PRINCIPALS' AWARENESS OF PUBLIC SCHOOL SPEECH AND LANGUAGE PROGRAMS

A Thesis
by
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ABSTRACT

PRINCIPALS' AWARENESS OF PUBLIC SCHOOL SPEECH AND LANGUAGE PROGRAMS. (May 1982)

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The purpose of this study was to determine the awareness that North Carolina elementary school principals have of the speech and language program in their schools.

To measure the degree of awareness of principals, this study correlated principals' responses to a telephone questionnaire with the responses of speech-language pathologists. Fifty randomly-selected North Carolina elementary school principals and their speech-language pathologists served as subjects in the study. Each principal was telephoned and after the purpose of the interview was explained, was administered a fifteen-question questionnaire. The speech-language pathologists working within the target schools were then called and administered the same questionnaire.

Using the Wilcoxon matched-pairs signed-ranks test, the degree of correlation between the
respondents was calculated. Based on the results, there was a significant difference at the .05 level of significance, between the responses of principals and responses of speech-language pathologists for seven items analyzed. Those seven items were: number of children being served by the speech-language pathologist, grades being served by the speech-language pathologist, number of students being seen for speech therapy on an individual basis, number of on-site observations by the principal, grades being screened for speech and language problems, grades being screened for hearing problems, and the amount of money being allotted to the speech and language program.

Principals and speech-language pathologists agreed on eight of the questions. However, principals and speech-language pathologists did not agree on seven of the questions, concluding that there is a discrepancy between the way that the two groups perceive the speech and language program. Therefore, principals and speech-language pathologists must make a joint effort to increase the level of awareness that principals have of the speech and language program.
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Special thanks also go to Dr. Edward C. Hutchinson and the Department of Speech Pathology and Audiology for assistance and cooperation in the study. In addition, thanks go to Dr. Deanna Bowman and her staff for assistance in computing the statistical analysis.

The author extends appreciation to the principals and speech-language pathologists throughout North Carolina who served as subjects for the study.

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Chapter 1

INTRODUCTION

Statement of the Problem

In order for a public school speech and language program to be successful, it is essential for speech-language pathologists to have the support and cooperation of school personnel including administrators, teachers and other school specialists (Phelps & Koenigsknecht, 1977). Of these three categories, the support and cooperation of principals is most essential, since speech-language pathologists must be accountable to their principal while working in a school. Principals' attitudes toward speech, language and hearing can "make or break a program" (Neidecker, 1980). Principals are responsible for assigning the room for therapy, informing the speech-language pathologist about school regulations, assisting in scheduling of therapy, interpreting the program to other members of the staff, and informing parents concerning speech and language disordered children (Neidecker, 1980; Dougherty, 1979). Therefore, it is important that principals be aware of the purpose of
the speech and language program as well as the way the program is implemented.

Since principals' support and awareness are so important to the speech and language program, it is the duty of speech-language pathologists to inform them about all aspects of the speech and language program. Principals need to know the number of children receiving speech and language services, screening procedures, the speech-language pathologist's schedule, and amount of money being spent on the speech and language program. Speech-language pathologists need to know what, if any, aspects of the speech and language program principals know as well as those areas that they are not aware of. The degree of awareness that principals have of speech and language programs has not been previously reported in the literature. Until speech-language pathologists know the awareness of principals, they may not know how to educate or inform principals concerning the speech and language program. Furthermore, the speech and language program cannot operate efficiently without the cooperation of a knowledgeable principal (Neidecker, 1980).

**Purpose of the Study**

The purpose of this study is to determine the degree of awareness that elementary school principals have of the speech and language program in their schools.
Null Hypothesis

There is no significant difference in overall awareness of speech and language programs between selected principals and their respective speech-language pathologists at the .05 level of significance.

Methodology

By administering a telephone questionnaire to a random sample of North Carolina elementary school principals and their speech-language pathologists, the degree of correlation between the two persons' responses will be determined using the Wilcoxon matched-pairs signed-ranks statistical analysis.

Definitions

Elementary school principal. For the purposes of this study, a principal will be in the public schools of North Carolina with an enrollment of kindergarten through grade four, kindergarten through grade five, or kindergarten through grade six.

On-site observation. Any time that an elementary school principal observes the school speech-language pathologist conducting speech and language therapy with children for the purpose of assuring adequacy of performance of school personnel.

In-service program. Programs designed to provide teachers or other staff members with opportunities to
increase their knowledge, insight, understanding and skills in working with handicapped (including speech and language disordered) individuals (Gearheart, 1976).

Assumptions

1. Speech-language pathologists in the study are assumed to be giving the true and accurate responses to the questionnaire.

2. Principals in the study are assumed to be responding to the questionnaire in the study without the aid of notes or advice from the speech-language pathologist or other school personnel.

3. The questionnaire in the study is assumed to be statistically valid.

4. The questionnaire in the study is assumed to be statistically reliable.

5. The degree of correlation determined in the study is not related to the effectiveness of the principal.

Significance of the Study

Phelps and Koenigsknecht (1977) indicate that future research is feasible regarding the assessment of attitudes toward speech and language services of educational specialists including principals. Without the understanding and cooperation of the school principal, it would be very difficult to have a successful speech and language program (Neidecker, 1980). If
principals are not knowledgeable about the exceptional children's program, and more specifically the speech and language program, that needed understanding and cooperation will not be forthcoming (Cline, 1980).

