WHEN IS ENOUGH ENOUGH?

Articulation Therapy Dismissal Considerations in the Public Schools

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There are little objective data available to help the speech-language pathologist decide when and why to dismiss a child from therapy. This is true across disorder categories but is of particular concern with regard to articulation disorders, since children with articulation difficulties constitute one of the largest groups receiving services. Bosley (1981) states that she was taught "the client was not through with speech training until he was carrying over the new phonemes into conversational speech of all kinds nearly 100% of the time" (p. 123). This suggests the possibility that clinicians expect perfect articulation from clients before considering them ready for dismissal.

The range of suggested terminal behaviors, or descriptions of what a child's articulatory behavior should be at the end of therapy, varies widely. The programmed approaches which specify a behavioral objective usually define it as 90-100% accuracy within conversational speech (Gerber, 1977). Following their four-year longitudinal study, Diedrich and Bangert (1980) suggested that therapy cease when sound proficiency levels are above 75% in conversation on two consecutive probes, one to two weeks apart. There do not appear to be any generally accepted rules regarding when to dismiss a child from articulation therapy.

Hodson and Paden (1983) do report that their requisite for dismissal of phonologically disordered children (3 years 6 months to 8 years 9 months) from a university speech clinic was that the child be judged to be essentially intelligible by significant persons in his or her environment. In addition, the child had to show "a substantial reduction of Percentage—Of—occurrence scores from pretest [of a phonological assessment] and all basic patterns, including liquids, must be beginning to emerge" (p. 57). In other words, Hodson and Paden do not set a predetermined criterion for achievement of a phonological pattern. Therapy is targeted on several patterns during a two- to four-month cycle and the patterns may be recycled one or more times.

With only limited empirical data and without well-defined clinical standards to determine when a child has had sufficient therapy, clinicians may feel a conflict between their desires to be conscientious and altruistic and the demands to have realistic and reasonable expectations for clients.

A number of factors may affect the decision regarding when to dismiss a child from therapy. Van Hattum (1982) observes "that general considerations for dismissal may be related to the type of disorder" (p. 551). Others urge that attention be directed to the client's physical, mental, or emotional capabilities (Weiss, Lillywhite, & Gordon, 1980), desire or motivation to change (Weiss, Lillywhite, Gordon, 1980; Bosley, 1981; Van Hattum, 1982), and flexibility, effectiveness of self-monitoring, and parent effectiveness (Bosley, 1981). Kemp (1983) cautions consideration of the ethical, educational, emotional, and monetary implications of dismissing a child from therapy prematurely or prolonging a child's intervention when it is no longer effective.

What then is the point at which dismissal from therapy is indicated? When is enough, enough? The present study was undertaken to examine current articulation therapy dismissal criteria used by public school speech and language clinicians and to identify which factors contribute to dismissal decisions.

Method

Subjects

Forty-eight speech and language clinicians working in a large suburban public school service agency surrounding the city of Pittsburgh were included in this investigation. Twenty-one of these individuals were bachelor's degree level clinicians and 27 held master's degrees. Nineteen clinicians (39.5%) held the Certificate of Clinical Competence awarded by ASHA; one other was completing the Clinical Fellowship Year (CFY). Their clinical experience range from two years to 22 years with an average of 9.83 years.

All of the 461 students who were dismissed from articulation therapy during the 1983 school year were included in this study. These children demonstrated normal hearing acuity and normal intelligence. They were not enrolled in any special education program with the exception of articulation therapy. In order to be formally enrolled in articulation therapy, each student had to meet the program entry criteria. These criteria specify a one year delay in articulation development as defined by the studies of Poole (1934), Sander (1972), and Templin (1957). During the last year of therapy, each child was receiving group therapy on a once weekly basis.

Procedures

The purpose of the study was explained to the staff of speech and language clinicians at a meeting held in the middle of the school year. The clinicians received a form to complete on each student, which asked for the following information: a) the proficiency level used in determining when a child was ready for dismissal (this criterion was to be reported as a percentage of correct responses); b) the length of time the proficiency level was to be retained by the student before dismissal; c) the unit of production (word, sentence, oral reading or conversation) at which proficiency was required; d) their opinions about what factors contributed most to the student's ultimate success in therapy (specifically, open-ended questions were used to identify what the clinicians felt the successful student brings to the therapy process); e) their opinions about what factors contributed most to their decisions to dismiss a child from articulation therapy (open-ended questions were again used to obtain this information).

