the lack of provision of bilingual therapy, and particularly, support for the development of the L1 in therapy. While considerations such as the language of education and status of various community languages do play a role, it would seem that therapists who provide services to those with communication disorders have an ethical obligation to maintain an objective view, where no language is regarded as superior to or more important than any other language, and all languages that the child needs to communicate on a daily basis need to be considered in therapy, not just one of them. Other commonly held beliefs underlying the continued provision of monolingual therapy are possibly that bilingualism is not the norm and that children with language impairments cannot cope with the acquisition of more than one language. These notions are hitherto unsubstantiated in the literature, particularly where simultaneous acquisition of two languages is concerned, and should be viewed critically by therapists. Once there is acceptance of the benefits of bilingual intervention to the child and his/her family, clinicians will be more willing to take up the challenge, and broader

professional issues such as the therapists' proficiency in the languages of intervention, and their planning of effective bilingual intervention will be addressed.

As indicated in the 'Introduction', a secondary aim of this research was for the Multilingual Affairs Committee of the IALP to develop best practice guidelines for working with bilingual populations. The results of this study have provided some direction for this, and the guidelines have in fact been published [23].

A further implication for training programmes in particular would be the inclusion of a requirement for high levels of proficiency in at least two community languages as well as a professional obligation to train and use interpreters effectively. This would also involve a commitment on the part of employing bodies and service providers to make interpreters or bilingual co-workers available, even if this involves additional financial resources.

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