It is important to determine the degree of awareness of principals concerning the speech and language program. Only when that awareness has been determined can speech-language pathologists begin measures to educate principals. Such measures include in-service programs, invitation to observe therapy or involvement in interpretations of the program (Neidecker, 1980). Determining principals' awareness toward speech and language programs, as this study will attempt to do, is a necessary step in a series of events leading to well-informed administrators and the attainment of their cooperation.
Chapter 2

REVIEW OF RELATED LITERATURE

Introduction

The awareness that principals have of the speech-language pathology program in their schools has not been specifically reported in the literature. However, related areas such as principals' attitudes toward special education are cited. The attitudes and relationships of classroom teachers toward special education and more specifically toward speech and language programs are cited. Before examining the relationship between the speech-language pathologist and principals or teachers, it is necessary to examine the role of the speech-language pathologist in the schools since speech-language pathologists are no longer considered an auxiliary service but an essential part of the school curriculum. As a result, the role of the public school speech-language pathologist has changed significantly and the awareness and support of principals is more essential than ever before.

Role of the Speech-Language Pathologist in the Schools

The role of the speech-language pathologist has undergone significant change (Garrard, 1979). This is
evidenced by the change in the descriptive terminology labeling our profession. Some of the terminology used includes: speech and hearing therapist, speech and language clinician, speech correctionist, speech teacher, communications specialist, communicologist, and the term currently endorsed by the American Speech and Hearing Association (ASHA), speech-language pathologist (Neidecker, 1980; Healey & Dublinske, 1977).

Ainsworth (1965) referred to two types of speech-language pathologists in the schools, the separatist and the participant. The separatist fulfills the responsibilities of diagnosing and remediating communication disorders in children. In addition to these responsibilities, the participant also must make suggestions to teachers and principals concerning communicatively disordered children and must become involved in the school. Similarly, VanHattum (1969) suggested that the speech-language pathologist be a member of an educational team, consultant, counselor and researcher.

O'Toole and Zaslow (1970) suggested that a good speech and language program "enriches the understandings of teachers, principals, school administrators and the public" (p. 50). This enrichment should be accomplished by informing those people
about the impact of communication disorders on academic achievement.

Bown (1971) concluded that the changing role of the speech-language pathologist should expand from diagnosis and remediation of communication disorders to orientation toward total verbal communication and development of a speech improvement program employing the services of volunteers and aides.

During the decade of the 1970s, the role of the speech-language pathologist expanded beyond the exclusive diagnosis and remediation of speech and language disorders. Ideas and recommendations for other responsibilities for the speech-language pathologist varied. One proposal was the diagnosing and implementing of group and individual programs in the developmental aspects of reading (Gruenewald & Pollack, 1973). A second suggestion was for the speech-language pathologist to serve as consultant for classroom teachers who have students with minimum deficits in auditory processing that might affect their performance in the classroom. Garrard (1975) stressed the need for speech and language programs to be implemented at the preschool level since regular teachers cannot handle the increased number of handicapped students in preschool. Dopheide and Dallinger (1975) reported on a pilot program where the speech-language
pathologist had a workshop for teachers so they could better cooperate with the speech-language program. Charlann Simon (1977) summarized specific ways in which the speech-language pathologist and learning disabilities specialists could cooperate to provide necessary language services to those children who need it. Pickering and Kaelber (1978) reported a project where kindergarten and first grade teachers in a rural school system were taught by a speech-language pathologist to integrate language development into their classrooms.

Gearheart and Weishahn (1976) stated that additional duties of the speech-language pathologist should include providing audiological services for the hearing impaired, working with the learning disabilities teacher, conducting specialized testing as part of a district diagnostic effort, and providing speech and language services at special schools for the physically handicapped, cerebral palsyed or multihandicapped.

Falck (1978) stated that even though the roles and responsibilities of the speech-language pathologist are varied and changing, their competencies "must reflect an ability to work with children, with other members of a team, with parents and with significant others within the community" (p. 75). According
to Falck, the contributions of the speech-language pathologist in addition to direct services to children with communication disorders, may be to provide: services to prevent deviation of communication, early intervention strategies in the classroom, support of other people who help children with serious communication disorders and support services for people who are members of a team. These contributions have been made only by "expanding the conceptualization of speech-language pathologists and by providing assistance for parents and teachers" (p. 76).

Blanchard and Nober (1978) concluded that due to state and federal legislation, the role of speech-language pathologists has expanded "into a more general educational arena," which is evidenced by high interest and involvement with decision-making participation in training and interacting with other specialists.

Due to the changing role of speech-language pathologists, Garrard (1979) stated that it has been necessary for speech-language pathologists to re-evaluate their responsibilities and competencies in the public schools. In the past, speech-language pathologists followed a model of taking children from their classrooms and working with them in a therapy room separate from the class. Garrard suggested
alternatives for speech and language therapy including language disabilities classes and speech and language resource rooms. In addition, Garrard advocated expansion of higher education training programs, treatment of total communication behavior, and establishment of program alternatives.