Results

The students involved in this study were in grades kindergarten through 12 and were

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working on various sounds* (see Table 1). In as much as data sheets for 18 subjects were incomplete, this table is based on the data from 443 of the 461 subjects included in the study. Noteworthy is the large number of students dismissed at the end of grades two (21.7%) and three (24.6%) and the large percentage of students who were in therapy for the correction of /s, z/, (41.3%) or /r/ (30.8%). On the average, students had spent 20.92 school months (eight months of therapy is equivalent to one school year) in therapy. The number of school months spent in therapy ranged from four to 72. During the last year of therapy, a range of one to ten phonemes, with a mean of 1.68, was targeted for treatment.

Proficiency Levels Used for Dismissal

For each of the students dismissed from articulation therapy, the clinician indicated the accuracy level used in determining the child's readiness for dismissal. The mean dismissal criterion used by participating clinicians across sounds was 93.35%, with a range of 90% to 100% (SD = 7.74). This limited range in dismissal criteria made it unnecessary to analyze separately the data with respect to certification status, educational level, and years of experience of the clinicians. A standard deviation was computed, however, for each clinician to determine the individual variability of dismissal criteria across students and/or sounds. Results indicated that 35.4% (17 out of 48) of the clinicians used the same criterion for dismissing all children on their caseloads who were involved in this study.

*The term "sound" was used on the survey data sheet.

Length of Time Proficiency Levels Were Retained

The clinicians were asked to report the length of time (in weeks) they required students to retain their articulation proficiency before they actually dismissed the students from therapy. Table 2 presents these data. As can be seen from the table, approximately half (50.6%) of the students were required to maintain their dismissal proficiency levels in the therapy setting for five to eight weeks before they were discharged from therapy.

Unit of Production Required

With respect to whether the dismissal proficiency criterion was retained at the word, sentence, oral reading or conversation level, clinicians reported dismissing almost all (99.8%) of the children when the desired accuracy was maintained at the conversation level. For the remainder of the students, accuracy of production was required at the sentence level. Thus, clinicians, regardless of their educational and professional background, agreed that students must demonstrate conversational proficiency prior to dismissal from articulation therapy.

Factors Which Contribute to Dismissal Decisions and to Ultimate Success in Therapy

Clinicians were asked to state the one factor that they thought contributed most to: 1) their decision to dismiss each child from articulation therapy at that time; and 2) each child's ultimate success in therapy. Two of the authors reviewed all of the responses and established 11 response categories (see Table 3). During a second review the responses were placed in these categories. The other two authors randomly crosschecked 20% of the responses to assure agreement in classification of responses. Inter-rater reliability reached 88.6%. In reviewing the clinicians' responses it appeared that many of the same reasons were cited as both contributing to success and affecting decisions to dismiss. Thus, the same categories were used in analyzing the responses to both questions.

As shown in Table 3, the clinicians' decisions to dismiss children from therapy were, in the overwhelming majority of cases (90.2%), based on the children's demonstrated level of mastery. Other factors were not considered nearly as often in determining readiness for dismissal.

Regarding factors contributing most to success in therapy, clinicians cited student

Table 1
Number of Students Dismissed by Grade and Error Sound

Grade	Error Sound	/r/ /ɝ/ /ɚ/	/s/ /z/	/θ/ /ð/	/ʃ/	/l/	multiple	other	Percentage of Students Dismissed by Grade
K		2	3	0	0	0	9	0	3.2
1		13	10	4	1	4	13	0	10.2
2		34	33	5	2	2	19	1	21.7
3		32	51	9	0	3	14	0	24.6
4		11	33	1	1	1	12	0	13.8
5		19	26	0	0	0	6	0	11.5
6		7	11	6	1	1	6	0	7.2
7		5	8	0	0	0	1	0	3.2
8		7	5	1	0	0	1	0	3.2
9		1	2	0	0	0	0	0	.7
10		1	1	0	0	0	0	0	.5
11		0	0	0	0	0	0	0	.0
12		2	0	0	0	0	0	0	.5
Total # of Students =	443	(134)	(183)	(26)	(5)	(11)	(83)	(1)	100%
Percentage of Students Dismissed by Error Sound		30.8	41.3	5.6	1.1	2.2	18.6	.2	100%