Neidecker (1980) suggested that in addition to working with children with disorders of articulation, language, voice, fluency or with hearing impairments, the speech-language pathologist should not neglect children with speech, language and hearing problems associated with cleft palate, cerebral palsy, intellectual impairment, visual impairment, emotional and behavioral disturbances and autistic behavior. The roles of speech-language pathologists may include being a community resource person, a supervisor for student teachers and a researcher in the areas of speech and language that can be applied to public schools.

Relationship with the Classroom Teacher

As part of their changing role, speech-language pathologists have had to attain the cooperation of the classroom teacher (Neidecker, 1980). It has been essential that the classroom teacher understand the speech and language program. If speech-language pathologists have the assistance of a knowledgeable,
interested classroom teacher and if they help these teachers know what to do with communicatively disordered children, services will be much more effective (Gearheart & Weishahn, 1976). Neidecker (1980) provided some specific ways the classroom teacher can show support for the speech-language pathologist:

1. The teacher can provide a classroom environment that will encourage communication.

2. The teacher will not exclude the child with a communication disorder from any activity in the classroom.

3. The teacher is also a teacher of speech and language by example of his/her speech and language (p. 131).

Dopheide and Dallinger (1975) reported a pilot program involving a workshop conducted for classroom teachers by speech-language pathologists. The goal of the program was to help teachers improve their cooperation in helping communicatively disordered children.

Gruenewald and Pollack (1975) suggested that teachers receive aid in teaching reading from the speech-language pathologist because of the speech-language pathologist's knowledge of auditory processing. The utilization of the speech-language pathologist as a consultant to suggest materials for
the teacher who has communicatively disordered children was suggested by Cafaro (1973). Gearheart and Weishahn (1976) suggested that if the speech-language pathologist helps teachers know what to do with communicatively disordered children, the speech and language program will be more effective. Pickering and Kaelber (1978) designed a project to help kindergarten and first grade teachers in a rural school to integrate principles of language development into the regular classroom.

Teachers may be more cooperative if they are knowledgeable about the speech and language program. Along with knowledge, the classroom teacher must have a willing attitude to work with the speech-language pathologist. The attitudes of classroom teachers toward the speech and language program can be found in the literature as long ago as 1954, when Lloyd and Ainsworth interviewed fifty-five teachers concerning the speech and language program at their respective schools. The implications of the study were that teachers want to be more helpful with children exhibiting speech and language problems but feel they need more training. A later study (Clauson & Kopatic, 1975) also concluded that teachers are aware of their strengths and weaknesses in understanding communication disorders, but doubt as to whether they would be
willing to expand their knowledge concerning speech and language problems.

Phelps and Koenigsknecht (1977) applied the Scale of Educators' Attitudes toward Speech Pathology (SEASP) to investigate the attitudes of classroom teachers toward public school speech and language programs. The results of the study showed that teachers hold a moderately favorable attitude toward the work done by the speech-language pathologist. The target population also agreed: first, that caseloads were too large to provide satisfactory services; second, that many educators were apathetic toward speech and language problems; and finally, that insufficient time was allotted to each child.

Ruscello et al. (1980) used the Scale of Educators' Attitudes toward Speech Pathology in two rural county school systems. These results were similar to those of Phelps and Koenigsknecht in that overall, rural teachers positively perceived speech and language programs. The teachers once again expressed a feeling that caseloads were too large and that time spent in remediation was insufficient.

Signoretti and Oratio (1977) suggested that the following affect teachers' attitudes toward the speech and language program: (1) planning, (2) knowledge,
(3) relationship with other educators, and (4) relationship with children.

Support of the Principal

It is essential for the speech-language pathologist to have the support and cooperation of the classroom teacher; however, the support and cooperation of the school building principal can be more important. Twenty years ago, McCausland (1962) best summarized the importance of the principal even as it is today:

The school principal plays a very important role in the success of a speech program. They assign the room for speech therapy—a room we hope, that is well-ventilated, properly heated, uncluttered and free from unnecessary noise and disturbances. It is the school principal who orders equipment and general supplies for the speech program in his school. One of his most valuable contributions is the enthusiastic support he lends to the program (p. 147).

The relationship between the school principal and the speech-language pathologist has not been frequently cited in the literature; however, principals' relationships toward general special education can be found in the literature several times since 1978.
With the passing of Public Law 94-142, The Education of All Handicapped Children Act of 1975, the role of the principal changed but no guidelines for principals were specifically included in the law. Mann (1978) suggested that the principal be responsible for dealing "with problems of litigation, redefinition of roles, in-service programs for staff, funding, time for meetings, parent involvement and the labeling of students" (p. 16).

The study of Lietz and Towle (1978) attempted to determine the degree of responsibility principals take in the operational and decision-making functions of PL 94-142 and its subsequent programs. In this investigation principals were assigned to twenty-seven such functions. The results implied the need for clear guidelines as to the role of the principal in special education.

Nevin (1979) provided some competencies that are required of principals in dealing with special programs. A list of forty-seven statements were submitted to general education administrators. They rated the competency statements as either not needed, useful, important, or essential. The results of this study showed the following to be considered essential competencies of principals: assuring due process, interpreting federal and state laws, using appropriate
leadership styles, resolving conflicts between personnel, using evaluation data to make program revisions and determining the functions of staff.

Gage (1979) in "The Principal's Role in Implementing Mainstreaming" wrote that principals know what staff members are doing, encourage respect for children, emphasize self-concepts, exhibit a positive attitude toward the school and its programs, provide alternative learning opportunities for all students and reinforce effective home-school relationships.

Principals' influence on programs for educationally handicapped children was investigated by Lietz and Kaiser (1979): principals responded as to what they considered to be the ideal responsibility in twenty-seven operational and decision-making tasks of special education. They were also asked to report their responsibilities thus far, in the same twenty-seven functions. There was a significant difference between what administrators perceive as an ideal state and the actual state of their decision-making responsibility. There were significant differences in the real state and ideal state of principals' responsibilities in screening for exceptional children, performance and coordination of staff in-service, service delivery planning including interpretation of test results, the selection of professional staff,
delegation of duties to staff members and evaluation of professional staff. Overall, the administrators indicated a desire for increased responsibility in the education of handicapped children.

The principals' role in the actual implementation of Individualized Education Programs (I.E.P.s) included an orientation for a handicapped child placed in a classroom, an explanation of handicaps to other children and assistance to classroom teachers in instructing handicapped children by decreasing class size and giving them time to attend I.E.P. conferences (Dougherty, 1979).

Robson (1981) conducted an investigation to determine the administrative role of those who deliver special services to handicapped children (including special education directors, elementary school principals, regular classroom teachers and special education teachers). Robson concluded that principals should take responsibility for all that is within their building, for organization of maintenance of special education and for direction of personnel.

The role and responsibilities of the principal in general special education can be applied to speech and language programs. The principals also can make contributions specifically to the speech and language program. According to Neidecker (1980), the principal
could be responsible for an adequate working space, providing equipment and supplies, acquainting the speech-language pathologist with school policies, assisting the speech-language pathologist in scheduling, integrating the speech and language program into the total school program and acting as a liaison between the speech-language pathologist and the community.

In a study of Davis (1980), principals ranked types of handicapping conditions as to how children with these conditions would succeed being mainstreamed into the regular classroom. Of the twenty-one handicapping conditions in the survey, mild speech and language disorders were second, moderate speech and language disorders were seventh, and severe and profound speech and language disorders were fifteenth.

A study to emphasize the current knowledge level of principals was cited in 1981. Cline used the Rucker-Gable Educational Programming Scale (RGEPS) to gather data as to the attitudes of principals toward three categories (mild, moderate and severe) of mental retardation, emotional disturbance and learning disabilities. Cline concluded:

1. Presence or absence of a special class or program within a school does not appear to influence the principal's
attitude toward or knowledge of exceptional children.

2. The attitudes held by principals toward exceptional children compare favorably with those held by experts in all areas except mild.

3. In all areas examined, principals demonstrate significantly less knowledge than experts regarding placement and those with less than 10 years' experience are more knowledgeable than those with more experience (p. 173).

The most recent and pertinent study on attitudes of principals toward public school speech and language programs was by Phelps and Koenigsknecht (1977). They constructed the Scale of Educators' Attitudes toward Speech Pathology (SEASP), based on evaluative statements from public school speech-language pathologists. The subjects in the study were thirty school principals, thirty learning disabilities specialists, thirty classroom teachers of Grades 1-3, thirty classroom teachers of Grades 4-6 and thirty speech-language pathologists. The subjects were selected from elementary schools in Chicago. They completed the SEASP by rating statements concerning the speech-language program as either strongly agree, agree, no opinion,
disagree or strongly disagree. The results indicated that principals have a lower overall score than speech-language pathologists. The range of the principals' scores indicated a moderately favorable attitude toward speech and language programs. The principals' standard deviation and range of scores indicated the principals possess the most variability of all groups in the study of their view of speech and language programs. The principals reacted favorably with the statements that caseloads were too large to provide satisfactory help and the time allotted to each case was not sufficient to bring about the desired change. They also agreed that educators were apathetic toward speech and language programs, that removing children from the regular classroom was an effective way to deliver services and that speech and language therapy helped a child's academic performance.

The principals reacted moderately to statements that educators felt positively about the results of speech and language therapy, that speech-language pathologists helped educators understand speech and language problems and that the speech and language program helped handicapped children relate better to their peer group.
Principals rejected the proposals that speech and language programs disrupted school curriculum, that the speech and language program was an integral part of the school curriculum or part of the total educational system and that the speech-language pathologists were successful in treating either the stuttering or voice disordered child.

Ruscello et al. (1980) attempted to apply the SEASP to the same type of population but in a rural school system. Data from principals could not be analyzed due to an insufficient number of replies to the scale from principals.

Summary

With the exception of the study by Phelps and Koenigsknecht (1977), few studies have been cited in the literature concerning principals' involvement with or attitudes toward speech and language programs. Future research is feasible for determining the attitudes of principals toward speech and language programs in different geographic areas, in lower socioeconomic regions in secondary schools and in schools with high numbers of minority groups (Phelps & Koenigsknecht, 1977).