Table 2
Number of Weeks Dismissal Criterion Maintained

Length of Time in Weeks	Number of Students	Percent of Students
4 or fewer	73	16.5
5-8	224	50.5
9-12	77	17.4
13-16	26	5.9
16 or more	43	9.7
Not reported	18	—
	461	100%

Table 3
Factors Contributing Most to Clinicians' Dismissal Decisions and Clinician's Perceptions of a Child's Success in Therapy According to Percent of Students

Factors	Dismissal Decisions	Success in Therapy
1. Attitude, interest and motivation	5.2%	41.9%
2. Parents' attitude and homework	.7%	15.6%
3. Attendance		.4%
4. Length of time in therapy	.7%	2.0%
5. Graduation	.2%	.7%
6. Awareness	1.3%	12.3%
7. Parent request for dismissal	.4%	
8. Stimulability, ease of production	.4%	1.5%
9. Sound mastery	90.2%	2.2%
10. Clinician's competence		12.8%
11. Other	.9%	10.6%

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attitude, interest in and/or motivation for articulation change for 41.9% of the students. Parents' attitude and homework completion, clinician's competence and sound awareness* were the next most frequently cited factors and represented from 12.3 to 13.6%. Approximately 10.6% of the responses did not lend themselves to inclusion in the ten pre-established categories. The low frequency with which these responses occurred made it reasonable to group them in one category designated as "other." Exemplars include: maturation, dentition, peer influence, and reinforcement from classroom teacher.

Discussion

This study examined current practices and attitudes regarding dismissal of students from articulation therapy. The results suggest that clinicians require a high level of articulation performance, (approximately 95% accuracy in conversational speech) before recommending dismissal from therapy. The selection of a dismissal criterion varied little across clinicians despite differences in their clinical training and professional experience.

Approximately half (50.6%) of the students continued in therapy for five to eight weeks after criterion was reached. This observation was almost identical to that reported by Diedrich and Bangert (1980), who found that clinicians kept children in therapy for an additional six to eight weeks after a criterion of 100% accuracy in conversation within the session was reached. Similarly, Van Hattum (1982), in examining the length of time articulation-impaired children remained in therapy, reported that 50% of therapy was devoted to the child's demonstrated retention of terminal articulatory behavior. These findings raise the question of why clinicians continue children in therapy after criterion has been achieved and whether this practice is necessary.

Sound mastery was the most frequently cited reason for dismissing children from articulation therapy. It should be recalled that sound mastery was viewed by participating clinicians as 90-100% proficiency in conversational speech. This finding is thus consistent with the opinion expressed by Bosley (1981).

Over half (57.5%) of the children dismissed were viewed by their clinicians as having been successful in therapy because of the motivation and attitude with which the student or parents approached the therapy process. This underscores the importance, at least as perceived by clinicians, of attitude toward and student responsibility for improvement in speech production.

Clinician competence was cited as contributing to success in therapy for 12.8% of the students dismissed. Obviously, this factor is not bound to either individual children or sounds, but emphasizes the clinician's role in effecting change in articulation.

This study suggests that clinicians almost uniformly have adopted conversational proficiency levels in excess of 90%. Clinicians might be more comfortable in using a criterion level of less than 90% if they have evidence that articulation growth would continue without direct intervention. Studies by Diedrich and Bangert (1980) and these authors (Chabon, Eger, Cushman, & Mient, 1985) may provide some of this support.

The problem remains, however, in knowing when enough is enough. Although it was confirmed that most clinicians establish goals of near-perfect speech for their articulation-impaired children, these objectives may not be realistic or necessary. At this point, a number of options are possible to provide practicing clinicians with some basis for making dismissal decisions. They can rely on their own and other's experience and continue to use criterion levels of 90-100%. They can modify proficiency levels to fit the needs of individual children or, alternatively, they can put the question to scientific test and systematically assess the value of adhering to stringent criteria. It may be time for speech and language clinicians to reconsider the dismissal criteria used and base future decisions on empirically based standards of quality rather than a prior notions of acceptability. ASHA

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*The term "sound awareness" was selected from the open-ended answers supplied by the participants.