The lack of research concerning principals' relationships with speech and language programs further justifies the need for more investigations into the
awareness of principals toward public school speech and language programs.
Chapter 3

METHODS AND PROCEDURES

In order to determine the degree of awareness the principals have of public school speech and language programs, a telephone questionnaire was administered to elementary school principals and to their subsequent speech-language pathologists. The degree of correlation between the two subjects' (principals and speech-language pathologists) responses was correlated.

Selection of Participants

Fifty elementary school principals were selected from the North Carolina Education Directory. A simple random selection was used to select the principals (Best, 1977). The names, addresses and phone numbers of the principals in the North Carolina Education Directory with either kindergarten through grade four, kindergarten through grade five, or kindergarten through grade six were used in the study. Each principal had an equal opportunity to be selected.

The speech-language pathologists selected were those currently serving the schools of the target
principals. The names of the speech-language pathologists were obtained from the principals.

**Notification Procedures**

The fifty selected principals were telephoned by the interviewer during the last week in January and the first week in February and were read the following statement:

My name is Ellen Freeman and I am a graduate student in Speech Pathology at Appalachian State University in Boone, N.C. I am working on my Master's thesis project which involves a telephone interview with elementary school principals in North Carolina concerning the speech and language programs at their schools. Will you answer some questions for me?

After the introductory statement, and before any other questions were asked, the principals were asked to give the name of their speech-language pathologist.

The fifty named speech-language pathologists were called during the weeks of February 15-19, February 22-26, and March 8-12. Before responding to the questionnaire, the speech-language pathologists were read the following statement:

My name is Ellen Freeman and I am a graduate student in Speech Pathology at Appalachian State University Library
Appalachian State University in Boone, N.C. I am working on my Master's thesis project which involves awareness of public school speech and language programs in North Carolina. Will you answer some questions for me about your program at [target school]?

Instrumentation

A fifteen-question questionnaire was developed. The questions were closed form and required selection of only one response by the subjects. The responses in the questionnaire were in an ordinal scale and asked for factual information. Table 1, p. 27, gives the breakdown of number of response options. The number of response options for the questions ranged from seven responses for one question, eight responses for one question, nine responses for one question, ten responses for three questions, eleven responses for one question, twelve responses for two questions, thirteen responses for one question and fourteen responses for four questions. (See appendixes for each of the questionnaires.)

The questions used were derived from Neidecker (1980) and consultations with both speech-language pathologists and principals. The questions dealt with number of children and grades served, number of
Table 1

Number of Questions per Number of Options

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in-service workshops conducted by the speech-language pathologist, number of students seen individually for therapy, the schedule of speech-language pathologists (including number of other schools served, days at the target school and number of hours at the target school each day), number of parent conference days, time for planning at the target school, grades that are screened for speech and language problems and hearing disorders, amount of money that the speech-language pathologist is allotted for the speech and language program from both the district office and from the school principal, type of speech and language disorders being remediated and number of observations that the principal conducts on the speech and language program during the year.

The questionnaire for the principals was worded in reference to the speech and language program and to the speech-language pathologist. The questions were reworded on a separate form for the speech-language pathologists so as to refer to their speech and language program (i.e., the phrase "speech-language pathologist" in the questionnaire was changed to the word "you").

The principals were called in a random order. The principals had no prior notice of the interview so their responses were spontaneous and they had no
aid from notes, the speech-language pathologist, the secretary or other school personnel. After the introductory statement was read, the name of the speech-language pathologist was obtained, and the fifteen questions were asked. The interviewer immediately recorded the responses of each principal on an individual score sheet.

After the fifty principals were interviewed, the speech-language pathologists were telephoned in a random order. After the introductory statement was read, the fifteen questions were asked. The interviewer immediately recorded the responses of the speech-language pathologists on an individual score sheet, separate from the principals'.

Statistical Analysis

The Wilcoxon matched-pairs signed-ranks test was used to obtain a correlation between the responses of the two sets of subjects. The requirements for using the Wilcoxon are: (1) subjects must be carefully matched before being exposed to the treatment, (2) subjects must be related in some way, (3) subjects must serve as their own control in a pretest-posttest design, and (4) subjects must be a random sample from a larger population (Huck et al., 1974). The subjects in this study met these requirements.
The Wilcoxon gave the magnitude as well as the direction (negative or positive) of the difference for the responses of the speech-language pathologists and the principals.

The number of principals giving the same responses as the speech-language pathologists (called a tie), the number of principals' responses different from the speech-language pathologists' in a negative direction, the number of principals' responses different from the speech-language pathologists' in a positive direction, and the probability were calculated.
Chapter 4

RESULTS OF THE STUDY

Data obtained from the telephone interviews of both the principals and speech-language pathologists are presented in both tabular and narrative form.

Fifty different schools and 39 different school districts are used in the study. Fifty different questionnaires from principals and 50 different questionnaires from speech-language pathologists are used in the analysis. However, three speech-language pathologists are assigned to two of the target schools (i.e., only 47 individual speech-language pathologists are in the study).

Analysis of Data

The Wilcoxon matched-pairs signed-ranks test is used to determine the correlation between the responses of the principals and the responses of the speech-language pathologists. The amount of difference (negative or positive) between the responses of each is calculated. If the two responses in a pair are the same, then the difference \( (d) = 0 \) and the pair is deleted from the analysis. The d's are then ranked without regard to sign (positive or negative).
rank 1 is assigned to the smallest d, 2 to the next smallest and so on. The sum of the positive ranks equals the sum of the negative ranks.

Table 2 (p. 33) shows the frequencies of the responses of the principals and the speech-language pathologists. Table 2 shows the percentage of principals that chose each option in questions one through fifteen of the questionnaire. In addition, Table 2 shows the percentage of speech-language pathologists that chose each option in questions one through fifteen of the questionnaire.

Table 2 shows the data obtained from the statistical analysis. Column one contains the questions asked. In column two, "cases" refers to the number of pairs of both principals and speech-language pathologists. "No response" and "other" from the questionnaire are not used in the statistical analysis. Therefore, if either the principal or the speech-language pathologist chose one of those responses, that question is not ranked for that pair of subjects.

"Ties" in column three refers to the number of principals that gave the same response as the speech-language pathologist. "Negative rank (-Rank)" refers to the number of principals who perceived a response to a question differently from the speech-language pathologist but in a negative direction. "Positive
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rank (+Rank)" refers to the number of principals who perceived a response to a question differently from the speech-language pathologist but in a positive direction. The Wilcoxon computes a z score which is in column six. Probability refers to level of significance, i.e., indicates the level at which the results are due to chance at the .05 level.

Results

The results of the analysis show that 12 out of 29 (question 11 and 12 are broken down and analyzed by each grade and question 15 is broken down and analyzed according to each disorder, giving a total of 29 analyses) items demonstrate a significant difference between the responses of the principals and responses of the speech-language pathologists at the .05 level of significance (question 1, question 2, question 4, question 10, question 11c, d, e, f, g, question 12b, e, and question 14). Seven out of 29 items show a significant difference between the responses of the principals and responses of the speech-language pathologists at the .01 level of significance (question 1, question 2, question 10, question 11c, e, f, and question 14).
Table 3

Wilcoxon Matched-Pairs Signed Ranks

<table>
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<tr>
<th>QUESTION</th>
<th>CASES</th>
<th>TIES</th>
<th>-RANK</th>
<th>+RANK</th>
<th>Z</th>
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*Significant difference at the .05 level.
Chapter 5

SUMMARY

The purpose of this study is to determine the degree of awareness that elementary school principals have of the speech and language program in their schools. Fifty elementary school principals and 50 speech-language pathologists at their schools are used as subjects for the study. The instrument used in the study is a telephone interview asking 15 questions concerning various elements of the speech and language program at the schools. The null hypothesis is used for the purpose of facilitating the computation and analysis (Wilcoxon matched-pairs signed-ranks test) of the data.

Results suggest a significant difference between the responses of the principals and the responses of the speech-language pathologists concerning: number of children served by the speech-language pathologist, grades served by the speech-language pathologist, number of students being seen for speech therapy on an individual basis, number of on-site observations conducted by the principal on the speech and language program, grades that are screened by the speech-language
pathologist for speech and language problems (significant differences were found for Grade 2, Grade 3, Grade 4, Grade 5 and Grade 6), grades that are screened by the speech-language pathologist for hearing disorders (significant differences were found for Grade 1 and Grade 4), and amount of money allotted for the speech-language pathologist from the principals' budget.

Implications of the Study

In order to have an effective speech-language program, speech-language pathologists must keep the principal informed on every aspect of the speech and language program. It appears from the results of this study that principals are not aware of every aspect of the speech and language program. The data from this study imply the following:

1. Principals and speech-language pathologists do not agree on the number of students being served by the speech-language pathologist.

2. Principals and speech-language pathologists do not agree on the grades that are being served by the speech-language pathologist.

3. Principals and speech-language pathologists do not agree on the number of students being seen for speech therapy on an individual basis.

4. Principals and speech-language pathologists do not agree on the number of on-site observations
conducted by the principal on the speech and language program.

5. Principals and speech-language pathologists do not agree on the grades screened for speech and language problems.

6. Principals and speech-language pathologists do not agree on the grades that are being screened for hearing problems.

7. Principals and speech-language pathologists do not agree on the amount of money allotted to the speech and language program from the principals' budget.

Recommendations

The speech-language pathologist should inform the principal on all aspects of the speech and language program, particularly number and grades of students served, number of students seen for speech therapy on an individual basis, grades screened for speech and language problems, and money allotted for the speech and language program. Principals can become more aware of the speech and language program by: (1) conducting additional and more thorough observations of the speech-language pathologist, (2) by the speech-language pathologist scheduling regular and periodic conferences with the principal, (3) by the speech-language pathologist conducting in-service workshops
for the faculty with a special invitation to the principal, (4) by the speech-language pathologist furnishing the principal with a periodic report on different aspects of the program, e.g., screening, conferences, etc., and (5) by the speech-language pathologist informally speaking with the principal concerning the program as often as possible.

More specifically, speech-language pathologists should include principals in the placement and planning of appropriate speech and language programs for children. In addition, the speech-language pathologist should inform the principal of the date, time, and place of parent conferences and stress to the principal the importance of attending. Prior to such a conference, it would be helpful, if not essential, for the principal to be briefed on the diagnostic procedures and instruments used with the child, the type and severity of a disorder and the plans for remediation.

Since principals are responsible for problems of litigation, they should be informed of the due process that must be followed by speech-language pathologists in assigning, placing and working with communicatively handicapped children.

The elements of the speech and language program investigated in this study are but a few of the many
aspects of the speech and language program that principals should be aware of. Also, the aforementioned recommendations are but a few of the ways the speech-language pathologist can and/or should make principals aware. However, speech-language pathologists must make principals aware of these and many more aspects of the speech and language program so their much needed cooperation and support is attained.

Recommendations for Future Research

1. This study should be replicated using a larger sample.

2. The following revisions of the questionnaire in this study should be made for future use.

   a. Question #6 "How long is the speech-language pathologist at school each day?" should be rephrased to "On the days speech-language pathologists are assigned to the school, how long are they there?" This change is suggested because most of the speech-language pathologists in this study are not assigned to a single school each day.

   b. Question #8 "How many placement, I.E.P. or other conference days does the speech-language pathologist provide for parents during the year?" should be changed to "When does the speech-language pathologist hold parent conferences?" Responses to this question should include
"regularly scheduled," "as needed," "twice a year," "three times a year," etc. These changes should be made since most of the speech-language pathologists in the study did not provide specific conference days for parents.

3. Principals' awareness of speech and language programs should be investigated at the middle school, junior high, and secondary level.

4. An investigation should be made to determine what, if any, differences exist between the awareness of female principals and male principals.

5. An investigation should be made of principals' awareness of speech and language programs with an experimental and control group composed of principals who have participated in in-service training concerning speech and language programs and those who have not.

6. A study should be conducted to determine what, if any, differences exist between the awareness of principals who have a full-time, non-itinerant speech-language pathologist and those who have a part-time itinerant speech-language pathologist.

7. A study should be conducted to determine what, if any, differences exist between principals' awareness of speech and language programs based on the amount of experience of the speech-language pathologist.
BIBLIOGRAPHY
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APPENDIX A

Principals' Questionnaire
APPENDIX A

Principals' Questionnaire

Principal's Name:________________________________________

Name of School:_________________________________________

School District:_________________________________________

Speech-Language Pathologist's Name:_______________________

1. How many students is your speech-language pathologist serving in your school?
   
   (1) 0-5 (2) 6-10 (3) 11-15 (4) 16-20 (5) 26-30
   (6) 25-30 (7) 31-35 (8) more than 35 (9) other
   (10) no response

2. What grades are served by the speech-language pathologist at your school?
   
   (7) K-6 (8) 1-2 (9) 1-3 (10) 1-4 (11) 1-5
   (12) 1-6 (13) other (14) no response

3. How many in-service programs for teachers at your school has your speech-language pathologist conducted this year?
   
   (1) 0 (2) 1 (3) 2 (4) 3 (5) 4 (6) 5 (7) 6
   (8) 7 (9) 8 (10) 9 (11) 10 (12) other
   (13) no response

4. How many students are seen for speech therapy on an individual basis only by the speech-language pathologist at your school?
   
   (1) 0-2 (2) 3-5 (3) 6-8 (4) 9-11 (5) 12-13
   (6) more than 13 (7) entire caseload (8) caseload
   (9) no response

5. How many days a week is the speech-language pathologist at your school?
   
   (1) 1/2 (2) 1 (3) 11/2 (4) 2 (5) 21/2 (6) 3 (7) 31/2
   (8) 4 (9) 41/2 (10) 5 (11) other (12) no response
6. How long is the speech-language pathologist at your school each day?

(1) less than ½ hour   (2) ½-1 hour   (3) 1-2 hours
(4) 2-3 hours   (5) 3-4 hours   (6) 4-5 hours   (7) 5-6 hours
(8) full day   (9) other   (10) no response

7. How many other schools are served by your speech-language pathologist?

(1) 0   (2) 1   (3) 2   (4) 3   (5) 4   (6) 5   (7) 6   (8) 7
(9) 8   (10) more than 8   (11) other   (12) no response

8. How many placement, I.E.P. or other conference days does your speech-language pathologist provide for parents during the year?

(1) 0   (2) 1   (3) 2   (4) 3   (5) 4   (6) 5   (7) 6   (8) 7
(9) more than 7   (10) other   (11) no response

9. How many hours a week is your speech-language pathologist allotted for planning therapy at your school?

(1) less than 1   (2) 1   (3) 2   (4) 3   (5) 4   (6) 5
(7) 6   (8) 7   (9) more than 7   (10) other   (11) no response

10. How many on-site observations do you conduct on your speech-language pathologist during the year?

(1) 0   (2) 1   (3) 2   (4) 3   (5) 4   (6) 5   (7) 6
(8) 7   (9) 8   (10) 9   (11) 10   (12) more than 10
(13) other   (14) no response

11. What grades does the speech-language pathologist screen for speech and language problems?

(1) K   (2) 1   (3) 2   (4) 3   (5) 4   (6) 5   (7) 6
(8) other   (9) no response

12. What grades does the speech-language pathologist screen for hearing problems?

(1) K   (2) 1   (3) 2   (4) 3   (5) 4   (6) 5   (7) 6
(8) other   (9) no response
13. How much money is your speech-language pathologist allotted for materials and supplies from the central, district or administrative office?

(1) less than $50  (2) $50-100  (3) $100-200  (4) $200-300  
(5) $300-400  (6) $400-500  (7) $500-600  (8) more than $600  
(9) other  (10) no response

14. How much money is your speech-language pathologist allotted for materials and supplies from your budget?

(1) $0-10  (2) $11-20  (3) $21-30  (4) $31-40  (5) $41-50  
(6) more than $50  (7) other  (8) no response

15. What types of speech and language disorders are being treated by your speech-language pathologist?

(1) articulation  (2) language  (3) voice  (4) fluency  
(5) hearing  (6) other  (7) no response
APPENDIX B

Speech-Language Pathologists' Questionnaire
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Speech-Language Pathologists’ Questionnaire

1. How many students are you serving at ________________ school?
   (1) 0-5 (2) 6-10 (3) 11-15 (4) 16-20 (5) 21-25
   (6) 26-30 (7) 31-35 (8) more than 35 (9) other
   (10) no response

2. What grades do you serve at ________________ school?
   (7) K-6 (8) 1-2 (9) 1-3 (10) 1-4 (11) 1-5 (12) 1-6
   (13) other (14) no response

3. How many in-service programs for teachers at your school have you conducted this year?
   (1) 0 (2) 1 (3) 2 (4) 3 (5) 4 (6) 5 (7) 6 (8) 7
   (9) 8 (10) 9 (11) 10 (12) other (13) no response

4. How many students do you see for speech therapy on an individual basis only?
   (1) 0-2 (2) 3-5 (3) 6-8 (4) 9-11 (5) 12-13
   (6) more than 13 (7) entire caseload (8) other
   (9) no response

5. How many days a week are you at ________________ school?
   (1) ½ (2) 1 (3) 1½ (4) 2 (5) 2½ (6) 3 (7) 3½
   (8) 4 (9) 4½ (10) 5 (11) other (12) no response

6. How long are you at ________________ school each day?
   (1) less than ½ hour (2) ½-1 hour (3) 1-2 hours
   (4) 2-3 hours (5) 3-4 hours (6) 4-5 hours (7) 5-6 hours
   (8) full day (9) other (10) no response

7. How many other schools do you serve?
   (1) 0 (2) 1 (3) 2 (4) 3 (5) 4 (6) 5 (7) 6 (8) 7
   (9) 8 (10) more than 8 (11) other (12) no response
8. How many placement, I.E.P. or other conference days do you provide for parents during the year?

(1) less than 1  (2) 1  (3) 2  (4) 3  (5) 4  (6) 5  
(7) 6  (8) 7  (9) more than 7  (10) other  
(11) no response

9. How many hours a week are you allotted for planning therapy at ____________________ school?

(1) less than 1  (2) 1  (3) 2  (4) 3  (5) 4  (6) 5  
(7) 6  (8) 7  (9) more than 7  (10) other  
(11) no response

10. How many on-site observations does your principal conduct on your speech-language program during the year?

(1) 0  (2) 1  (3) 2  (4) 3  (5) 4  (6) 5  (7) 6  
(8) 7  (9) 8  (10) 9  (11) 10  (12) more than 10  
(13) other  (14) no response

11. What grades do you screen for speech and language problems?

(1) K  (2) 1  (3) 2  (4) 3  (5) 4  (6) 5  (7) 6  
(8) other  (9) no response

12. What grades do you screen for hearing problems?

(1) K  (2) 1  (3) 2  (4) 3  (5) 4  (6) 5  (7) 6  
(8) other  (9) no response

13. How much money are you allotted for materials and supplies from the central, district or administrative office?

(1) less than $50  (2) $50-100  (3) $100-200  (4) $200-300  
(5) $300-400  (6) $400-500  (7) $500-600  (8) more than $600  
(9) other  (10) no response

14. How much money are you allotted for materials and supplies from your principal's budget at ____________________ school?

(1) $0-10  (2) $11-20  (3) $21-30  (4) $31-40  (5) $41-50  
(6) more than $50  (7) other  (8) no response

15. What types of speech and language disorders are you treating at ____________________ school?

(1) articulation  (2) language  (3) voice  (4) fluency  
(5) hearing  (6) other  (7) no response
VITA

Ellen Denise Freeman was born in Asheville, N.C., on February 18, 1958. She graduated from Asheville High School in June 1976. In August of that year, she entered Appalachian State University, Boone, N.C. and in May 1980 she received a Bachelor of Science degree in Speech Pathology. She then accepted a position as district speech therapist for Anderson County School District I, Williamston, S.C. for the 1980-81 academic year. In June 1981 she returned to Appalachian State University to obtain a Master's degree in Speech Pathology.

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